
Interactive Television and Tourism

Marketing WA to the UK Pleasure Travel Market
through Interactive Television Applications

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BCom (Honours)

This thesis is presented for the degree of Doctor of Philosophy,
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Declaration

I declare that this thesis is my own account of my research and contains as its main content work which has not previously been submitted for a degree at any tertiary education institution.

Anika Schweda
6th August 2004

Abstract

As an information intensive industry and as one of the most progressive industries in information technology adoption, travel and tourism provides an ideal context in which to investigate how new technologies such as interactive television challenge our understanding of media and media use. This research looks at how interactive television can be used by consumers and how it may be best applied by marketers in international holiday travel.

Using the UK international traveller market to Western Australia as case in point, this research had three main research goals: 1) to understand how travellers use information sources with a focus on interactive television; 2) how an individual's previous interactive media and travel experiences may pre-dispose them to using interactive television; and 3) to better understand why individuals interact and what impact the interaction has on the promotional effort. A travel ad and a travel show segment were used to explore these with impulse (brochure request) and telescopic (destination video) interactive opportunities. The treatments were deployed over a video-on-demand platform in greater London and participants took part in their homes via their televisions and a self administered questionnaire.

This research has furthered the use of the multi-dimensional grid in understanding information sources in relationship to one another and updated the landscape with

modern information sources such as television, teletext, the Internet and interactive television. Findings from this area of investigation suggest that current interactive television offerings cater better to short-haul destinations and although it currently plays a minor role, interactive television has the potential to significantly contribute to travellers' long-haul holiday planning process.

The finding that individuals understand interactive television through their experience with teletext rather than the Internet and are more likely to use interactive television if they are thorough and experienced planners supports the theory of knowledge transference. However, most importantly, if an individual has a positive experience with interactive television they will interact again in the future. Contributions were also made to a better understanding of the interactive television user and the use of interactive television applications to the travel and tourism industry in particular. Exploration of the differences between the Impulse and Telescopic approaches to interactivity highlighted that while interactivity generally enhances the promotional effort each approach has its own strategic applications.

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Part #1

The Study, Background and Method

Part #1 Overview

These four chapters provide the outline of the study, the literature research, the research questions and the methodology employed.

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Chapter #1

Tourism, Destination Marketing and New Technology

Chapter Overview

This chapter introduces the research by presenting the background for undertaking this research and the objectives that it aims to satisfy. It then goes on to outline the framework from which the research is approached and the process or method that was employed. The chapter then concludes with a preview of the thesis chapters.

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1.1 Introduction

As interactive technologies such as the Internet, mobile phones and interactive television push us even further into the information age, it is important to understand how our previous understandings of media and media use need to change. As an information intense industry and as one of the most progressive industries in information technology adoption, travel and tourism is an ideal context in which to investigate how interactive television can be used by consumers and how it may be best utilised by marketers. Through a quasi-experimental approach this study seeks to better understand how interactive television is used by international travellers (in particular long-haul) to plan their holiday and in turn how the industry may best apply it to their marketing efforts.

1.2 Tourism

Tourism and in particular international tourism, is one of the world's largest and most important industries (WTO, 2004) and involves not only the tourist and those businesses directly servicing them, but also the destination's government and wider community. It deals with an intangible, heterogeneous and perishable product and thus relies heavily upon readily updateable information to sell its product. These characteristics bring with them uncertainties, especially for the potential holiday traveller, which are translated into emotional and financial risks. In an attempt to minimise these risks the traveller embarks on an information search for knowledge

ranging from the practical to the inspirational. This will then assist in making holiday planning decisions and to verify their choices.

Information sources available to travellers vary and are most often used in combination. Personal experience and inter-personal sources such as friends/relatives and travel agents are easily accessible, trusted sources of information for the traveller (Andereck and Caldwell, 1993). Destination specific literature such as guidebooks, brochures from tour operators and tourist bureaux also play an important role in holiday planning, especially after the destination has been chosen (Gitleson and Crompton, 1983; Bieger and Laesser, 2001). Mass media, print and broadcast, offer travellers sources with a wide range of credibility and types of information. This ranges from advertisements for fares and special offers to articles, travel shows and unrelated programmes such as movies (Nielsen, 2001). The United Kingdom also has television channels dedicated to travel where travellers can watch stories on different destinations, resorts and special offers before calling into a call centre to make a booking. Interactive media of note include teletext, the Internet and more recently interactive television. Text-based teletext has moved from analogue to digital television and has been a success story in the United Kingdom in selling travel products, especially last minute and package holidays (Teletext, 2002). The Internet provides a more diverse and sophisticated environment for travellers to explore their options and purchase holiday products, while interactive television is relatively new on the scene and offers more in the way of video-on-demand product profiles.

These information sources are the main communications link between the traveller and the destination. Destination marketing organisations (DMOs) combine these channels to create awareness, build destination image and brand and increase appeal and subsequent visitation. Advertising, consumer trade shows, press releases, familiarisation tours for journalists and travel agents, the production of informational destination material such as brochures and websites are some ways in which DMOs can achieve these objectives (French, Craig-Smith and Collier, 1995).

While there is considerable research in tourism on the use of information sources (see Sections 2.3 and 2.5.2), it is often dated and limited in the sources that they cover and the frameworks with which they aim to understand the use of information sources in the holiday planning context. It is not only the evolution of technology and tourism marketing that necessitates this, but also the growth and maturation of the international traveller. It is important to integrate the new technologies, marketing opportunities and information sources into the wider understanding of communication channels available to DMOs and how travellers use information sources as a whole (Mansfeld, 1992; Fodness and Murray, 1997; Swarbrooke and Horner, 1999).

1.3 Interactive Television

Interactive television is a technology that has waxed and waned over the last 35 years with two-way cable trials like QUBE and FSN in the United States of America and others through out Europe. However, with the recent advent of digital television

there is more scope to develop the interactive content that interactive television has promised over the years and allow viewers to have a more active, immediate, asynchronous experience with their televisions (Klopfenstein, 1997). As it is a constantly evolving medium, there is still no concrete definition for interactive television. However, it is currently characterized by the capability of delivering information and entertainment with interactivity for viewers beyond channel changing and VCR time-shifting. For advertisers it provides a mass audience with the possibility of targeting messages with narrowcasting and taking record of what is viewed by household, if not by viewer.

“Interactive television is not a single technology or service but a family of diverse systems and applications that trace their history to the very beginning of television.”

(Carey, 1995, p220)

Aside from sound roots in the television industry, interactive television has also had influence from associated technologies. The remote control and the Video Cassette Recorder (VCR) have taught the viewer to be active and selective essentially on impulse (Everett, 1997; Swedlow, 2000; Vorderer, 2000), teletext has accustomed viewers to use their television for information as well as entertainment (Tydeman and Kelm, 1986; Middleton, 2001), while the Internet has established a benchmark for interactivity and choice of information. Not only have these then accustomed viewers and users to interact with computer-mediated media, they have also provided the viewer with a set of skills or a discourse with which to understand similar environments (Gregan-Paxton and Roedder John, 1997; Docampo-Rama, 2001).

“... there will be a real need to examine the role of television when interactive TV becomes a fixture in millions of homes.”

(Swan, 2000, p122)

Despite the spread of this still evolving medium there is still relatively little research on how it is being adopted by the audience and what the audience wants from it (Swedlow, 2000). While not directly related, interactive media research such as that looking into the Internet, highlight important issues that need consideration also in the investigation of interactive television. It is also important to investigate interactive television in its television viewing environment (Lee and Lee, 1995) and on a higher level to understand the new media in terms of traditional communications and media audience theories and to then up-date these (Heeter, 1989; Morris and Ogan, 1996). Current research efforts are dominated by case studies and usage data collected by interactive television providers (eg. BskyB, ntl:) and creative agencies. There is also a growing amount of industry commissioned reports (eg. Riseley, 1998; Freeman and Lessiter, 2001; Brodin, Barwise and Canhoto, 2002; Weapon7 and Chinwag, 2002) and academic research dealing with interactive television from a range of perspectives (see Section 3.5).

1.4 The United Kingdom and Western Australia

The UK began its experience with this wave of interactive television in 1998 and with the first interactive ad airing in 2000 on SKY. Since then interactive television has traversed the satellite, cable and terrestrial platforms, both pay and free to air and currently 12.2million (50.2%) households have access to interactive television

(OFCOM, 2004). The UK government has planned to switch off analogue transmission by 2010 (OFCOM, 2004) meaning that all of the UK will be digital and thus have access to interactive television. The UK has also the unique position of having had a successful experience with teletext and also has an increasing Internet penetration – currently 52% (Towler, 2003).

In 2002 UK residents took 41.2million holidays abroad, with around 21% of those being long-haul in nature (Lovegrove, 2004). While Europe is still a very popular destination for UK travellers there is an increase in interest for long-haul destinations like Australia (Davies, 2004). This trend is accompanied with the move away from the time-honoured package holiday and towards independent travel, especially to long-haul destinations (McGrath and Gillett, 2004).

While only 0.86% outbound trips from the UK travelled to Australia in 2002, they accounted for 14% of all international visits to Australia (ATC, 2004) and 28% of international visitors to Western Australia (WATC, 2004). Furthermore, most were independently organised trips with a substantial friends-and-family segment and more than half being repeat visitors (ATC, 2004). Western Australia is favoured by UK travellers for its vast and varied natural environments that offer sought after adventure and experiences. Western Australia concentrates its marketing communications in the Greater London area of the UK and has used television commercials, public transport posters, print media and public relations activities to name a few, in efforts to attract new visitors. However, with the advent of

interactive television in the UK there is another opportunity to build the WA brand, remind past visitors and to build a rapport with new travellers.

With being one of the most developed interactive television markets and a major source market for Western Australian tourism, the UK is an ideal market in which to research how travellers will adopt interactive television to planning their holiday and how destination marketers may employ interactive television to best communicate with their potential traveller market.

1.5 Objectives: Investigations

Fundamentally, the objective of this research is to gain a better understanding of the holiday decision process associated with long-haul travel in the context of new media, in particular interactive television. This will be explored along three lines of investigation. Investigation #1 looks at the traveller's (source utility evaluations and temporal) use of information sources, to better understand how interactive television fits into these sources and subsequently its place in the planning process. Interactive television applications will also be investigated to see what is most suited for marketing long-haul destinations from the traveller's and industry perspectives (Figure 1.5.1).

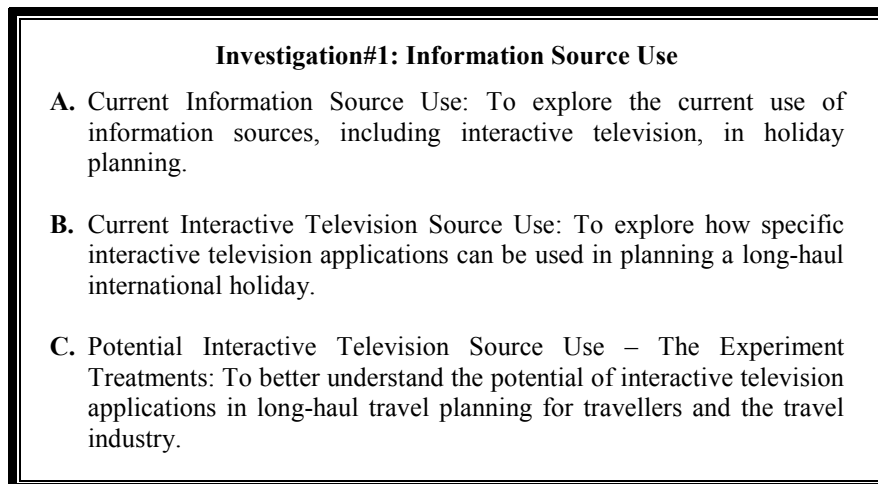


Figure 1.5.1: Research goals concerning the use of information sources for holiday planning, in particular interactive television.

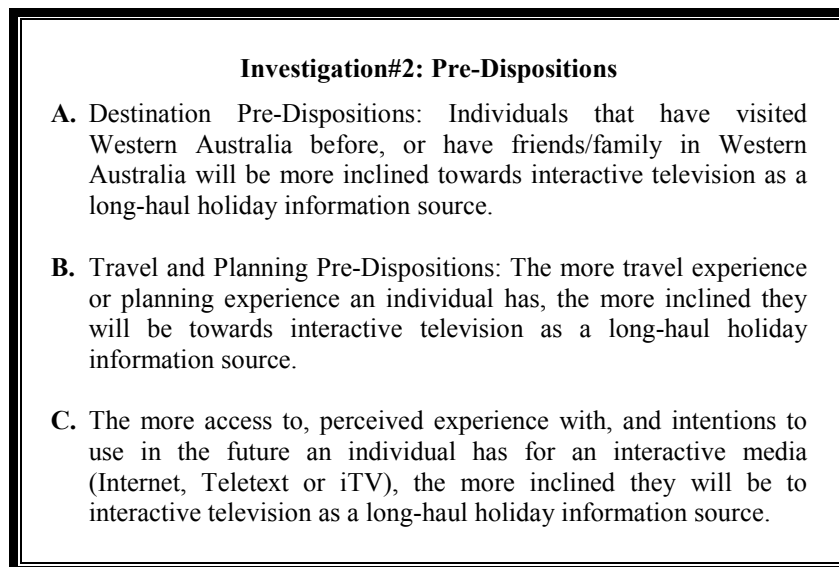


Figure 1.5.2: Research goals concerning factors that may pre-dispose individuals to interactive television for holiday planning purposes.

This use will be augmented by Investigation#2 which explores three possible pre-dispositional factors that would incline individuals towards interactive television, such as interactive media experience, travel and planning experience and familiarity with the destination in question, Western Australia (Figure 1.5.2). The third investigation (Investigation#3, Figure 1.5.3) will help to shed light upon the dynamics of interactivity: why individuals interact and what impact interaction has. This will look at whether interaction makes a difference to an individual's attitudes

towards the promotional vehicle or the interactive opportunity, the involvement with the promotional vehicle, attitude towards the destination and inclination to iTV.

- Investigation#3: Interaction Dynamics**
- A.** Why Interact: What reasons do people give for interacting with a treatment?
 - B.** Interaction and Attitude towards the Promotional Vehicle: Interaction with the treatment will be associated with more positive attitudes towards the promotional vehicle (ad or travel show).
 - C.** Interaction and Attitude towards the Interactive Opportunity: Interaction with the treatment will be associated with more positive attitudes towards the interactive opportunity (brochure request or destination video).
 - D.** Interaction and Involvement with the Promotional Vehicle: Interaction with the treatment will be associated with greater involvement with the promotional vehicle (ad or travel show).
 - E.** Interaction and Attitude towards the Destination: Interaction with the treatment will be associated with more positive attitudes towards the destination (Western Australia).
 - F.** Interaction and Attitude towards Interactive Television: Interaction with the treatment will be associated with more positive attitudes towards interactive television as a holiday planning source.

Figure 1.5.3: Research goals concerning the dynamics of interaction: why individuals interact and what impact this may have on selected advertising effectiveness measures.

These three paths will then assist in gaining a better understanding as to the adoption of interactive television into the holiday planning process, the potential of interactive television as a lead generation tool for the tourism and travel industry and a clearer understanding as to how different promotional vehicles can be combined with different interactive opportunities. The investigations have been purposefully kept as a mixture of hypotheses and objectives due to the nascent nature of the technology and the inter-disciplinary nature of the inquiry. It is not the intentions of this thesis to prove the place or role of interactive television, but rather to open the door on discussion and further research – to gain a better understanding of what exists in the current gap.

1.6 Parameters

The objectives detailed above are drawn from the framework illustrated in Figure 1.6.1. This is extracted from a basic interpretation of the holiday decision process featuring the tourist, the destination and information sources. By looking at how tourists utilise different information sources, a greater understanding will be gained of the holiday decision process, the selection for use of sources by tourists, how information sources relate to each other and ultimately, implications for how marketers may best employ certain sources to promote themselves. This will be considered in the context of interactive television.

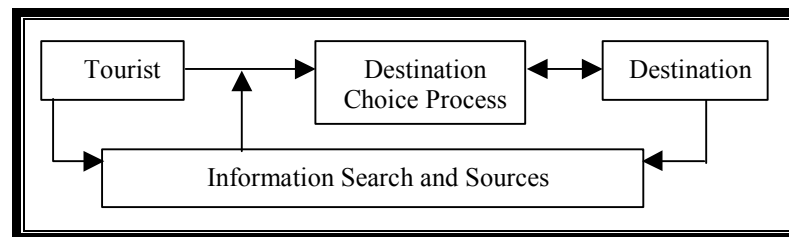


Figure 1.6.1: Holiday decision process – basic concepts.

The interests of industry partners acted as practical parameters upon this theoretical framework. Given that the United Kingdom is one of the major markets for Western Australian tourism, it was important for the research to be conducted in London where the Western Australian Tourism Commission (WATC) runs most of its promotion. Furthermore, participants were required to be sourced from a non-student population so as to get a more varied sample of potential travellers to Western Australia.

These partner criteria partially influenced the third major parameter, the method of administration. In assessing the best method of carrying out the study an opportunity presented itself in the form of running the study via a Video-On-Demand (VOD) provider. As a form of interactive television and access to a substantial subscriber base, this option proved to be too valuable to pass up. It would allow the treatments to be selectively administered in a natural setting (participants' own homes), simultaneously by participants that are of varying demographics and are used to the idea of interacting with their televisions. It also meant that this method's suitability for this kind of research could be evaluated by being compared to a small group of in-person participants (ie. observational laboratory setting).

1.7 Process

In designing the research experiment, a number of factors were taken into consideration. After consultation with industry partners and review of the current literature, a decision was made to test two types of promotional vehicles typically used by destination marketing organizations, plus two interactivity options. A travel commercial or ad and a travel show segment were the two promotional vehicles used. The interactivity options reflected the impulse approach - a brochure request - and the telescopic approach - a destination video. These were tested in their linear and interactive versions. The experiment design is illustrated in Figure 1.7.1.

Interactivity Option	Promotional Vehicle	
	TV Ad	Travel Show Segment
Control (Linear)	Control Ad	Control Show
Impulse (Brochure Request)	Impulse Ad (Interactive Ad w. Brochure Request)	Impulse Show (Interactive Show w. Brochure Request)
Telescopic (Destination Video)	Telescopic Ad (Interactive Ad w. Destination Video)	Telescopic Show (Interactive Show w. Destination Video)

Table 1.7.1: Experiment design.

Each treatment was set up as a ~30minute programme. The ad was placed as the last ad in a pod of three in the only commercial break in a gardening programme. The travel show segment was one of three long-haul destination segments making up a travel programme with no commercial breaks. Almost all media was sourced from Australian producers to ensure novelty for participants. Treatments were allocated to one of six postcode groups (by the VOD provider) to ensure that participants could only watch one treatment, thus avoiding contamination.

The treatments were administered via a video-on-demand (VOD) provider, HomeChoice, which operated via ADSL in the Greater London area. The 3,500 subscriber households were informed of the study through 15second ads on-air and via the HomeChoice website. Participants were recruited mainly through the on-screen promotion and offered a shopping voucher and entry into a prize draw for two tickets to Australia upon participation.

Participants registered either via the television or a freecall number and completed screening questions which required them to be over 18 years of age and having travelled overseas on holiday in the last 10 years. A Lab Pack containing instructions and the questionnaire was then sent out to them. They were to first complete part one of the questionnaire which dealt with interactive media experience, travel and planning experience, destination familiarity and demographics. They were then instructed to watch the treatment before completing part two of the questionnaire that asked them to evaluate their experience with the treatment, including whether or not they interacted with the treatment. They then returned the completed questionnaire for their voucher and entry into the prize draw.

1.8 Research Format Preview

This thesis is segmented into three parts. Part One contains the introduction and the literature review chapters for tourism and interactive television topics. The tourism chapter - *Tourism, Tourists, Destination Marketing and the Holiday Decision Process* (pp19-85) – reviews the tourism phenomenon, the role of destination marketing and current common promotional practices, the tourist and their decision making process, in particular the use of information sources in gathering and preparing for a holiday. This chapter concludes with a review of the United Kingdom travel market, in particular the outbound market for destinations near and far and an overview of Western Australia as a destination in case.

Chapter Three - *Interactive Television: Evolution, Technologies and Research* (pp86-135) - reviews the evolution of interactive television from its various media roots and its previous trial incarnations through to the details of today's manifestation. It discusses the notion of knowledge transfer from past to present experiences and looks at recent research in the interactive media and interactive television fields in relation to consumer or viewer behaviour in particular. Part one closes with Chapter Four - *Research Questions, Method Rationale, Implementation and Critical Analysis* (pp136-213). This provides a synopsis of the pertinent issues raised in the discipline reviews and formulates the avenues for research. It rationalises the innovative research method before detailing its components (treatment stimulants, questionnaires and logistics) and reporting on its implementation. An overview of the basic statistics are given and the chapter is rounded out by a critical analysis of the method and recommendations for future use of the method.

Part Two of the thesis concerns the three paths of investigation and analysis of the collected data. Chapter Five – *Investigation#1: Understanding the Use of Information Sources in Planning International Travel – Where Does Interactive Television Belong in the Information Mix?* (pp215-279) - investigates the use of information sources in terms of their temporal use and source utility in three phases. Phase one concentrates on establishing the information mix landscape for overseas travellers from the United Kingdom (Investigation#1A). Phase two incorporates current interactive television sources into this landscape (Investigation#1B) before phase three orientates the treatment stimulants here (Investigation#1C). The sources are considered in terms of graphical location and relation, statistical differences and

similarities and long- versus short-haul travel experiences. Through this analysis it seeks to understand international traveller's relative use of information sources (traditional and new) as well as the potential that interactive television has as a source in this holiday planning mix.

Chapter Six focuses on three factors that may possibly incline individuals to using interactive television in holiday planning. *Investigation#2: Understanding Possible Pre-Dispositions Towards Interactive Television* (pp280-346) investigates how an individual's familiarity with a destination (Investigation#2A), their previous travel and holiday planning experience (Investigation#2B) and their experience with interactive media such as teletext, the Internet and interactive television (Investigation#2C) may pre-dispose them to being open to the concept of interactive television as a holiday information source. This analysis is conducted at the overall level as well as specific levels of interactivity.

Some of these findings then pre-empt Chapter Seven's delve into why individuals interacted with their treatments – *Investigation#3: Understanding Interaction* (pp347-380). The reasons given for interacting by the Lab Session participants and the Call-Back participants are added to the probing in the *Why Do It?* Section (Investigation#3A). Meanwhile, post-treatment measures are analysed for the effects (if any) that interaction may have had in the *What Does It Do?* section. This explores such factors as attitude towards the promotional vehicle (Investigation#3A), attitude towards the interactive opportunity (Investigation#3B), involvement with the promotional vehicle (Investigation#3C), attitude towards the destination

(Investigation#3D) and evaluations of interactive television as a holiday planning source (Investigation#3E) .

Part Three of the thesis brings together the research's findings in Chapter Eight - *Main Learnings Applied* (pp382-394) - and applies them to the travel and tourism industry, the interactive television industry and the traveller. It revises the main findings from the analyses and then converts these into three issue discussions. These deal with travellers' adoption of interactive television, the state of interactive promotional vehicles and interactive television as a lead generation tool for the travel industry. Chapter Nine – *In Conclusion* (pp395-407) - presents the conclusions of the research, makes further recommendations to improve on the research's limitations and outlines possible avenues of future research.

Chapter #2

Tourism, Tourists, Destination Marketing and the Holiday Decision Process

Chapter Overview

This chapter looks at the phenomenon of tourism and tourists; how destinations are marketed, the channels of communication that are utilised, how holiday decisions are made and what information sources travellers use. An overview of the United Kingdom overseas travel market and Western Australia as a destination are also given before concluding remarks and a preview of the ensuing chapter.

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2.1 Tourism – Definitions and Characteristics

Tourism has long been in evolution. Travel began with the movement of people but it became tourism when the travel arrangements became organised in the trade era of Sumeria around 4000BC (McIntosh and Goeldner, 1990). While the Victorian era ‘Grand Tour’ allowed the upper classes to play tourist, modern mass-tourism really only commenced in earnest after the Second World War when transport modes became more accessible for the everyday citizen.

With the growth of the tourism phenomenon and its impact upon economies, a better understanding was required of how to manage it and this gave rise to the beginnings of tourism-related research in the 1950s and 1960s (French, Craig-Smith et al., 1995). This research originated and still includes diverse disciplines such as geography, economics, sociology, marketing and psychology, to name a few, each with its own discourse for understanding the tourism machine. From such varied discourses emerge similarly assorted tourism definitions (Table 2.1.1). McIntosh’s definition takes an almost top-down approach by identifying the four broad main stakeholder groups (tourists, business suppliers, host governments and host communities), while the definition of Mathieson and Wall (cited in Heath and Wall, 1992) takes a bottom-up approach by describing tourism in relation to the tourist herself. The definition from pre-World War Two (cited in Morley, 1990) seems to combine the two approaches and reiterates the temporary and leisure nature of the tourist. Such definitions only begin to illustrate the complex workings of what the tourism phenomenon is.

Author	Definition of Tourism	Reference
-	“The sum of phenomena and relationships arising from the interaction of tourists, business suppliers, host governments and host communities in the process of attracting and hosting these tourists and other visitors.”	McIntosh (1990)
International Association of Scientific Experts, pre-WWII.	“Tourism is the sum of phenomena and relationships arising from the travel and stay of non-residents, in so far as they do not lead to permanent residence and are not connected with any earning activity.”	Morley (1990)
Mathieson and Wall (1982)	“The temporary movement of people to destinations outside their normal places of work and residence, the activities undertaken during their stay in those destinations and the facilities created to cater to their needs.”	Heath (1992)

Table 2.1.1: Selected definitions of the tourism concept.

In addition to the many definitions of tourism that have been formulated, there have been as many attempts of modelling it. Figure 2.1.1 features a model from the sociological perspective, illustrating how the leisure holiday concept does not function in isolation, but in relation to the individual’s life and the wider community.

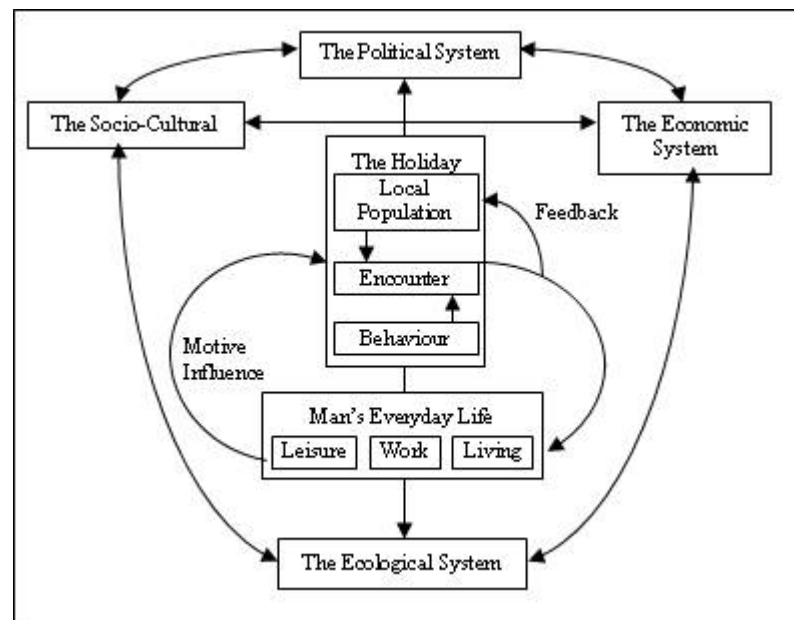


Figure 2.1.1: Tourism from a sociological perspective - the model of life in industrial society. Source: Krippendorf, 1999 (c. 1984).

	Tourist	Tour	Others
Demand	<ul style="list-style-type: none"> • Individual characteristics • Motivations • Psychology 	<ul style="list-style-type: none"> • Prices/Fares • Promotion and marketing • Attractions 	<ul style="list-style-type: none"> • Government Policies • Society and Culture • Technology • Climate, Politics • Social & Economic Trends
Supply	<ul style="list-style-type: none"> • Stay Duration • Activities • Usage • Satisfaction • Spending 	<ul style="list-style-type: none"> • Resources (natural, man-made, cultural) • Tourism facilities and services 	<ul style="list-style-type: none"> • Infrastructure • Communications • Economy and Commerce • Society
Impacts	<ul style="list-style-type: none"> • Experience • Knowledge • Pleasure 	<ul style="list-style-type: none"> • Income • Depreciation and deterioration of resources • Investment 	<ul style="list-style-type: none"> • Environmental • Economic • Social • Physical

Figure 2.1.2: A model of tourism from the economic and marketing perspectives.

Source: Morley, 1990.

Figure 2.1.2 provides an alternative view of tourism, this time from the marketing perspective. This model formulated by Morley (1990; based on Mathieson and Wall, 1982) details how the three main players (tourist, tour operator/service provider and community) interact to form the tourism industry – demonstrating the inter-relatedness and inter-dependability of the tourism product. While demand is significantly driven by the characteristics and desires of the tourist, tourism businesses and the destination community also influence this by the promotion and prices of products and the bureaucracy or natural characteristics of the destination (eg. visas or climate). Similarly, while the supply side is typically associated with the tourism business (providing the flight or accommodation), the tourist and the destination community also participate at this stage. The tourist supplies the consumption of the services and the destination supplies the wider experience of culture, infrastructure and economy. Lastly, the impact phase of tourism can be both positive and negative for all concerned. The impacts experienced by the business

and destination tend to be tangible (income, wear and tear on assets, etc) while those on tourists are largely intangible (experience, knowledge, etc.).

The intangibility of the tourist experience is a reflection of the greater intangibility of the tourism product as a whole, along with its perishability and heterogeneity (Sessa, 1989; Seaton and Bennett, 1996). This intangibility stems from the large service component in most tourism products – more of an experience than a product - and from the fact that the tourist must wait to experience the product and thus can not trial it in advance. Tourism products' limited shelf life relates to limiting factors such as hotel or flight capacities and destination climates (eg. skiing holidays possible only in winter). Furthermore, the heterogeneity of tourism products derives not only from the individuality of each tourist and their holiday decisions, but also from the unique interactions of each with the tourist businesses they use during the holiday. No holiday experience stands to be exactly the same.

Such characteristics bring with them uncertainties that are translated into emotional and financial risks for the potential tourist. These risks are especially relevant in holiday travel where the holiday is highly anticipated, socially visible and costing the individual substantial investment of time and financial resources (Gitleson and Crompton, 1983; Schul and Crompton, 1983; Goodall, 1988; Murray, 1991; Hsiesh and O'Leary, 1993; MacKay and Fesenmaier, 1998; Swarbrooke and Horner, 1999). These risks can be managed by accurate, relevant and useful information on the tourism product, so that the risks involved can be reduced, expectations educated and, potentially, satisfactions managed.

2.2 Destination Marketing

One of the main products in tourism is the destination. While it is true that tourism entails many players, the destination is one of the most important; after all if there was no where to go, tourists could not be tourists. The concept of a ‘destination’ includes not only the physical environments (man-made and natural) and the tourist environment and attractions, but also the economic, political, the socio-cultural systems and the image or perception that tourists have of the destination (Moscardo, Morrison, Pearce, Lang and O’Leary, 1996). While ‘destination’ can be used to describe anything from a country to a theme park, in this case it will refer to a country or a state. From this point of view, the destination is made even more complex by the numerous regions, businesses and people involved that have the potential to embody the destination for tourists. Furthermore, destinations also suffer to various extents the intangibility, perishability and heterogeneity of other tourism products. Not only are they intangible due to their distance, they are also often different things to different tourists. For example, while one person may be interested in Switzerland for its culture, another may be primarily drawn for its outdoor activities.

Thus, marketing a destination is not as clear cut as marketing a traditional consumer product; even its promotional strategies remain to be further developed compared to those of consumer goods (Seaton, 1994). This flexible view of the destination, the intangibility of the tourism product and the significant geographic and temporal divide between the supply and demand sides of the tourism equation mean that

promotion is an even more integral part of a successful tourism venture (Seekings, 1989; Seaton, 1994). It could even be said that “promotion is the product in tourism” (Seaton, 1994, p373; Witt and Moutinho, 1995, p379) as travellers purchase the images and promises that it presents.

In an attempt to promote and disseminate information on a destination, most have destination marketing organisations (DMOs) as part of a government department or sometimes a private venture. These organisations are essentially co-ordinators that attempt to promote a destination’s stakeholders’ interests under a unified banner or even a brand so as to build and maintain tourist markets - domestic and international (see more detailed outlines of DMO roles in Table 2.2.1). To promote a destination, the DMO may employ advertising, public relations, sales promotions and personal selling strategies. These may be actioned through activities like producing destination brochures, advertising campaigns, attending trade shows, building distribution networks and industry relationships and press releases (French, Craig-Smith et al., 1995).

World Tourism Organisation*	Jefferson and Lickorish (1991)*	Weaver and Lawton (2002)
<ul style="list-style-type: none"> • Identify markets and target audiences • Communicate with markets and audiences • Improve visitor numbers • Promote destination image 	<ul style="list-style-type: none"> • Act as guardian of destination’s image • Set the scene via research into demand factors • Blaze the trail in developing new markets • Co-ordinate the marketing • Monitor visitor satisfaction 	<ul style="list-style-type: none"> • Promotion • Research • Co-ordination of tourism industry • Provide tourist information

Table 2.2.1: Roles of destination marketing organisations (DMOs). Note: * these are cited in Seaton and Bennett, 1996.

While promotion assists in reducing potential traveller's risks and helps to build the destination's image (Seaton, 1994; Witt and Moutinho, 1995), different promotional tools can "vary in their effects at different stages of buyer readiness" (Kotler, Bowen and Makens, 2003, p561). For example, advertising known for its mass reach and low cost has the ability to create awareness and build preliminary knowledge, while the persuasion and conviction stages are ideally nurtured by the more expensive but flexible technique of personal selling. These stages can also be enhanced by public relations which proffer information in an unbiased and believable way. The quick closing of a sale can be assisted by sales promotions such as discount vouchers (Kotler, Bowen et al., 2003). In addition direct marketing can be used to address potential targets individually and collect personal information to build a database in a controlled and accountable way (Reid, 1994). Promotional activities often have two main target audiences: potential travellers and influencers (Kelly and Nankervis, 2001).

When marketing to potential individual travellers, the DMO employs long-term strategies and while they do promote special offers/events their main focus is on building the image or brand of the destination so as to increase awareness and appeal to target markets. The DMO's focus on image is in part an economic decision (as funds are often limited) but also a strategic decision. The destination image allows the DMO to essentially present the personality of the destination to potential travellers who then amalgamate it with their own knowledge to create a personalised picture of the destination with relevant connotations. This then acts as a very powerful factor in travellers' holiday decision-making process (Ashworth and

Goodall, 1988; Goodall, 1988; Dann, 1996). The DMO may action the promotion of the image through brand advertising, consumer trade shows, press releases and the production of informational destination material such as brochures and websites.

For influencers, such as the media, travel agents and tour operators, a push rather than a pull strategy is often used. Typical promotional efforts for this target market look to educate and impress, which in turn aims to simplify the selling-on of the destination to their respective audiences. While the promotional tools used for individual tourists spill over to communicating with influencers, there are a number of special tactics used. These include industry trade shows, hosting of television programmes, familiarisation tours and press relations (French, Craig-Smith et al., 1995; Kelly and Nankervis, 2001; Middleton, 2001; Weaver and Lawton, 2002). These are just a number of ways in which DMOs can promote their destination. A more detailed review of information sources available to DMOs and potential travellers follows.

2.3 Information Sources for Marketing Destinations

As an intangible, experiential product, tourism is heavily reliant upon information for both the traveller and the destination marketer. While destinations look to various media and channels to communicate with and distribute to their market (Ashworth and Goodall, 1988), travellers turn to information sources to become aware of their options and assist in evaluating holiday alternatives (Mansfeld, 1992). There are numerous channels or information sources available and the most common way of distinguishing between them is by classifying them by their level of formality and

how commercial their message is. Figure 2.3.1 shows how a source may be formal or informal and commercial or non-commercial.

Sources of Information	Types of Information	
	Formal	Informal
Commercial	Brochures Guidebooks Tourist Offices State Travel Guides	Auto Clubs Travel Agents Travel Operators
		TV* Internet* Radio*
Non-Commercial	Magazines Newspapers	Friends/Relatives Visitor Centres Personal Experience

Figure 2.3.1: Classification of information sources. Adapted from Fodness and Murray, 1997; and Nielsen, 2001*.

Other interpretations of information sources along these lines include that of Crotts (1999) and Gartner (1993). Crotts allots information sources to be personal (eg. friends), marketer-dominated (eg. advertising), neutral (eg. newspaper article) and experiential (eg. personal experience) and notes that new sources such as the Internet could be in a class of their own due to the variety of information types which they carry (Crotts, 1999). Meanwhile Gartner distinguishes sources as either overt or covert, depending upon how clearly they are identifiable as a promotional communication (Gartner, 1993). Information sources can also be internal or external to the user. While this applies mainly to travellers, it is also useful for marketers to be aware of this difference, because this may influence how the information is applied to the decision making process (Um and Crompton, 1990). Internal sources such as internalised knowledge and personal experience are readily available and relatively trustworthy as the individual ‘owns’ them. External sources are all others and require more effort on the user’s part. Thus if a destination is able

to get travellers to internalise information about them such as their image, they stand a better chance of being included in the travellers considerations.

This study is concerned with the use of information sources used in pre-departure planning for long-haul holidays, in particular those available in the United Kingdom. These sources will be discussed in detail in the context of five groups: intra-personal, interpersonal, destination specific, mass media and interactive media. These groups assemble sources with similar properties, whether they are from the marketer or traveller's perspective.

2.3.1 Intra-Personal Sources: Past Experience and Internalised Knowledge

Intra-personal sources are internal to the traveller and refer to their personal experiences and acquired knowledge. This information may have been acquired through various experiences, including personal reading, mass media exposure, conversations with relatives, friends and associates, or even personal experience with travel in general, or the destination in question. Personal experience has been noted by a number of authors to be more influential than other external sources due to its relationship with decision criteria formation (Bettman, 1979; Mazursky, 1989; Soenmez and Graefe, 1998; Kotler, Bowen et al., 2003). Furthermore, the extent and nature of past travel experience has been linked to future travel behaviours (Schul and Crompton, 1983; Mazursky, 1989; Oppermann, 1997; Soenmez and Graefe, 1998; Oppermann, 2000). Hence, intra-personal information is a very important information source. Unfortunately, destination marketers do not have direct access

to this information channel, but many attempt to become a part of it indirectly through their use of external information channels in the hope of being internalised.

2.3.2 Inter-Personal Sources: Friends/Family, Other Travellers, Travel Agents

One of the most cited sources of inter-personal information is ‘friends and family’ or ‘friends and relatives’ or even ‘word-of-mouth’. In a survey on which sources were used and deemed important by tourists Anderdeck and Caldwell (1993) found that word-of-mouth (WOM), along with personal experience, was the most influential source identified by tourists. This is mainly due to their status as a trusted source in that they will be honest and will provide evaluative judgments in relation to the individual concerned (Kotler, Bowen et al., 2003). Older travellers, those travelling close to home or making routine trips are heavy users of friends and family (Gitleson and Crompton, 1983; Gartner, 1993; Hyde, 2000). They have also been reported to be used throughout the decision process for a number of purposes (Gartner, 1993). Friends and family can also overlap with another inter-personal source, other travellers. Travellers either on a trip or those recently returned are often the best source of up-to-date, experiential information (Fesenmaier and Vogt, 1993; Vogt, Stewart and Fesenmaier, 1998). Marketer’s best approach to utilise this source is to ensure that their experiences are more than satisfactory so that WOM is positive.

Traditional travel agents are also important interpersonal sources, especially for long-haul, complex or package holidays (Mok, 1993; Snepenger and Snepenger, 1993), which require professional advice, or by those travellers that are time-starved (Zalatan, 1996). Travellers mainly use them for acquiring brochures, practical

information and locating the best deal (Tjøstheim, 2002; Markland, 2003), however, for some they also provide assurance and confirmation of holiday choices (Gitleson and Crompton, 1983; Beirne and Curry, 1999); something for which they are often favoured for over computer-mediated agents (Lang, 2000). Their other role is as a distribution channel (Renshaw, 1997). This intimate link between advice and the ability to sell sees travel agents being directly marketed to by destinations or tour operators, via sales promotions, incentives, training sessions and even familiarisation tours.

2.3.3 Destination Specific Literature: Guidebooks, Brochures and Tourist Bureaux

Destination specific literature encompasses those information sources that are dedicated to the destination only. Destination specific literature can be commercial, like tour operator or even destination generated brochures, or non-commercial such as independent guidebooks. It is common for these sources to be used in the holiday planning process and also during the trip (Sheldon, 1997). Studies have aligned the use of guidebooks with long-haul overseas trips (Gitleson and Crompton, 1983; Duke and Persia, 1993; Hyde, 2000; Bieger and Laesser, 2001), by highly-involved individuals (Fesenmaier and Johnson, 1989), or those with no experience of the destination (Snepenger, Megad, Snelling and Worrall, 1990). They are also most likely to be used by those desiring a well-planned holiday (Gitleson and Crompton, 1983).

Guidebooks such as *Lonely Planet*, *Lets Go* and *Rough Guides* offer the tourist a compact, practical and thorough review of a destination and with their non-

commercial tone are considered to be highly credible sources (Nolan, 1976; Gitleson and Crompton, 1983). While they are directed to be used during a trip, travellers often use them prior to the holiday to plan their itinerary and verify WOM information. As guidebooks are independent publications, destinations can do little to influence the travel writers other than ensure they have a positive stay and keep them updated on new developments.

Brochures are the travel industry's communication steadfast (Bieger and Laesser, 2001). From the industry's perspective, they are portable, flexible and relatively low cost (Morgan and Pritchard, 2000). They can also be used to satisfy various marketing goals including creating awareness and desire, informing and a call to action to facilitate the purchase (Middleton, 2001). They offer tourists a tangible experience of the destination with practical information, fanciful descriptions and inviting, glossy images. Brochures published by tour operators are mainly used by package holidayers, while independent travellers look towards those coming directly from destinations (Bieger and Laesser, 2001; Tjøstheim, 2002), with the majority of UK travellers sourcing brochures from their travel agents (Markland, 2003). While brochures can act as a lure for those undecided upon their holiday destination, they are more often used after a destination has been decided upon for prices, comparison-shopping, getting in the holiday mood and even as souvenirs (Getz and Sailor, 1993; Zhou, 1997; Markland, 2003). They tend to be most influential with first-time travellers to the destination than those that have already had experience with it (Zhou, 1997; Weaver and Lawton, 2002) and thus there is the potential to tailor brochures to these two segmentations (Zhou, 1997).

This prospect of customisation is possible with the advent of e-brochures which have the advantages of not only being cheaper and faster to produce and deliver, but are always available and can be customized by selecting customer-relevant pages (Markland, 2003). Despite these industry advantages, their adoption may be slower than anticipated because "most people, even those seduced by new technology, still seem to want to hold colour brochures in their hand at the beginning and end of the choice process." (Markland, 2003, slide 24). Another non-paper option is the video brochure, which allows a richer communication of information through audio and emotive moving images. Although the intention for most of these videos is to assist in pre-trip planning, they are often more influential as inspirational tools and for post-trip sharing with others (Hanefors and Larsson, 1993).

Another source for destination specific information is the **tourist office** or **visitor centre**. From a pre-trip perspective this refers to the office held by a destination in target markets. For example, the Western Australian Tourist Commission has offices in major markets such as the United Kingdom, Germany, Japan, Singapore and Malaysia. These offices are responsible for trade shows, publicity, industry liaison and customer information services (brochures) and the like for their respective markets. Thus a traveller can access information on Western Australia via these offices while still at home. The visitor centres are the in-trip information source that the destination offers travellers and cater for attraction information, tour bookings and local information. In the former, destinations focus upon providing information

that persuades as well as informs, while the latter focuses on information of a practical nature.

2.3.4 Mass Media: Mass Print and Broadcast Media

Mass media offer a wide range of communication channels and tactics to the destination marketer. Mass media includes print such as newspapers and magazines and broadcast such as television and radio. Within these channels there are the strategic options of advertising or below-the-line promotions via public relations, each with their own strengths. Advertising is typically used by destinations for image building campaigns, while tour operators, airlines and travel agents typically use it for promoting products or special offers. For the tourist, advertising's commercial goal bestow it with little credibility for destination information (Nolan, 1976), however it does allow tourists to glimpse a destination's image and it is ideal for practical information such as pricing and the latest deals (Getz and Sailor, 1993). Content generated from destinations' public relations efforts such as familiarisation tours are considered by tourists to be a more credible source (Nolan, 1976). This is due to the articles and travel programmes reflecting more the experiences of the individual travel writer or presenter rather than a direct promotional pitch. This personal touch likens it to a word-of-mouth or friend or relative source, but one in which the destination can have a more direct influence.

The use of **mass print media** by the travel industry for advertising purposes accounts for almost 60% of typical travel advertising spend (Morgan and Pritchard, 2000) and in 1997 this was 11% of total printed display advertising in the UK

(Middleton, 2001). Given that print advertising is mainly used for special offers and product deals, travellers tend to consult this source in the later stages of the decision process; often after the destination has been chosen but a great deal is desired (Gartner, 1993). Articles, on the other hand, are more often used for inspiration at the beginning of the process, or even as an entertaining past-time in themselves, before the need for a holiday becomes apparent and then again after the destination has been chosen and particular attractions or possible experiences are sought.

Broadcast media accounts for only 36% of the travel industry's advertising spend in the United Kingdom (Morgan and Pritchard, 2000). Radio at 6% (Morgan and Pritchard, 2000) is an information dissemination tool that is used mostly for local region campaigns (Gartner, 1993). Meanwhile, television is "becoming an increasingly significant knowledge source" (Riley, 1994, p454) which is reflected by accounting for 30% of the travel industry's advertising spend (Morgan and Pritchard, 2000). It is ideal for such an intangible industry as it can provide a virtual experience of the destination with its vivid audiovisual capabilities, which permeate the emotional faculties of a large, far-reaching audience. Furthermore, Gartner (1993) argues that television is an important image formation agent and thus influences the perceptions of a destination and it seems that families and females make special use of television for planning their holidays (Gitleson and Crompton, 1983; Gartner, 1993).

As with print media, there are several routes to destination promotion on television: commercials, non travel-related programs and travel programs. Commercials are

most often conducted for international tourists on a national- or state-destination level. Non-travel related program refers to the use of a destination in a program, documentary, movie or serial as a location. It is argued that using movies or serials to promote a destination is more powerful than brochures, due to the viewer's heightened involvement with the content and undivided attention (Riley, 1994; Reeves, 2004). This has proved beneficial for some locations. For example, Australia has benefited a number of times over the years from movies such as *Crocodile Dundee* and *Priscilla: Queen of the Desert*. Similarly, *Braveheart*, *Rob Roy* and *Loch Ness* are estimated to have generated £7-15million in additional visitor spending in Scotland (Middleton, 2001). And in 1993 one in six tourists attributed their visit to the Republic of Ireland to a film (Reeves, 2004). However, non-related programming can also have an influence upon a destination. For example, the disadvantages of news coverage of civil unrest at a destination can be amplified if the bias of the media or news agency are also negative (Nielsen, 2001).

Travel programs such as *The Great Outdoors*, *Getaway* and *Postcards WA* in Australia, or *Holiday* on the BBC, are viewed by a range of people. These include not only those who want to travel in the near future, but also those who want a vicarious experience or those who wish to relive past travels. These programs present destinations almost in guidebook format - a dash of history and cultural background, activities to do while there, where to stay and estimated costs for flights and accommodation.

The travel channels in the UK such as the *TV Travel Shop*, *Thomas Cook TV* and the *Travel Channel*, are more promotion driven and broadcast segments on various destinations, package tours and resorts with the aim of making a sale. After communicating via the safe, emotive audiovisual technology of television a call centre manned by booking agents caters for enquiries and holiday purchases. This allows the viewer to be inspired by the stories, gather information on the holiday of their choice and then gain personal advice from the call centre staff and book their desired holiday. On review of some of the channels available (see Appendix 2A for notes) much of the content relates to package holidays and products for well-developed tourist destinations. This may be due not only to their affiliations with tour operators but also because these products are easier to sell in such an environment than customised holidays which are better catered to either the Internet or travel agents.

Selected Travel Websites	
✓ Flight and holiday finders.	✗ Finders need to have more criteria options.
✓ Good for acquiring information but lacks personal interaction, would book off-line.	✗ Information expectations not met in terms of flight timetables, should also include information from brochures and would benefit from consumer tips.
✓ No aggressive sales staff.	
✓ Ability to go at own pace.	✗ Poor graphics compared to brochures etc.
TV Travel Shop (a TV travel channel)	
✓ Familiar, comfortable and easy to use, no fear of the technology.	✗ Nature of programming (extensive, linear and repetitive) makes finding something new and different difficult.
✓ Large, clear images with a sense of entertainment.	
✓ Lower cost than using web.	✗ Would confirm television deal with those in regular brochures.
✓ Contact with an agent via the call centre.	

Table 2.3.1: Strengths and weaknesses of travel websites and television travel shopping channels (non-interactive in experiment). Source: Adopted from Morgan, Pritchard & Abbott, 2001.

Morgan, Pritchard and Abbott (2001) compared television travel shopping channels and the Internet (see Table 2.3.1). Television shopping channels were found to be superior to the Internet in that they afforded a comfortable, emotive, visually stimulating environment for holiday shopping, with attractive personal interaction through the call centre. However, its linear nature made the experience tedious in attaining the desired information and people still tended to confirm the television products with those in hardcopy brochures (Morgan, Pritchard and Abbot, 2001). By combining interactive technologies with the television environment, such as in interactive television, an effective compromise may be found.

2.3.5 Interactive Media: Teletext, the Internet and Interactive Television

Interactive media refers to media which moves the viewer from a passive to an active participant. One of the first interactive media was teletext which allowed goal-directed search for information through text-based advertising and general interest information. The Internet is also an interactive media and is currently experiencing much success in distributing information, facilitating communication and enabling the purchase of goods and services. Interactive television is a convergence of the two technologies and is still developing its niche in the entertainment and information worlds. The strength of these media lie in the fact that users can be in control of the information they see (to various extents) and in the case of the Internet, digital teletext and some retailers on interactive television, viewers can also purchase goods. For destination marketers the interactivity means that the viewer is in a more involved position with media and content and that information can be easily updated (even automatically). In addition, information can be presented in more aesthetically

pleasing and entertaining ways (video streaming on the Internet and high definition video via digital interactive television).

Teletext technology emerged in the late 1970s and there are a number of providers in the UK including Ceefax (from the BBC), Teletext Ltd., 5Text (from Channel 5) and SKYText (BSkyB's version) to name a few (Brown, 2004). Essentially these services are funded through advertising and provide their information via analogue technology with chunky text based pages. However, with the advent of digital television some such as Teletext Ltd. are converting to a more attractive graphic display featuring video and the like (BroadbandBananas, 2001; Teletext, 2002). It is estimated that 84% of United Kingdom households have access to a teletext service, with 36% of those accessing it daily and a further 52% occasionally (Towler, 2003).

One of the main uses of teletext services has been the travel pages that feature advertising for holiday products, especially for last minute deals. It has been heralded as “the largest holiday advertising medium in the UK” with one in every ten holidays being sold through the analogue service, with around 7.2million people accessing the travel pages in a typical summer (BroadbandBananas, 2001; Teletext, 2002). Currently users research available products via their teletext televisions and then contact a call centre to purchase the product. However, Teletext aims for this to be possible in the future via the television remote (Teletext, 2002). Teletext advertising is largely the domain of travel retailers but destinations can engage in joint marketing efforts with airlines or similar providers to promote a destination. Furthermore, there is also the potential to provide Teletext Holidays with destination

information (eg. footage) to use in their destination profiles in the digital service where information presentation is more sophisticated. From a destination marketer's point of view, teletext could be used to promote the destination via special joint-advertising efforts with product providers (eg. share advertising costs for special airfares with an airline)

The **Internet** and the World Wide Web have been a significant addition to the tourism industry's distribution and communication channel arsenal. As an industry of intangible products and distant customers, it is already largely driven by information and the use of telecommunications. The Internet enables this information to be disseminated and products distributed in a goal-directed environment meaning that user attention levels are higher (Morgan and Pritchard, 2000) and information intake is more efficient (Ashworth and Goodall, 1988). Information is presented not only via text but also through graphics and streaming video. Due to the limitless amount of pages or websites possible, a range of information types are accessible including destination websites by government agencies or destination marketing organisations, guidebook based sites, personal accounts by other travellers, on-line travel agencies, local tourist business websites, airlines and even chat rooms or forums where travellers can post advice, questions and experiences. With such a plethora of information options available, potential travellers have the ability to gain a well-rounded picture of a destination. For destinations this also offer options, however, the lack of regulation over the Internet (compared to traditional mass media) means that there is less control over how a

destination is ultimately presented outside of the destination's official sites and this has the potential to be damaging.

In the UK 52% have access to the Internet and after email (64%) and searching for general information (58%), the Internet is used mostly for travel and holiday purposes (26%) (Towler, 2003). This is not only limited to information, but increasingly also the purchasing of holiday products, with one study estimating travel related e-commerce as the biggest sector on the Internet accounting for one-fourth of all Internet purchases (CTC, 2001). This means it is a direct competitor of other distribution channels such as travel agents and tour operators (Markland, 2003). From a marketer's point of view, the Internet's low entry costs are making it also a very attractive advertising medium, rivalling television and print media (Weaver and Lawton, 2002).

Travellers find the Internet to be a convenient and instantaneous information source, ideal for comparing pricing and searching for deals, last minute or detailed information, researching a specific destination and all without any sales pressure and under their own control (Beirne and Curry, 1999; Lang, 2000; Morgan and Pritchard, 2000; Markland, 2003; PhoCusWright and Vividence, 2003). However, travellers have also noted the overload of information if only browsing for destinations, long download times of brochures for low speed connections, security concerns for bookings (payment security and proof of booking) and the lack of personal attention that is afforded by person-to-person travel agents (Lang, 2000; Morgan and Pritchard, 2000; Markland, 2003; PhoCusWright and Vividence, 2003). This

indicates that it is not the ultimate source of information, rather it is used in a wider mix of sources for holiday planning. The web-based travel agency, Expedite UK, found its users on average consulted 26 sources (online and offline) for information before booking a holiday (Morgan and Pritchard, 2000).

Thus the Internet tends still to be used largely for acquiring information on destinations, airfares and accommodation, often before consulting a travel agent (Lang, 2000). When researching destinations guidebook style sites such as *Lonely Planet* (www.lonelyplanet.com) seem to be the most useful, followed by government, business and other traveller sites, while web-based travel agent sites only become useful when a destination is selected and prices or offers are being sought (Beirne and Curry, 1999). The Internet is an important source for long-haul travellers (Bolin, 2000; Coase, 2001) and when it is used for booking or purchasing travel products, flights account for most of these (Morgan, Pritchard et al., 2001; PhoCusWright and Vividence, 2003). One study has also found that the Internet is the most important source for travellers next to their family and friends (PhoCusWright and Vividence, 2003). Studies have also shown that while the typical Internet user is 25-34 years of age, the majority of online bookers are 35-54 years old, indicating that while heavy users of the Internet may be in the younger generations, purchasing on the Internet has no age confines (Morgan and Pritchard, 2000; Morgan, Pritchard et al., 2001). Another interesting factor in travel-related Internet use is the individual's previous use of and experience with the Internet (Cassidy, 2000). Cassidy (2000) found that "the longer an individual has been using

the Internet and the more time spent online per week, the more likely the individual is to have used and intend to use the Internet to plan leisure travel” (p5).

Interactive television (iTV) is the attempt to meld television and Internet technologies and give the user the advantages of both in the one device. However, it is not simply the Internet on television. Rather it adapts the interactive concept to the tele-visual environment using digital transmission technology to provide a relatively easy-to-use, entertaining, rich-media that allows for enhanced viewing and goal-directed information searches. Despite the interactive television industry’s nascency it is actually a product of previous efforts such as the cable projects QUBE (1970s) and FSN (1990s) in the United States of America (DeFleur and Ball-Rokeach, 1989; Neuman, 1991; Swedlow, 2000). For a more detailed review of interactive television and its history see Chapter 3.

Interactive television provides similar communication avenues to traditional television: commercial spots, travel programmes and non-travel related programming. In addition it allows these commercials and programmes to be interactive for viewers to get more information either on screen or by requesting a brochure. There are also other opportunities such as banner ads in the electronic programme guide (EPG), stores in ‘walled gardens’ or virtual malls, branded games and due to the digitisation of the media, there is the opportunity for advertisers to run their own branded channels if they have the content. The iTV technology not only allows travel and tourism marketers new options, but it also puts the viewer or potential tourist into a new situation. It is argued that the interactivity afforded by

iTV allows the viewer a feeling of ownership not only over the decisions they make but also the content they view. This is said to put them in a more positive attitude which allows them to take in and accept the information more readily. Thus if a potential tourist is able to choose the segment of a destination of interest to him, he should be in a more positive frame of mind than one who had to watch a linear presentation of the content (Ashworth and Goodall, 1988), which is a positive outcome for destinations.

An early visualisation of how iTV would work for the travel industry is described in Figure 2.3.2 and while this is not how iTV is currently being used, technology has been trialled to enable such virtual travel agents when customers and the industry is ready for it (Scott, 2001; John, 2002).

“A prospective traveller obtains travel information simply by dialling a special number in a device that is part of the television set. A selected travel agent responds by displaying on the client’s screen a series of full-colour pictures or a descriptive audio-visual program of a desired travel destination, tour or cruise ship. If the client is prepared to decide on the spot, all arrangements are completed and the client’s checking account or credit card number is debited by the travel agency.”

(McIntosh and Goeldner, 1990, p452)

Figure 2.3.2: Forecasted use of iTV by the travel industry.

Surveys have suggested that interactive television stands to be a viable channel for purchasing travel and holiday products with consumers indicating it as one of the top products that consumers would like to and would consider purchasing through the new technology (Morgan and Pritchard, 2000; Morgan, Pritchard et al., 2001). Purchases are already possible for various products using viewer’s subscription profile and remote control via a cable or telephonic back channel. While Thomas

Cook allowed interactive search on their dedicated television site in 2001, purchases were carried out through a call centre (Cook, 2001). Another holiday retailer actually offered on-screen booking capabilities, however, customers were slow to take advantage of this function (Clarke, 2003). It is suggested that this is not due to information security issues but rather to the fact that holidays are high involvement products that require more personal attention than afforded by a computer-mediated technology (O'Donovan and Daum, 2000; Cook, 2001; TTG, 2001), however, package holidays will lend themselves sooner to the technology than independent itineraries (Day, 1999). Furthermore, interactive television stands to aid in waste reduction for the travel industry in information dissemination and cost reduction, by providing an 'always on' outlet for up-to-date high quality audio visual information (Middleton, 2001).

Some early research reports suggested that the travel and tourism industry would use interactive television in much the same way as they did teletext; ie. as a forum for disseminating just-in-time information, rather than the lead generation tool that the automobile industry was establishing it as (O'Donovan and Daum, 2000). However, current practices contradict this. Currently, the travel and tourism industry is making use of iTV in two main ways: generation of qualified leads *and* information dissemination. Destination marketing organisations (DMOs) are exploiting iTV's more efficient capability to generate qualified leads (qualified meaning that complete personal details are received) via brochure request, enhanced advertising spots. These spots are usually incorporated into a wider media campaign and are proving to be successful in returning responses – with one iTV ad responsible for 50% of the

overall campaign's responses (Harrower, 2003). However, there is still a challenge to bring the per response cost down in line with other media or even below. Primarily DMOs see iTV as a prime information dissemination tool and any notion of booking via iTV is very much further in the future (Harrower, 2003; Jenkins, 2003).

Tour operators, travel agents and travel retailers are also of the mind that to use iTV as a booking portal is too early and are currently using it for information dissemination, to drive sales, increase contact with customers, conversion of viewers into customers and to enhance the brand experience (Clarke, 2003; Gershon, 2003; Nieboer, 2003; Pye, 2003). While many do carry the latest information on deals, availability, prices and the like, they do not see themselves as hi-tech teletext services, rather as more exclusive travel agents (Nieboer, 2003). Again, as the DMOs, travel retailers feel that the iTV industry needs to improve consumer knowledge and the current technology, as well as reduce costs before they become more committed to iTV (Clarke, 2003; Gershon, 2003; Nieboer, 2003; Pye, 2003).

In summary, interactive television allows the viewer more control in a goal-directed, high definition, audio visual environment. It is already fulfilling its information dissemination role successfully for travel marketers and there are indications that with the right timing, booking holidays may also become a viable reality further in the future. As it is still developing its consumer critical mass, its technology and business models, what is in use today by consumers and the travel industry alike is only the tip of a creative and functional iceberg.

2.4 The Tourist

The earliest definition of a tourist by Olgivie in 1933 included any traveller away from home for less than one year who spent but did not earn money at the destination (Table 2.4.1). This basic definition was refined as the travel phenomenon grew, distinguishing tourists from refugees, pilgrims and business travellers by the pleasure, novelty and voluntary nature of holidays. Furthermore, current World Tourism Organization’s definition has refined tourists even more so by distinguishing between international, domestic and even day-trippers. While being mindful that definitions about human behaviour provide indistinct boundaries and often face exceptions to the rule, it is safe to identify a tourist as one who is a voluntary, temporary traveller for pleasure, business or other purposes. They will spend money without earning it at the destination before returning home.

Author/s	Definition	Reference
Olgivie (1933)	“all persons who satisfy two conditions, that they are away from home for any period of less than a year and, second, that while they are away they spend money in the place they visit without earning it there.”	Morley (1990)
Cohen (unknown)	“a voluntary, temporary traveller, travelling in the expectation of pleasure from the novelty and change experienced on a relatively long and non-recurrent trip.”	Morley (1990)
World Tourism Organisation (unknown)	“... ‘international visitor’... travels to a country other than that in which he has his usual residence, the main purpose of who’s visit is other than the exercise of an activity remunerated from within the country visited and who is staying for a period of one year or less. ...international tourist... whose main purpose of visit can be classified under: a) pleasure, holidays, culture, active sports, visits to friends and relatives, other pleasure purposes; b) professional: meeting, mission, business; c) other tourist purposes: studies, health, pilgrimage.”	Morley (1990) Ross (1994)

Table 2.4.1: Selected definitions of a tourist.

These definitions, whether for economical, political or sociological purposes, will continue to evolve in line with the travel and tourism industry and changes in the tourists themselves. Poon (1993) sees tourists to have changed from that of the mass, sun-seeking, status-oriented tourist of the 1980s to the more sophisticated authentic-experience-based tourist of today (Table 2.4.2,Poon, 1993).

Old Tourists	New Tourists
Search for the sun	Experience something different
Follow the masses	Want to be in charge
Here today, gone tomorrow	See and enjoy but do not destroy
Just to show that you had been	Just for the fun of it
Having	Being
Superiority	Understanding
Like attractions	Like sports
Precautions	Adventurous
Eat in hotel dining room	Try out local fare
Homogenous	Hybrid
See holidays as novelty and an escape from life.	Harder to please and view holidays as an extension of life.

Table 2.4.2: Differences between the old and the new tourist styles. Source: Poon, 1993.

Furthermore, tourists themselves try to avoid the previous stereotypes and emphasize the sensitive, independent nature of their activity by preferring terms such as traveller or backpacker to tourist (Seekings, 1989); essentially interchangeable terms. Regardless of definitions, a tourist’s personal characteristics play a major part in their holiday decisions. These characteristics include their demographics, psychographics and motivations, as well as attitudes, past travel experiences and personal or situational constraints (Woodside, 2000).

Demographics and **psychographics** refer to the personal non-psychological and psychological characteristics, respectively. While demographics are easily accessible facts such as age, gender, income, lifecycle stage, they have been only

useful for descriptive purposes or as group classifiers (Bodur and Yavas, 1988; Gitelson and Kerstetter, 1990; Um and Crompton, 1990; Hsiesh, O'Leary and Morrison, 1994; Kim, Weaver and McCleary, 1996; Hudson and Gilbert, 2000).

Author/s, Year	Traveller Types/Typologies		Reference
Cohen, 1972	Organised Mass Tourist	Explorer	Hudson (1999)
	Individual Mass Tourist	Drifter	
Plog, 1974	Allocentric	Psychocentric	McIntosh & Goeldner (1990)
Westvlaams Economisch Studiebureau, 1986	Traditionalists	Rest-Seekers	Swarbrooke & Horner (1999)
	Nature Viewers	Discoverers	
	Active Sea Lovers		
	Family-Oriented Sun & Sea Lovers		
	Contact-Minded Holiday Makers		
Henely Centre	Bubble Travellers	Total Immerse-ers	Stewart (1993)
	Wide Horizon Travellers	Idealised Experience Seekers	
Yiannakis & Gibson, 1992	Sun Lover	Thrill Seeker	Yiannakis & Gibson, 1992
	Action Seeker	Explorer	
	Anthropologist	Jetsetter	
	Archaeologist	Seeker	
	High Class Tourist	Drifter	
	Escapist	Sport Lover	
	Organized Mass Tourist	Independent Mass Tourist	
Decrop, 1999	Alternative Tourist	Homebody Tourist	Decrop, 1999
	Surrogate Tourist	Adaptable Tourist	
	Unplanned Tourist	Gestalt Tourist	
	Unwilling Tourist		

Table 2.4.3: Selected tourist-type typologies based on psychographics.

Psychographics, on the other hand, have been proven to be quite effective in tasks such as designing tours for different groups due to their strong link to behaviours (Schul and Crompton, 1983; McIntosh and Goeldner, 1990; Hsiesh, O'Leary et al., 1994; Frew and Shaw, 1999). Psychographics have been operationalised through lifestyle and personality typologies (see Table 2.4.3 for a selection, McIntosh and Goeldner, 1990; Yiannakis and Gibson, 1992; Stewart and Ward, 1994; Decrop, 1999; Hudson, 1999; Swarbrooke and Horner, 1999).

As with models, typologies can over-simplify what is otherwise a highly individualistic, emotionally-vested behaviour. One must be aware that tourists may move between categories at any time and can be influenced by other individuals in the travel party. Furthermore, typologies can date rapidly as the industry and market evolves and can be inadequate for differences in nationality or culture given the predominantly European and North American research bases (Swarbrooke and Horner, 1999). Thus it is important to consider the tourist holistically, using the psychographic types only as a guide.

A tourist's **motivations** have received much investigation as they are the impelling and the compelling (push and pull) forces behind behaviour which attempt to satiate an urge (Crompton, 1979; Baloglu, 2000). They are the “set of needs which predispose a person to participate in a touristic activity” (Mok, 1993) and are influenced by the individual's characteristics and circumstances (Pearce, 1993; Decrop, 1999; Gnoth, 1999; Swarbrooke and Horner, 1999), as well as sociological and economic factors (Bodur and Yavas, 1988). Table 2.4.4 illustrates examples of motivations for touristic activity. Escape, relaxation, socialisation, self-development, prestige and novelty of the experience are all common motivations identified for pleasure travellers (Crompton, 1979; Gitelson and Kerstetter, 1990; Gartner, 1993).

Given their cerebral origins, motives are often difficult to correctly identify and express, as they can be products of external stimuli or the subconscious and one motivation can result in numerous behaviours (Crompton, 1979; Krippendorf, 1984; Mansfeld, 1992; Ross, 1994). Furthermore, it is important to acknowledge that

motivations can occur as multiples and are dynamic. They can change between different holidays, during the holiday, depending upon the destination, an individual's lifecycle or characteristics (Crompton, 1979; McIntosh and Goeldner, 1990; Swarbrooke and Horner, 1999).

Author/s, Year	Motive Classification/Motivation Models	
Gray, 1970 ¹	Wanderlust	Sunlust
Plog, 1974 ³	Psychocentric – Allocentric continuum	
McIntosh, 1977 ¹	Physical	Interpersonal
	Cultural	Status and Prestige
Crompton, 1979 ¹	Relaxation	Novelty
	Prestige	Education
	Enhancement	Social Interaction
	Exploration and evaluation of self	
	Regression to childhood or simple lifestyle	
	Escape from a perceived mundane environment	
Iso-Ahola, 1980 ³	1. Biological dispositions, early socialisation and personality factors	
	2. Need for optimal arousal	
	3. Perceived freedom and competence	
	4. Leisure needs	
Levels influenced by situational factors and social environment.		
Beach & Ragheb, 1983 ⁴	Intellectual	Competence-Mastery
	Social	Stimulus-Avoidance (escape)
Krippendorf, 1987 ¹	Escape	Communication
	Self-Realisation	Happiness
	Broadening the Mind	Recuperation and Regeneration
	Freedom & Self-Determination	Compensation & Social Integration
Pearce, 1988/1991 ³	1. Relaxation, bodily needs	4. Self-esteem, development
	2. Stimulation	5. Fulfillment
	3. Relationship	
Gnoth, 1999 ²	Outer-Directed and Expressive	Outer-Directed and Instrumental
	Inner-Directed and Expressive	Inner-Directed and Instrumental

Table 2.4.4: Selected motivational classifications and frameworks in the tourism literature. Source: Adapted from ¹ Ross, 1994; ² Gnoth, 1999; ³ Pearce, 1993; and ⁴ Swarbrooke and Horner, 1999.

Since motivations are drivers they assist in building an individual's **expectations** of a holiday and what should be achieved through it (Gnoth, 1999). Expectations are both cognitive and affective and are especially important to an intangible and often uncertain purchase like a holiday (van Raaij and Franken, 1984). They are formed through memories of actual experience, inferences drawn from related experiences

and perceptions from various information sources (van Raaij and Franken, 1984; Martin and Simmons, 1999). They are the benchmarks that help determine whether a particular drive or motivation is satisfied (or dissatisfied) through the holiday and are then converted to attitudes, which will in turn influence future decision making processes.

An individual's **attitudes** have been shown “to be a useful predictor of overall preferences” (Assael, 1984 inUm and Crompton, 1990). They are subjective experiences, involving evaluative judgements and may be expressed through language or behaviour (Ross, 1994). A tourist can hold different attitudes, such as toward the destination or toward the act of travelling to that destination. Much of the literature has stressed that measuring the attitude toward travelling to the destination will provide a more accurate indication of the likelihood of actual travel (Ross, 1994).

As the discussion of expectations has already indicated, an individual's **travel experience** is an important source of information and can be used as an indicator of subsequent future travel behaviour (Schul and Crompton, 1983; Oppermann, 1997; Soenmez and Graefe, 1998, Mazursky, 1989 #446; Oppermann, 2000). An early study by “Lansing & Blood (1964)... reported that previous overseas travel was the best prediction of travel overseas in the future” (Schul and Crompton, 1983, p26). Since then, it has been an important factor in many holiday decision-making models (Mazursky, 1989; Woodside and Lysonski, 1989, to name a few; Witt and Moutinho, 1995; Moscardo, Morrison et al., 1996; Vogt and Fesenmaier, 1998; Hudson and

Gilbert, 2000; Oppermann, 2000; Woodside, 2000). These models recognize that past travel experience may not only provide information on a particular destination but also transcendental skills and knowledge applicable to the holiday planning and actualization process. Models have also been created to explain how it does this.

For example, the ‘travel career ladder’ theory by Pearce is based on Maslow’s Hierarchy of Needs and postulates that as a tourist becomes more experienced they look to fulfil higher level needs through their travel. It is possible for an individual to ascend or descend the ladder at anytime, or not partake in it at all when not travelling (Ryan, 1998; Oppermann, 2000). Despite the rapid uptake of this theory in the decade following its introduction, there remains some contention as to its realism and its applicability (Ryan, 1998; Oppermann, 2000). The ‘travel horizon’ by Schmidhauser, on the other hand, seeks to explain future travel behaviour through past travel behaviour. It is suggested that the further a tourist has travelled in the past, the more likely that they will travel as far or even further in the future. However, this future behaviour is influenced by many other factors such as lifecycle, risk-taking propensity and the nature of the trip and thus the tourist may not travel that far again or frequently (Mazursky, 1989; Soenmez and Graefe, 1998; Oppermann, 2000).

Just as an individual acts upon motivations to travel, they also act within a set of implicit and explicit **constraints** (Goodall, 1988). Constraints may prevent an individual being able to undertake holiday travel, as well as defining the type and specifics of the holiday (McIntosh and Goeldner, 1990) and thus it has been

suggested that they may be more important than the decision-making process itself (Mansfeld, 1992). Crawford et al (1991) conceptualised four types of constraints: intra-personal (within the individual), leisure preferences (individual's preferences for leisure time), interpersonal (interaction with others), interpersonal compatibility and co-ordination (bringing together of the travel group) and structural (economical, temporal, access, etc) (Crawford, Jackson and Godbey, 1991).

The structural constraints such as time and money are the most obvious and are often considered in light of an individual's priorities and family life cycle. For example, studies have shown that higher-income individuals are more likely to travel further away from home than low-income individuals (Hsiesh and O'Leary, 1993). However, this is tempered by lifecycle factors such as school age children who can not be taken out of school for such long holidays. The individual's personality, health, interest and knowledge in a destination may also mould the holiday, as would their relationships with other people in the travel party (McIntosh and Goeldner, 1990). The distance of the destination from the individual's residence may also be a constraining factor, especially if the other constraints of money and time are of issue. This is because generally to travel further away costs more money and takes more time. However, studies have suggested that it is cognitive distance rather than actual distance that is more debilitating for some tourists (Ross, 1994), as people often over-estimate the distance to long-haul destinations and underestimate domestic distances (Ankomah, Crompton and Baker, 1995).

Thus for every personal characteristic, motivation, attitude and experience that an individual has that determines why, where and when they will go on holiday, they also have constraints that govern why they do not go to a particular destination, undertake certain activities or even go on holiday at all. It is critical to take all such aspects into account when attempting to understand the behaviours of tourists. Just as these aspects govern the holiday decision process, they will also have a connection with how tourists collect information to make their holiday decisions.

2.5 Going on Holiday

Already from the discussion it is obvious that the tourism industry is a vast and competitive market vying not only for tourists' money and patronage but also word-of-mouth support. To make the market aware of their intangible and perishable wares, destination marketing organisations communicate to potential tourists through all manner of media possible. But how do those potential tourists use those marketing communications to decide whether to go on holiday, where to go on holiday and finally what to do when they get there?

2.5.1 The Holiday Decision Making Process

The process by which tourists make their holiday decisions has changed little in substance over the years (Figure 2.5.1), though its expression and details have developed in line with the discourses of influencing disciplines. It has been one of the most reviewed concepts in the tourism literature, with one review citing it as the central concept of tourism-related research (Moscardo, Morrison et al., 1996). Other

issues given significant coverage in the literature influence this central concept and include destination image, traveller characteristics and the destination itself (Moscardo, Morrison et al., 1996). These other concepts assist in understanding why people travel, how they decide to travel and how they decide where to travel (MacKay and Fesenmaier, 1998).

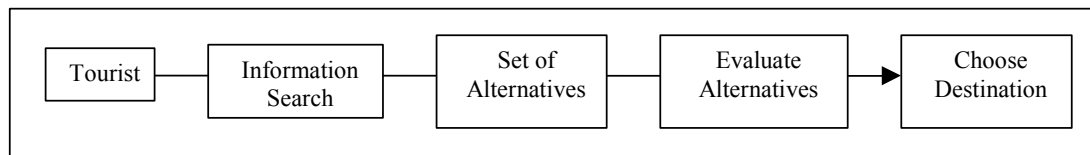


Figure 2.5.1: Basics of the destination decision process. The tourist embarks on an information search that allows the formation of a set of alternatives, from which the final holiday destination is chosen.

The basis of the tourist choice model is grounded in consumer behaviour and utilizes the problem solver ideology (Mansfeld, 1992; Perdue, 1993; Schmidt and Spreng, 1996; Hyde, 2000), which stipulates that a tourist will use the information available to them to choose a destination that best satisfies their needs. Some models have also included the hedonic consumer via affective components (Woodside and Lysonski, 1989; Um and Crompton, 1990; Baloglu, 2000; Hyde, 2000, Mayo, 1981 #445) to produce a more rounded approach. However, there is a consensus that the factual requirements of decision making are intrinsic to the decision process, while the hedonic elements are on the peripheral.

The models depicted in Figures 2.5.2 through 2.5.5 are examples of models offered in the literature and show that there are many influencing details to the basic holiday decision-making process as outlined in Figure 2.5.1. These factors include a tourist's previous experience and individual characteristics; the destination's attributes,

promotional efforts and the resulting image; various sources of information; the nature of the trip; and constraints such as time, perceived risk and even cognitive distance.

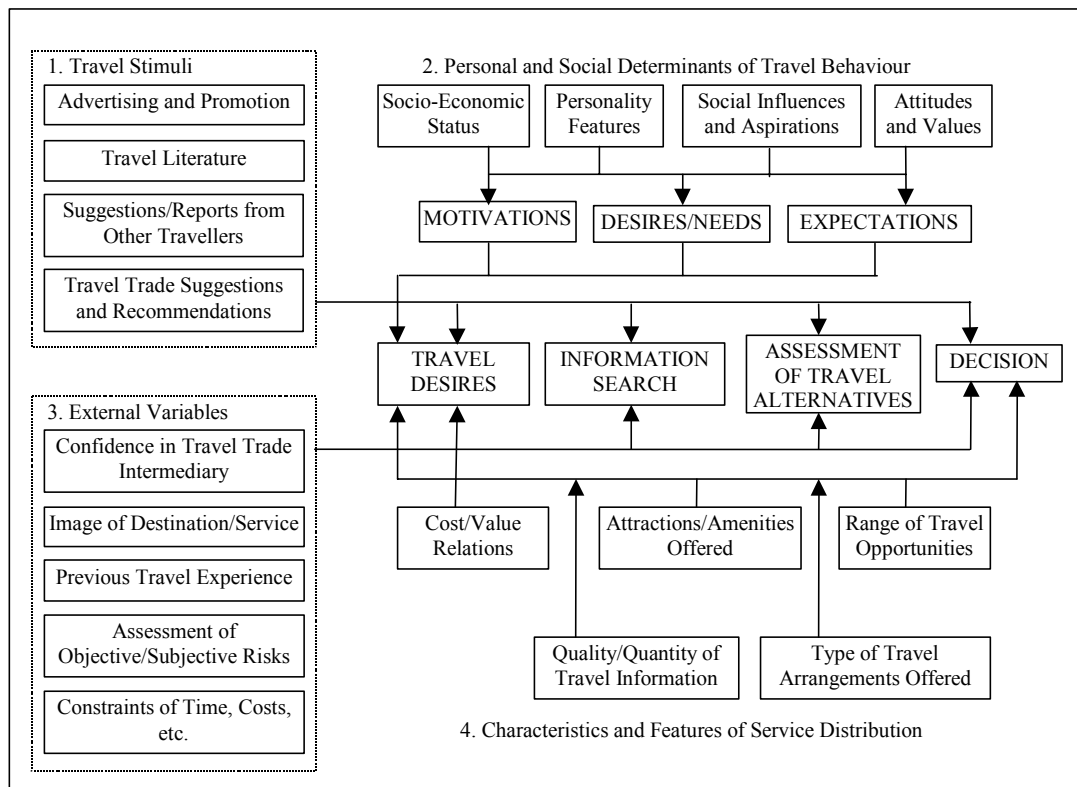


Figure 2.5.2: Travel decision process model by Schmoll, 1977. Source: Hudson and Gilbert, 2000.

While the models by Schmoll (Figure 2.5.2), Mathieson and Wall (Figure 2.5.3) and from Weaver and Lawton (Figure 2.5.4) represent the gross process with influencing variables, the models by Woodside and Lysonski (Figure 2.5.5) and Um and Crompton (Figure 2.5.6) focus more on the cerebral processes of destination selection. However, all four concede to the notion that tourists will embark on an information search, the spoils of which are then used to compile and consider a list of possible destinations before deciding upon the final holiday destination. Of note at this stage is that this consideration stage will consist of a mixture of conscious (meta-

cognitions) or unconscious (automatic) thoughts and processes depending upon the nature of the trip (Woodside, 2000). That is, familiar or simple trips will have lower meta-cognitions than new or complex holidays.

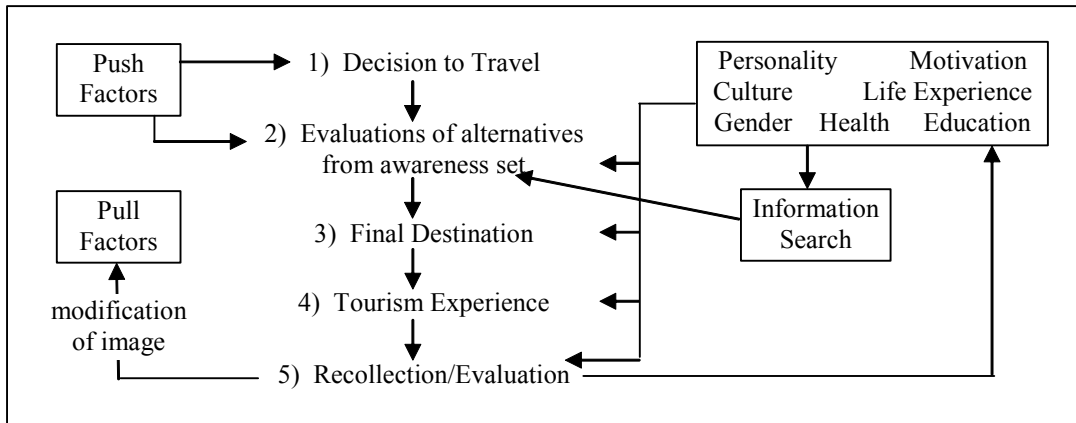


Figure 2.5.3: General destination decision selection model. Adapted from Weaver and Lawton, 2002.

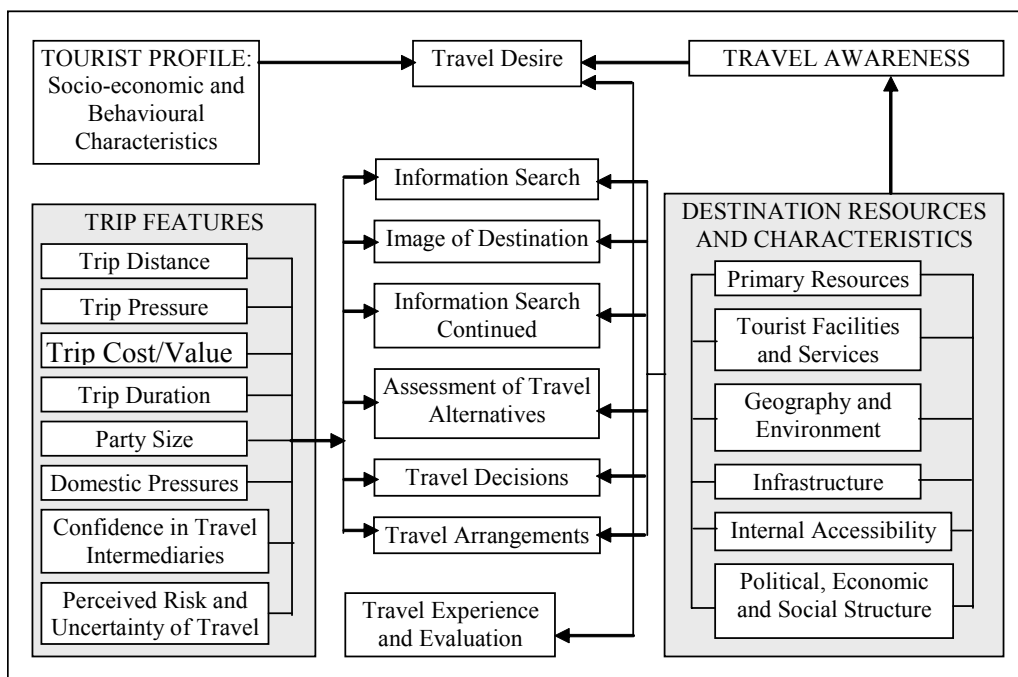


Figure 2.5.4: The tourist decision-making process by Mathieson and Wall, 1982. Source: Hudson and Gilbert, 2000.

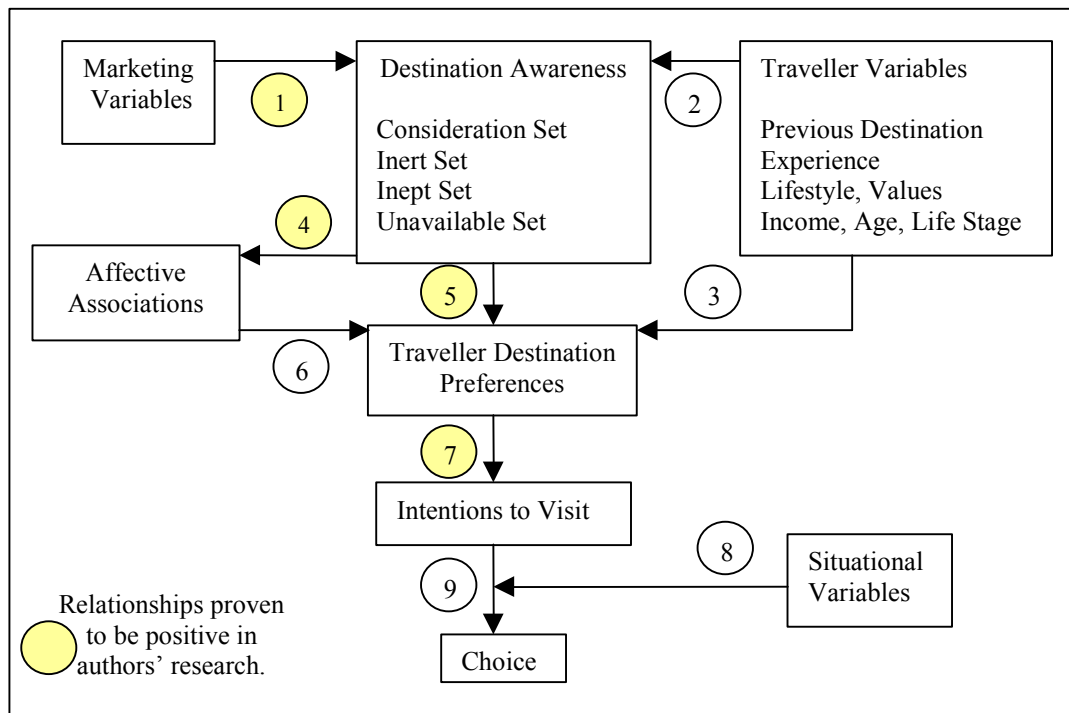


Figure 2.5.5: General model of travel leisure destination awareness and choice.
Source: Woodside and Lynsonski, 1989.

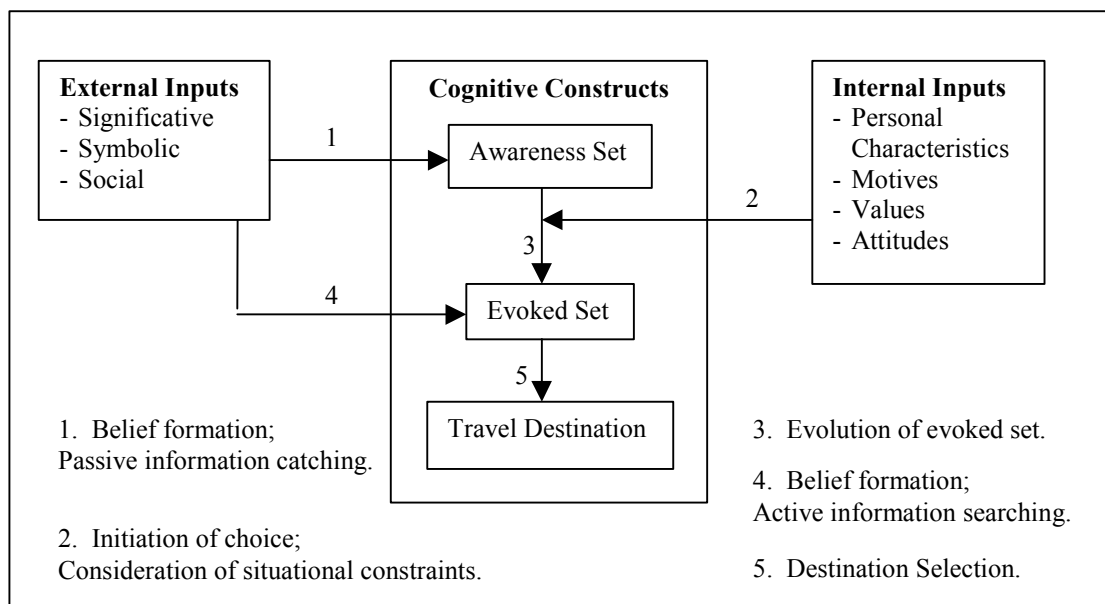


Figure 2.5.6: The pleasure travel destination choice process by Um and Crompton, 1990.
Source: Um and Crompton, 1990.

Whilst the models represent the ultimate destination choice, the smaller details of a trip, such as accommodation or attractions to visit, are also subject to such a decision process, however, often not at the same time as the main destination choice. While it is accepted that the majority of people make their activity decisions before leaving home, a substantial 24.9% make such decisions on arrival at their destination (Crotts and Reid, 1993). This is especially typical of long-haul tourists who gain better, more detailed information on arrival at their destination (Crotts, 1999; Hyde, 2000).

In both destination and detailed situations, as in general consumer behaviour, information is deemed to be vital in the process. Information comes in many guises. Within the four models, information that is required by the process includes the tourist's internal environment such as their needs, travel desires, personal experience or knowledge. Information also originates in the external environment from the destinations' or tour operators' marketing efforts and non-commercial parties. Information sources will be discussed in more detail in a future section.

As with all models, it is important to be mindful of parameters and limitations. Such models are often generalized from European or North American research and can date rapidly due to the speedy development of new travel and communication technologies, social change and the ever increasing fragmentation of tourist markets (Swarbrooke and Horner, 1999). In addition, further limitations such as the often descriptive nature of these models and their focus on a particular concept (eg. cognitive constructs as in Um and Crompton's model) reflect their role as guidelines

and not predictive tools (Hudson, 1999) and thus must be interpreted and used cautiously.

While only guidelines, models highlight areas for further investigation. One of the central concepts in the holiday choice models is that of the tourist employing an information search and consulting sources to assist in their decision-making processes. With information being crucial to the intangible tourism product it is important to gain a better understanding of the role it plays in the holiday decision process and tourists' uses of it.

2.5.2 The Role of Information Sources in Holiday Planning

As an intangible product, tourism is heavily reliant upon information for promotion.

Not only are information sources important for destination marketers for communicating with their market and as distribution systems for booking and purchase (Ashworth and Goodall, 1988), but also for tourists. Information allows tourists to make educated decisions about their holidays as it assists in the formation of beliefs about a destination (Baloglu, 2000). As the holiday decision process highlighted, the information search assists in the evaluation of holiday alternatives.

Information search is “the motivated activation of knowledge in memory, or acquisition of information from the environment” (Engel, Blackwell and Miniard, 1995 in Fodness and Murray 1998, p109), “in response to internal and external contingencies” (Fodness and Murray, 1997, p506). While there has been conjecture over whether information sources influence holiday decisions directly or indirectly

(mediating or moderating variable) (Fodness and Murray, 1997), there is consensus that it serves two main roles: functional and non-functional.

2.5.2.1 The Functional and Non-Functional Roles of Information

The **functional** purpose of information search provides useful (utility) product knowledge (knowledge), in an efficient manner (efficiency), so as to reduce the likelihood of mishap (uncertainty) or risk (Vogt and Fesenmaier, 1998). This includes information concerning prices, events, attractions, accommodation, opening times, locations and transport modes. In gaining information on practical aspects of the trips the financial, temporal and emotional investments or risks associated with the intangible, socially-visible tourism product are minimized (Schul and Crompton, 1983; Murray, 1991; Andereck and Caldwell, 1993; MacKay and Fesenmaier, 1998; Swarbrooke and Horner, 1999).

However, not all search behaviour is dedicated to the functional aspects of holiday planning but also to **non-functional** or hedonic purposes. Information search can be an enjoyable experience in itself (Manfredo, 1989; O'Guinn and Faber, 1991; Manfredo, Bright and Haas, 1992; MacKay and Fesenmaier, 1998; Crofts, 1999; Chaudhuri, 2000) by adding excitement, forming expectations of foreseeable pleasure in the anticipation of the experience (Zalatan, 1996), enhancing personal knowledge or social standing and allowing a vicarious experience of a destination (MacKay and Fesenmaier, 1998).

Research has found that information search purposes can differ between groups. For example, while functional and aesthetic information needs are important for all tourists, information needs expand to include non-functional information as planning and travelling experience increases (MacKay and Fesenmaier, 1998; Vogt and Fesenmaier, 1998). It has also been found that the travel-stage an individual is in determines the type of information that they search for. Individuals in the pre-contemplative stage, with little travel and planning experience, will predominantly search for functional information, while those in the maintenance stage of the cycle tend to be experienced travellers who desire more hedonic information for inspiration and self-enhancement purposes than travellers in other stages (MacKay and Fesenmaier, 1998).

Thus, while functional information needs are central to the holiday planning process and aesthetic needs tend to be on the periphery (Vogt, Fesenmaier and McKay, 1993), each tourist will seek their own combination of functional and non-functional information. The degree to which they do this and even the overall search for information is influenced by a number of factors.

2.5.2.2 Influencing Factors on the Role of Information Sources and Search

There have been many avenues of investigation as to the factors influencing information search. Some have explored the traditional factors such as demographics and socio-psychographics (see Andereck and Caldwell, 1993, pp.173-174 for a review of the literature), while others have explored knowledge levels, familiarity, past search experience, friends or relatives at the destination, travel party

characteristics, nature of the trip and more. It has been the latter that have provided more significant findings.

One clear factor that influences an individual's search for information is their **level of knowledge** or **familiarity** with a destination. There appear to be three main theories (Manfredo, 1989). One suggests that the higher the knowledge level the more intense the search for further information will be (Johnson and Russo, 1984). That is, knowledge and search are positively related, in that experts are better equipped to identify and acquire relevant information than inexperienced individuals (Alba and Hutchinson, 1987). An opposing view is that there is a negative relationship where increased prior knowledge means less search, while those with less knowledge will attempt to rectify their lack of knowledge by seeking information more intensely (Kiel and Layton, 1981; Perdue, 1993). Alternatively, there is the combination of the two in the inverted-U theory. Here information search increases from low to moderate knowledge levels and then at saturation the search declines (Brucks, 1985).

Knowledge of and familiarity with a holiday destination has also been found to influence the types of information sources considered. For example, destination naïve tourists have been found to favour official promotional materials, such as travel agents, tour brochures and guidebooks above personal sources such as friends and relatives (Woodside and Ronkainen, 1980; Snepenger, Megad et al., 1990).

The **level of involvement** with the product, or even the decision making process, has also been linked to the search for information (Fesenmaier and Johnson, 1989;

Andereck and Caldwell, 1993; Perdue, 1993; Schmidt and Spreng, 1996). Highly involved individuals tended to use a number of sources (particularly high-involvement information sources such as travel specific books and films) over an extensive planning period and tend to travel long distances. In contrast, those who are less involved use less involving sources (such as mass media) less than 3 months ahead and travel closer to home (Etzel and Woodside, 1982; Etzel and Wahlers, 1985; Fesenmaier and Johnson, 1989). However, not all highly involved individuals will devote large amounts of time to the planning process. Rather they may transfer the planning responsibility to a singular source such as a travel agent to do the research for them (Gartner, 1993).

Linked to the level of knowledge and involvement is the tourist's level of **perceived risk**, which has been found to mediate the importance of information for a purchasing decision. Perceived risk can be connected with the financial, time, social status or emotional costs associated with a holiday and typically, the more risk is involved in the holiday, the more information is sought to alleviate it (Chaudhuri, 2000). However, this principle is often tempered by the availability of and access to sources as well as the amount of time available for planning.

The **credibility** or quality of an information source is also important if it is to be useful during the search (Bronner and de Hoog, 1984). While credibility of a source tends to be reflected in its utilization, individuals are still able to ascertain credibility of a source prior to use (Nolan, 1976; Etzel and Wahlers, 1985; Vogt and Fesenmaier, 1998). Studies have found that destination-specific literature, such as

guidebooks and official tourist board information, are seen to be the most credible, least biased information sources, while print ads are the least credible (Nolan, 1976; Gitleson and Crompton, 1983). Friends and family and travel agents have also been evaluated as credible sources, however, their strengths lie more in helping to evaluate or legitimize the individual's decisions than providing up to date factual information (Gitleson and Crompton, 1983).

Furthermore, studies have also found that desired **holiday benefits** and **trip characteristics** can be influential to the search for information (Snepenger and Snepenger, 1993; Crofts, 1999). If a well-planned trip or one that is filled with excitement is desired, planning will be done well in advance and with many sources, in particular destination specific literature, print and broadcast sources (Gitleson and Crompton, 1983; Schul and Crompton, 1983). If the purpose of the holiday is to visit friends and family, they are often the main, if not only, source of information that tourists consult (Gitleson and Crompton, 1983).

Likewise whether the trip is **long-haul or short-haul** has also shown to differ in the information sources used for a number of reasons. For instance, the increased distance, potential cultural differences, increased time spent at the destination and the additional financial costs required for long-haul holidays, call for a greater search for information to minimise the risks involved compared to a short-haul holiday (Gitleson and Crompton, 1983; Fesenmaier and Johnson, 1989; Zalatan, 1996; Hyde, 2000). Long-haul tourists also rely more upon official and company controlled sources such as travel agents (Duke and Persia, 1993; Hsieh and O'Leary, 1993)

while short-haul and package tourists are satisfied with brochures or pamphlets (Hsiesh and O'Leary, 1993).

In summary, all of these factors are never in effect on their own, rather they work in conjunction, driving the individual to search for information beyond their current knowledge levels that will help to reduce uncertainties and meet the requirements of their holiday. As a tourist is more likely than not to consult a number and variety of sources in their search for information, it is important to see how these sources compare or are used together.

2.5.3 Approaches to Understanding the Use of Information Sources

While information sources are accepted as an important part of the tourists' planning toolbox, it is also meaningful to understand how tourists use them and how sources relate to each other. Tourists often consult more than one source in planning their holiday, but do not use each in exactly the same way – whether that is in the degree of use or the combination of information types. By following this line of investigation and gaining a better understanding, destination and tourism marketers may employ information sources more effectively.

One way to understand information use better is to investigate what types of sources travellers used and then see how this differed by trip characteristics. An example of this is the early and frequently referred study by Gitelson and Crompton (1983). Their primary aim was to investigate travellers' planning horizons, the type of

sources used and the number of different sources used. While the study was primarily descriptive it supported a number of general assumptions (Table 2.5.1).

Trip or Traveller Characteristic	Planning Period	Number of Source Types	Information Source Type				
			Friends / Relatives (71%)	Destination Specific Literature (50%)	Consultant (31%)	Broadcast Media (20%)	Print Media (26%)
Short Distance			✓✓			✓	
Long Distance	≥3 months			✓✓	✓✓	✓	✓✓
Short Time		1				✓	
Long Time	≥3 months	3-4		✓✓	✓✓	✓	✓✓
Family Groups						✓	
Without Children					✓✓		
Looking for Excitement	≥3 months	3-4		✓		✓	✓
Desire Well Planned Holiday	≥3 months	3-4				✓	

Table 2.5.1: Selected findings from Gitelson and Crompton (1983) for information source usage.

Note: only over-representations and significant usage is illustrated. Blanks refer to unavailable information or under-representation or non-significant relationships.

Firstly, the longer the planning horizon, the more information sources were consulted. Furthermore, the longer and further from home that an individual travelled, the longer the planning horizon and the more sources were consulted. While most travellers consulted more than one source external to their personal experience and acquaintances, those travelling on longer, far-away holidays consulted the most number of and the most varied sources. In particular, they made the most use of destination specific literature, print media, travel consultants and even broadcast media.

The study’s results were limited not only by the sampling frame (self-drive tourists using Texas welcoming centres) but also by the lack of explicit measures for the

effectiveness of sources. The authors recognized that while a source may have been used by a majority of travellers, its impact upon the holiday could only be implied and suggested that a more explicit measure could improve on this. Despite these limitations, this study provided a basis to build upon both in knowledge detail and the conceptual understanding of traveller’s information source use.

		Travel Agent Only	Travel Agent + Others	Others Only
		44%	25%	31%
Travel Group	Group Size (n.s)	2.26	2.36	2.30
	Percent Male	36%	39%	46%
	Average Age (n.s)	45 yrs	41 yrs	42 yrs
Accommodation Preference	Ship	72%	71%	45%
	Hotel	59%	62%	40%
	Camping	2%	9%	44%
Leisure Activities	National Parks	54%	81%	56%
	Museums	43%	60%	48%
	Cultural	30%	54%	37%
	Fishing	5%	6%	25%
	Camping/Hiking	3%	13%	35%
On-site Behaviour	Organised Tours	78%	69%	28%
	Total Expenditure	\$4,328.18	\$4,908.18	\$2,733.82
	Length of Stay	8.27 Days	10.66 Days	13.36 Days
	Souvenir (n.s.)	\$206.09	\$217.62	\$198.46

Table 2.5.2: Information search strategies used by destination naïve tourists to Alaska segmented by trip elements. Source: Adapted from Snepenger, Meged, Snelling & Worrall, 1990.

Another way is to look at the information strategies that travellers use in relation to travel outcomes; that is how they combine their sources to satisfy their trip needs. An example of this is the study investigating the information search strategies employed by destination-naïve tourists to Alaska (Snepenger, Megad et al., 1990). They found three main information strategies: travel agents only (44%), travel agents and other sources (25%) and other sources only (31%). Each strategy was differentiated on a number of factors (see Table 2.5.2 for findings).

The ‘travel agent only’ approach was used by females for short holidays with a preference for ship or hotel accommodation and an interest in organized tours to see the sights. Those that used ‘travel agents and other’ tended to spend the most money and saw more attractions independently. Lastly, the ‘non-travel agent’ group differed most markedly, in that they were male with no accommodation preference, enjoyed a diverse range of leisure activity interests and travelled independently on the longest but least expensive holidays. These results show that different trip behaviour and desired trip benefits are linked to different search strategies. In turn, different sources serve different purposes and different individuals reinforcing the notion that “audiences tend to match their media use...to their own tastes, ideas and information needs” (Renckstorf and McQuail, 1996). However, one must also consider that trip behaviour can be an artefact of the products available through a source, rather than matching a source for one’s known trip desires or behaviours.

Cluster	Description	Average Important Sources Used
1	80% are package tours. Tour operator brochure the most important (3.39), followed by the travel agent (3.09) and destination brochures (3.00).	4.8
2	46% of trips are NOT package tours. Local/regional brochures (3.26) are the most important followed by friends/relatives (3.19) and then guidebooks (2.93). This cluster holds the Internet as more important than the other clusters.	7.7
3	84% are independent trips and 35% are for VFR purposes. Friends/relatives (1.99) are the most important followed by ‘other’ sources (1.81).	0.9
4	84% are independent trips to Switzerland and adjoining countries. Destination brochures (3.14) are the most important followed by friends/relatives (2.68).	3.2

Table 2.5.3: Information source use clusters from travellers from the Swiss and Alpine Region. Adapted from Bieger and Laesser, 2001.

Another example of this is the study by Bieger and Laesser (2001) in the Swiss Alpine Region, which concluded with four clusters information source use (Table 2.5.3). While the authors did not name any of the clusters, it becomes apparent that each can represent a type of holiday. For example, with the very low amount of important sources, the low importance scores (eg. 1.99 out of four) and the high percentage of independent trips to visit friends and relatives, cluster three is typical of VFR (visiting friends and relatives) travel. Meanwhile, cluster two's high use of important sources is reminiscent of independent travellers especially to new destinations. Clusters one and four seem to represent package tourists and repeat visitors, respectively.

An interesting point highlighted by the authors was that as the number of sources used rose, so too did the importance of the friends and family source, suggesting that these reference people act as "information filters" (Bieger and Laesser, 2001, p164). In comparison to the paper by Snepenger et al (1990) Bieger and Laesser asked people to rate the importance of each information source which allows a more meaningful interpretation of what role each source plays in the information gathering and subsequent decision making process. The average importance scores of the information sources were not reported in the article, however, a plotting of these for the different use clusters may shed more light upon how the individual sources compare and how the clusters may differ.

While these papers look at combinations of information sources, the former does not detail the proportion of usage and thus tells little of how sources have interacted.

The latter improves on this by investigating for an importance rating of each source but unfortunately did not publish these explicitly. Thus these are still largely descriptive accounts of search strategies and a more conceptual approach is required. This need is heightened by the rapid advances in information technology in recent years (eg. the Internet and interactive television) as well as an increasing fragmentation of leisure travellers, quickly making categories obsolete. Understanding information source use needs to move away from finite categories and towards a device that allows comprehension of source relationships.

Search Strategy	Strategy Description	Main Information Sources	Ave. No. Sources Used
Pre-purchase Mix	Pre-purchase, external	Heavy use of wide variety of contributory sources; minimal use of decisive sources.	3.6
Tourist Bureau	Pre-purchase, external	Most frequent users of state travel guides and local tourist offices as contributory sources; limited use of auto clubs as decisive sources.	4.1
Personal Experience	Ongoing, internal	Almost completely reliant on personal experience.	1.3
Ongoing	Ongoing, external	Heaviest use of magazines and newspapers as contributory sources; limited use of auto clubs and travel agencies as decisive sources.	5.6
On-Site	Ongoing or pre-purchase, external	Greatest reliance on friends or relatives as decisive sources.	2.4
Automobile Club	Pre-purchase, external	Highest use of auto clubs as decisive sources; also heavy use of friends or relatives. Moderate use of contributory sources including brochures, guidebooks, newspapers and state travel guides.	2.4
Travel Agency	Pre-purchase, external	Most frequent users of travel agents as decisive source; limited use of contributory sources including brochures, guidebooks, newspapers and state travel guides.	1.6

Table 2.5.4: Information search strategies. Source: Adapted from Fodness and Murray, 1998.

Fodness and Murray (1998) also created information source use categories for self-drive visitors to Florida using official tourist centres in the mid-1990s (Table 2.5.4). While these are little different from the other studies, they moved towards a

conceptual tool by subjecting their binomial data (whether a source was used or not used) to multidimensional scaling. This produced multidimensional grids as seen in Figures 2.5.7 to 2.5.9. The authors interpreted the dimensions as relating to the spatial, temporal and operational aspects of information sources (Fodness and Murray, 1998).

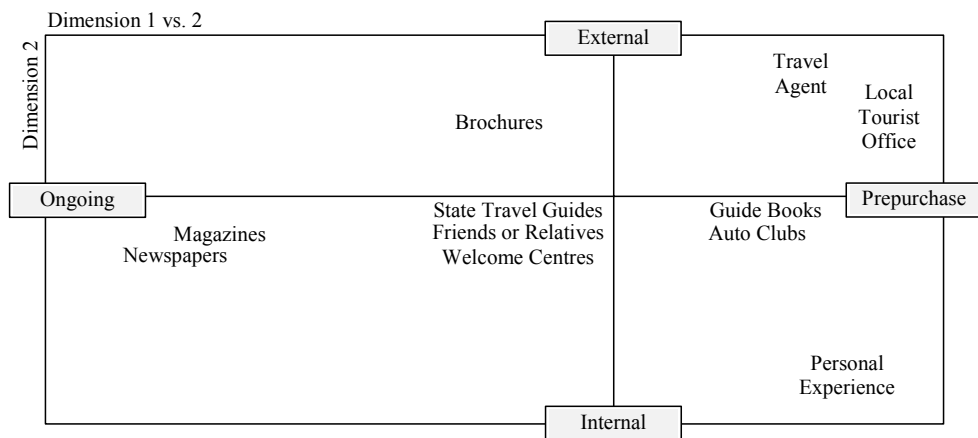


Figure 2.5.7: Multi-Dimensional perceptual map featuring Dimension#1 (Temporal) and Dimension#2 (Spatial). Source: Fodness and Murray, 1998.

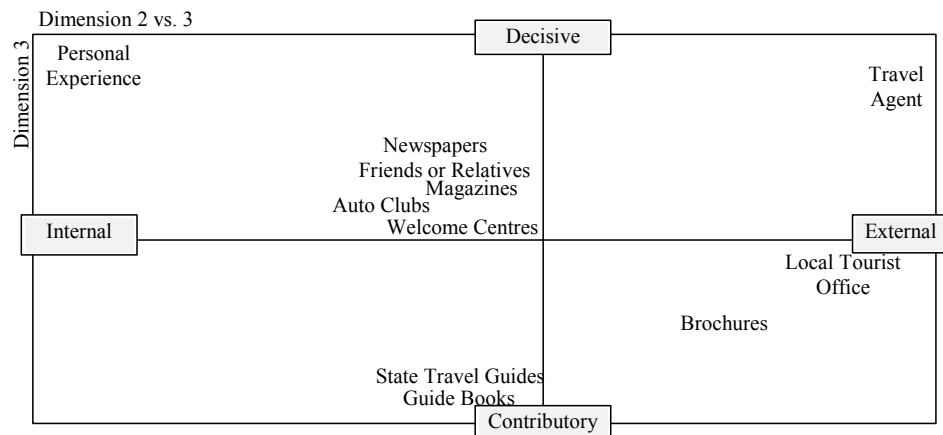


Figure 2.5.8: Multi-Dimensional perceptual map featuring Dimension#2 (Spatial) and Dimension#3 (Operational). Source: Fodness and Murray, 1998.

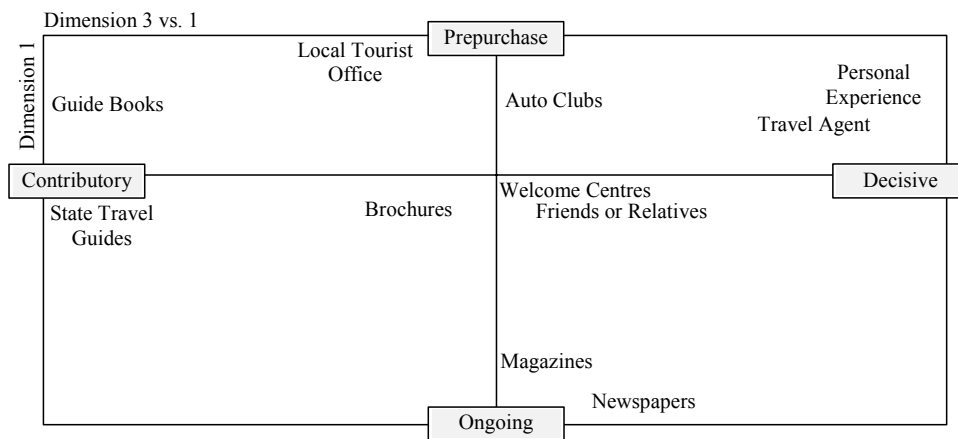


Figure 2.5.9: Multi-Dimensional perceptual map featuring Dimension#1 (Temporal) and Dimension#3 (Operational). Source: Fodness and Murray, 1998.

Spatially, a source can be internal or external to the traveller. Temporally, a source can be used on an ongoing basis in planning holidays or for pre-purchase purposes. Operationally, a source can be a decisive or contributory source in the decision-making process. These dimensions were then also included in the descriptions of the search strategies. Thus, for example, the ‘personal experience’ strategy is internal, ongoing and its singular source is decisive, while the ‘tourist bureau’ strategy is external, pre-purchase and its combination of sources is contributory.

These various approaches offer different ways of understanding travellers’ use of information sources. While the categorisation of information source mixes or strategies are useful, the visual representation of how individuals use information sources is even more telling. Such representations can indicate not only the individual source’s role use in the information gathering process but also how it relates to other sources used by the traveller. It may be a useful tool for media planning and destination literature production.

2.6 The Outbound UK Travel Market

The United Kingdom of Great Britain has a population of 59.4 million people, 13% of which live in London (ATC, 2003). British consumers are becoming more “sophisticated” (ATC, 2001) and are interested in travelling to more far away destinations (Davies, 2004). This is not surprising considering that not only is there an increasing attitude amongst the English that travel is an essential experience, but also with a strong currency and substantial holiday leave each year (23 days), it is easier and more acceptable for them to take long haul holidays (ATC, 2001).

In 2002 the United Kingdom (UK) took 61.45 million trips abroad, with 41.2 million of these being for holiday purposes (Lovegrove, 2004). The majority of holidays were taken in Europe (84.5%), followed by Other Countries (9.4%) and then North America (6.1%). While the majority were short-haul in nature, around 21% were long-haul (ATC, 2004). Australia is reported as being the destination for 0.86% of all trips.

Selected figures from 2003 UK travel abroad data are presented in Table 2.6.1. Of the 41.2 million holidays taken in 2003, 47.4% (~19.52 million) were package holidays attesting to the UK’s fervent package holiday market. Interestingly this represents a small decrease in holiday packages which were at 52% (~20.75 million) of all holidays (39.9 million) in 2002 (MAI, 1999; Gill, 2003). This trend is expected to continue as travellers become more sophisticated and reject the

‘superficial’ cookie cutter resort packages for more interesting, responsible, tailored holidays (McGrath and Gillett, 2004).

	Trips Abroad	Holidays Abroad	Of those being Package Holidays	VFR Trips Abroad
Total	61,453,000	41,203,000	19,517,000	8,534,000
Europe	50,635,000	34,828,000	16,550,000	5,888,000
North America	4,157,000	2,508,000	814,000	819,000
Other Countries	6,659,000	3,888,000	2,154,000	1,827,000
Australia*	529,000	-	-	-

Table 2.6.1: Trips abroad as taken by UK residents in 2003. Note: Australia is included in ‘Other Countries’ and did not have figures for holiday or VFR categories.
Source: Adapted from Lovegrove, 2004.

The most popular destinations for UK travellers have been fairly consistent over the last few years. Spain and France have topped the list every year with Republic of Ireland, the USA and Italy rounding out the top five (Table 2.6.2). In terms of long-haul destinations other than the USA, Asia, the Caribbean and Australia are the destination of choice for over half a million UK travellers each year (Table 2.6.3). India and South Africa are also popular country destinations with 497,000 and 476,000 visits respectively in 2003.

Destination	2003 (000s)	2002 (000s)	2001 (000s)
Spain	13,750	12,525	11,790
France	11,957	12,112	11,959
Rep. Ireland	3,876	3,965	3,930
USA	3,626	3,602	3,990
Italy	2,903	2,650	2,471
Greece	2,852	2,958	3,215
Netherlands	2,149	2,149	2,095
Germany	2,146	2,275	2,242
Belgium	1,967	1,784	1,738
Portugal	1,890	1,779	1,598

Table 2.6.2: Top ten destinations visited by UK travellers from 2001 to 2003. Source: Adapted from Lovegrove, 2003.

Long-Haul Destination	2003 (000s)	2002 (000s)	2001 (000s)
USA	3,626	3,602	3,990
Asia*	1,272	1,114	1,210
Caribbean	816	721	779
Canada	532	666	609
Australia	529	486	498
Middle Africa	499	369	431
India	497	479	465
South Africa	476	309	397
Central and South America	445	460	462
Other Middle East	441	383	450

Table 2.6.3: Top ten long-haul destinations visited by UK travellers from 2001 to 2003. Note: Asia refers to all countries but Hong Kong, India and Japan. Other Middle East refers to all countries but Israel. Source: Adapted from Lovegrove, 2003.

While long-haul destinations such as Australia, India and South Africa (MAI, 1999) individually barely rate a percentage on the overall trips abroad made by UK residents, they account for 20% of expenditure (Gill, 2003). On average visitors spend £1,636 in New Zealand and £1,547 in Australia compared to a short-haul holiday in Belgium of £240 (Gill, 2003). These expensive long-haul holidays are due in part to transport costs as well as the increased periods of stay. Even more encouraging is the desire to go to such far flung destinations. A recent survey found that long-haul destinations made up the top three dream destinations of UK travellers, with 17% dreaming of a trip to Australia or New Zealand, 16% longing for the USA or Canada and 10% preferring the Caribbean (Davies, 2004). The short-haul destination of Spain came in at fourth place, reflecting its holiday popularity.

The UK accounts for 14% (672,800) of all international visitors (4.75million) to Australia (ATC, 2004) and is Western Australia's largest source market accounting for 28% (158,500) of all international visitors (566,200) in 2003 (WATC, 2004). Australia as a whole has always been a popular destination for the United Kingdom

pleasure travel market. This is predominantly because of the ‘visiting friends or relative’ (VFR) market segment prevalent through the historical links between Australia and the United Kingdom. In 2003 34% of UK visitors to Australia were visiting friends and relatives exclusively, with a further 52% reporting they had come on holiday (ATC, 2004). On average in 2003 UK visitors stayed 38 nights, with many utilising family and friends for accommodation and transport purposes. More importantly, 59% were repeat visitors and 81% had independent travel arrangements (ATC, 2004).

Those UK tourists that visit Australia tend to be experienced travellers over a range of demographic aspects but with a sense of discovery and adventure. These characteristics are reflected in Australia’s UK market target segments. The Backpacker (18-29 yrs), Young Professional (25-44 yrs) and the Older Adventurer (45-64 yrs) segments are distinguished by different ages, time and monetary resources, pre-trip planning and pre-booking extents and activity interests (ATC, 2003). However, they are all relatively well informed, eager and adventurous individuals.

When researching their holiday, UK travellers consult a range of information sources (MAI, 1999). Table 2.6.4 shows that of selected information sources brochures are the most consulted (66%), followed by friends and relatives (63%) and newspaper and magazine articles (47%). Television shows and teletext were also well represented (37% and 31% respectively). TV ads were used by 26% of respondents, however this referred mainly to domestic and package holiday destinations, as long-

haul destinations make little use of ads because they can not present the detailed information required by their visitors (MAI, 1999).

Get Information From...		Book Holidays Via...	
Brochures	66%	Travel Agent	64%
Friends and relatives	64%		
Newspaper and Magazine Articles	47%	Internet	3%
TV Shows	37%		
Teletext	31%	Direct to Airline/Hotel	37%
TV Ads	26%		
Internet	13%		

Table 2.6.4: Information source use and booking channels used by UK travellers in 1999. Source: Adapted from Market Assessment International (MAI), 1999.

The Internet factored minimally at 13%. While no more recent figure could be found for the general UK international holiday market, a look at those UK residents travelling to Australia indicates that this has risen in recent years with 27% of those travelling to Australia using the Internet for trip information in 2003 compared to 14% in 1999 (ATC, 2004). The most common use of the Internet by such travellers is to research in more detail their chosen destination and to help plan their Australian itineraries (ATC, 2004). Interactive television's exclusion may be due to it being still a very new media in 1999 and a search of the more recent UK tourism market reports fails to discover any reference to its use as a holiday information source.

Overall, UK travellers are active travellers with considerable spending power. They seem to take full advantage of their proximity to Europe and the availability of package holidays, but also travel independently and further abroad to more exotic destinations. They use a variety of information sources in planning their holiday and are an important market for colonial destinations such as Australia.

2.7 Destination: Western Australia

While the journey may be more important than the destination in many life experiences, the destination is the ultimate goal for the annual holiday. Tourists do not plan for a holiday full of endless planes, trains and automobiles, rather these are means to the destination which has been chosen to satisfy desires, needs and curiosities and thus is filled with meaning. For this research study Western Australia will be used as the illustrative destination.

Australia is a highly desirable destination for UK travellers closely followed by the USA and New Zealand and is the third most considered destination after the USA and Spain (ATC, 2003). Its main competitor destinations are identified as Canada, the Caribbean, emerging Asia, Southern Africa, the Indian Ocean islands, South America, New Zealand and the USA (ATC, 2003). As with most long-haul destinations it faces the challenges of long travel time (about 17 hours from London to Perth) and considerably expensive airfares. However, Australia also suffers from a stale and icon-laden image and the notion that one has to cover its vast attractions in one visit (ATC, 2002). Marketing campaigns to rectify these perceived barriers have been implemented by the Australian Tourism Commission in May 2004 (Lee and Dennis, 2004). Despite such barriers Australia has proven to be a growing destination for the UK long-haul adventure market - accounting for 5.6% of their 2002 outbound long-haul market (ATC, 2004) - with Western Australia being the third most visited Australian destination with 24% of Australia-bound UK visitors (ATC, 2004).

Western Australia (WA) accounts for a third of the Australian land mass and is home to about 1.96 million people (ABS, 2004). It is a destination rich in diverse natural attractions and is a major gateway between south-east Asia and Australia (for more information see www.westernaustralia.com). Most of WA's international visitors come from the UK (28%) followed by Singapore, Japan and Malaysia (WATC, 2004, see Table 2.7.1).

Source	No. of Visitors to WA	% of WA's International Visitors
United Kingdom	158,500	28.0%
Singapore	55,800	9.8%
Japan	45,600	8.0%
Malaysia	37,200	6.6%
USA	35,900	6.3%
New Zealand	34,500	6.1%
South Africa	23,700	4.2%
Germany	22,800	4.0%
Indonesia	19,600	3.5%
Netherlands	17,000	3.0%
Total International Visitors to WA		566,200

Table 2.7.1: International visitors to Western Australia ending December 2003 by country of residence. Source: WATC, 2004 – Quick Quotes.

The UK is considered to be its most resilient, strong growth market (WATC, 2003; WATC, 2004) with a high mix of VFR and holiday visitors. It is estimated that 70% of UK visitors come for a Holiday with 43% coming to visit friends and relatives (WATC, 2003). Over the years, the UK has become more knowledgeable of Western Australia (Coase, 2001) and this is expected to grow as marketing efforts are stepped up to move WA from the awareness set to the consideration set for those without prior experience of WA. In researching their trip to WA UK travellers mostly use their friends and relatives but below-the-line sources such as television

travel shows and newspaper and magazine articles have been gaining in their influence (Coase, 2001).

Information Source	Major	Minor	Don't Use
Friends and Family	57%	30%	12%
Travel Guidebooks	44%	32%	22%
Travel Shows on TV	38%	40%	20%
Travel Articles in Newspapers or Magazines	33%	45%	18%
Travel Agents	30%	39%	28%
Internet	23%	27%	49%
Advertisements	16%	51%	30%
Airlines	13%	40%	44%

Table 2.7.2: Major and minor sources of information used in planning a long-haul holiday from the UK to WA. Source: adapted from Coase, 2001.

The results of the information source survey are displayed in Table 2.7.2, with the major and minor categories being similar to the utility of the source. As a special interest, the Coase survey also further investigated respondents' Internet use along similar lines to its utility and temporal use. Of those that used the Internet, 11% used it for the purpose of choosing a destination, while 29% used it to inform themselves further after deciding upon a destination, with another 8% using it for both purposes. This is similar to the early and later stages in the planning process. Individuals also took advantage of its role as a distribution channel by booking flights and accommodation through it (13%). Of those individuals who did not use the Internet for booking, 18% said that they would consider doing so in the future. However, there was still a large proportion (34%) that will probably not use it for booking in the future.

Despite teletext being heralded as “the largest holiday advertising medium in the UK” with one in every ten holidays being sold through one of the teletext analogue

services (BroadbandBananas, 2001; Teletext, 2002), it was not included in the survey. Neither was the emerging interactive television. It is suggested that this may be due to the then media channel interests of the study's commissioners (Western Australian Tourism Commission). However, with the ever increasing fragmentation of communication opportunities and the importance of new and interactive media channels, it is vital to include such market anomalies in investigations even if past promotion strategies have not included them. This inclusion will allow a better understanding of gaps, interactions or over lapping of current promotional media use via the use behaviours of travellers.

A more recent market research study of international visitors to WA in 2003 supports the general findings of the Coase study but also shows that the Internet has increased in utility over the last few years (MarketEquity, 2003). Furthermore, the most preferred way of attaining destination information before departure was found to be via an official destination website or a physical tourist centre in the country of origin.

Information Source	Used by % of travellers	Comments
Travel Guidebooks	64%	Key for eco-tourists or backpackers
Internet	49%	Lower among luxury or travellers 65+
Word of Mouth	37%	-
Travel Agents	27%	Highest among luxury and food and wine travellers
Brochures	16%	-
Travel Magazines	4%	-

Table 2.7.3: Sources used by international traveller to Western Australia.

Source: Adapted from Market Equity, 2003.

These types of information sources were used to gather general information on the destination as well as what is available to do at the destination, accommodation and to get an idea of travel time and distance when at the destination. Thus, while

brochures from travel agents and the tourism commission are valuable information sources for potential visitors, a functional and information packed website is the most popular way for visitors to gather information and plan their itineraries after guidebooks and word of mouth.

Typically the UK traveller to WA is between 15 and 29 years of age (30%) and identify themselves as budget travellers (41%) (WATC, 2003). They are attracted by the beautiful clean beaches and the natural environment offering adventurous nature based experiences that dominate WA's image (WATC, 2003). However, WA's man-made and tourist environments are providing emerging attractions as well and allow easy exploration of the state's vast regions. Western Australia's economical and political climate is also an attractive feature, for example, when compared to that of South Africa. It is a relatively safe and an inexpensive destination for Sterling Pound visitors to explore and the socio-cultural atmosphere is different enough from the United Kingdom so as to elicit a whimsical experience but still in a familiar, safe social setting (ATC, 2001).

2.8 Chapter Summary and Preview

The tourism and travel industry deals with intangible, perishable, high involvement, experiential products and geographically distant customers. By providing these potential tourists with information, a destination does not only promote and communicate their product, but also assists tourists in servicing their practical and hedonic information needs which in turn help to reduce emotional and financial risks.

The media used to communicate this information are numerous, each with their own strengths and weaknesses for the industry as well as the travellers. Both the industry and the travellers use these information sources in combination in their communication and research efforts. The new interactive media, such as digital teletext, the Internet and iTV, are anticipated to have an even greater impact upon the travel industry than their analogue or off-line counterparts have had, as their instantly up-dateable, continuously accessible and enhanced presentation technology cater for the nature of the tourism beast. The evolution and use of these media are examined more closely in the next chapter as well as the notion that experience with previous media will influence behaviour with future media.

Chapter #3

Interactive Television: Evolution, Technologies and Research

Chapter Overview

The previous chapter provided a very brief exploration of interactive television and concentrated more on how interactive television was currently being used by the tourism and travel industry for promotion purposes and by travellers for planning holidays. This chapter charts the evolutionary landscape of interactive television and how past media technologies have prepared viewers or users for this latest paradigm. A discussion on current interactive television then outlines the technology background, applications, the United Kingdom market and consumer research in the field and academic.

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3.1 What is Interactive Television? - Briefly

Since the 1950s the television experience has seen consumption increase and the array of content choices grow. However, the immediate television viewing experience has remained relatively passive (Datamonitor, 2001). The advent of digital television technology brings with it the promise of a new paradigm of technology that allows viewers to have a more active, immediate, asynchronous experience with their televisions (Klopfenstein, 1997). In this new paradigm, consumers have increasing power over the what, when, how and where (Hovaness, 2000).

Compared to traditional television, viewers have increased power over the content or the ‘what’ of the viewing experience through more choice, friendlier on-screen programme guides that can also filter selections and video-on-demand services (Hovaness, 2000). Viewers’ ‘when’ or time-shifting power is given an up-grade from the VCR to the digital personal video recorder (PVR) which can store days of programmes on its hard drive and automatically skip advertising. Currently, the ‘how’ of viewing media is limited to switching camera angles and video streams as the industry as yet does not allow more innate manipulation by viewers. Similarly, the ‘where’ of television is also only on the precipice of change, as selected television content is slowly being made available through multi-media mobile phones and streaming on the web.

While these concepts identify interactive television (iTV) by new media characteristics it is hardly a concrete definition. This is pertinent for iTV as its technology is constantly evolving, allowing different ways for television to be interactive. Like traditional television, iTV still delivers information and entertainment to viewers and a mass audience to advertisers (Frutkin, 2000). However, the new technology enables interactivity beyond channel changing and recording broadcast (time-shifting). It allows better targeting of messages through narrowcasting and in turn measurement of content viewed, as well as two-way communication between the viewer and the broadcaster (Wildman, 2001). The excerpts in Figure 3.1.1 provide a brief description of iTV so as to give the following discussion a context.

“More specifically, ITV... is a technology that allows the user to receive information from the broadcaster as well as to send information to the broadcaster or to other users on the network, ...allows user to employ local interactivity via broadcasted material, applications or programs, usually through an advanced ITV terminal (set-top box etc.)”

(Rose, Dormann, Olesen, Beute and Jensen, 1999, section 3.1)

Interactive television "offers a shared emotional experience that delivers an audience that is more susceptible to marketing messages [and as it] is emotionally engaging, it is particularly well-suited for the early stages of the buying process- building awareness and generating leads."

Marketing Perspective (Smith, 2001)

“Next-generation broadcasting combines the best of a computer and a television. It sends digitised video signals and delivers them via satellite, cable, or ordinary rooftop antenna. In the home, a set-top box decodes the signals into hundreds of channels. And instead of just allowing one-way traffic, interactive systems let the viewer use a remote control or regular keyboard with an infrared connection to send instructions back to the broadcaster – either through a telephone line or through the cable. Already, viewers are customising weather reports, altering camera angles on TV programs, ordering pay-per-view films, sending emails and web surfing.”

End-Use Perspective (Echikson, 2001, p16)

Figure 3.1.1: Sample descriptions of interactive television.

3.2 Evolution of Interactive Television

While interactive television as we currently know it is still a young and emerging technology, the concept has been edging its way into the market ever since a 1950s American children's show, *Winky Dink*, sold a kit with transparent plastic and crayons so that their young viewers could help the cartoon character in his adventures (Swedlow, 2000; Weapon7 and Chinwag, 2002). Later there were trials such as the North American cable projects QUBE and Full Service Network (FSN), which indicated that there was viewer support for such a concept. However, since "interactive television is not a single technology or service but a family of diverse systems and applications that trace their history to the very beginning of television" (Carey, 1995, p220) it is also important to acknowledge how associated media and technologies have contributed to familiarising viewers with the idea of interacting with their televisions (Neuman, 1991). After all, new technologies do not merely appear but emerge from existing technologies and experiences (Pyungho, 2001).

3.2.1 Interactive Media Precursors

While it is clear how television is linked to the evolution of iTV, television-associated technologies and computer technologies have also been important contributors. These include such hardware as the remote control and videocassette recorder, programme concepts such as home shopping, new information presentations such as teletext and videotex and even new media vehicles such as the Internet (Swedlow, 2000; Freed, 2001).

3.2.1.1 The Remote Control and the Video Cassette Recorder

From the basic black and white or coloured television, hardware technologies like the remote control and the video cassette recorder gave viewers increased control over their viewing environment. The remote control device (RCD) was intended to make television easy and more convenient (Kaye and Sapolsky, 1997) and has had a steady evolution since the first ‘Lazy Boy’ in 1950 (Zenith, 2004). It allowed viewers to turn the dial without having to leave their couches and in addition the viewers also developed their own uses of the RCD. Viewers use the RCD to ‘channel surf’ or scan channels for interesting programming, zap from channel to channel to avoid ads and also develop a greater awareness of what is available to them (Kaye and Sapolsky, 1997). This added awareness and control means that viewers are better able to selectively expose and attend to the information in the broadcast and thus the RCD is considered to be part of the active audience paradigm (Ferguson, 1992). The remote control not only allowed the television to be controlled but also, in time, external devices such as the video cassette recorder.

As one of the most rapidly adopted technologies worldwide since its 1972 release (Anonymous, 2001; Anonymous, 2003), the video cassette recorder (VCR) was heralded as a 'revolutionary' device that would foster a highly selective, active, emancipated audience (van den Bulck, 1996, p316). To become this active audience, the VCR enables viewers to address a variety of needs such as storing and retrieving desired programming (time-shifting), avoiding advertising and material not of interest (ie. zapping and zipping), watching pre-recorded material (eg. rental videos),

building personal libraries and socializing (viewing with friends) (Rubin and Bantz, 1989; Rubin and Rubin, 1989; Straubhaar and Lin, 1989).

Together the RCD and VCR have taught the viewer to be selective and interactive essentially on impulse (Swedlow, 2000). Despite little fundamental change in the television viewing experience (Perse and Ferguson, 1997) these new technologies did set new expectations of control and immediacy that viewers take to the interactive television paradigm.

3.2.1.2 Television Home Shopping and Direct Response Television

Home shopping (aka. direct response marketing) is a concept rather than a technology, however it has been influential in making viewers comfortable with the idea of purchasing without trying the product out. Catalogue or mail-order shopping pioneered this concept and television-based home shopping emerged in the 1970s with the QVC and HSN shopping channels (Margolis, 1999). While catalogues allowed shoppers to go at their own pace, television home shopping offered product demonstration and the building of a relationship between the presenter and the viewer during the infomercial or segment. To actualise a purchase the viewer phones a call centre with the offer code and the product is then mailed out to them.

One of the largest hurdles for the home shopping industry has been to make the customer comfortable with the notion of purchasing in a virtual situation and not being able to inspect the product first hand. To overcome this, infomercials and shopping channels use their most powerful tool: information. By providing potential

customers with a variety of information (eg. technical information and testimonials) they are able to lower the risk of non-inspection (Kim and Lennon, 2000). While product return rates are higher than in-store shopping, repeat purchasers are proof that this form of shopping is acceptable to many consumers (Kim and Lennon, 2000). In particular, home shopping seems to appeal most to those consumers that tend to be brand conscious, convenience driven consumers who seek variety and innovation, have positive attitudes to direct marketing, advertising and risk and are impulsive shoppers, who dislike in-store shopping (Donthu and Gilliland, 1996).

The intangible nature of home shopping has made it an ideal environment through which to sell the equally intangible product of tourism. Aside from catalogue and traditional television channels such as the TV Travel Shop, Travel Deals Direct and the Travel Channel, teletext has also adopted the home shopping concept to sell 15% of all package holidays in the United Kingdom (Greenberg, 1989; McNeill, 1997).

3.2.1.3 Teletext and Videotex

Teletext and videotex were developed in the United Kingdom from subtitling technology (Young, 1983; Ryan, 2000). Teletext is a one-way service carried in the broadcast signal allowing information retrieval, while videotex is a two-way transmission using a phone line and a television screen to access computers and allowing both information retrieval and transactions (Young, 1983; Sheldon, 1997). Although both set out with similar goals to provide information to the general public, it soon became evident that both were not equally suitable for that purpose.

Teletext was first introduced to the public as Ceefax through the BBC and as Oracle by ITV in the late 1970s. It steadily penetrated the UK so that by 1985 17% of households had access to teletext services (Gunter, 1989) and now it is estimated that it reaches 84% of households (Towler, 2003). As teletext services matured and became more accessible, the demographic characteristics of users moved from 35-54 year old ABs (managers/professionals) (Young, 1983; Tydeman and Kelm, 1986; Gunter, 1989) to most ages in mainly the C1, C2 and DE (well educated, skilled, and unskilled workers, respectively) classes (Ryan, 2000). Most users accessed the service twice a day for the news, TV guide, weather and sport information for an average of 10 minutes per session (Young, 1983; Tydeman and Kelm, 1986; Gunter, 1989; Ryan, 2000).

Early research found that while most teletext use ran parallel to regular television use it was goal directed, with users searching for specific information two-thirds of the time (Tydeman and Kelm, 1986; Greenberg, 1989; Gunter, 1989). Moreover, teletext was preferred over other media such as the television, newspapers and radio, for travel information (61%) and for the TV Guide (50%). However, television won out for entertainment purposes (77%), children's use (55%) and the weather (46%) (Greenberg, 1989; Gunter, 1989). Furthermore it is a complementary media with 56% of users accessing it during their television viewing time (Greenberg, 1989).

Teletext is a free service and depends upon revenue from advertising. This is central to its operation and has been welcomed by the public who see the immediately updateable nature beneficial for last minute travel bargains and the like (McNeill,

1997; O'Donovan and Daum, 2000; Ryan, 2000). On the teletext service featuring on the UK channels ITV and Channel 4 the travel pages are only the sixth most accessed service and yet they account for a substantial part of the UK travel industry sales: 1 in 10 holidays and 1 in 15 leisure flights (Ryan, 2000). Furthermore, there is significant evidence that teletext is an attractive research tool for travellers with it being in the top five consulted information sources (MAI, 1999; Cassidy, 2000).

Videotex was championed by British Telecom (BT) in 1977 as Prestel, in an attempt to utilise telephone line capacity during off-peak periods (Inkpen, 1994). It failed as a domestic service in the UK, but the travel industry adopted it because of its ability to send and receive messages and access databases in remote computers; the ferry operator Sealink being the first in the early 1980s (Inkpen, 1994). Since then, the travel industry has been avid users of videotex systems such as Prestel to distribute information on arrival/departure timetables, fares, package holidays, flights, accommodation and provide reservation facilities to its agents (Young, 1983; Inkpen, 1994; Sheldon, 1997).

Interestingly, many of the issues that are faced with today's interactive television were also challenges that teletext and videotex technologies encountered. Content providers had to understand what users considered as interesting material (Anonymous, 1984); service providers had to formulate content mix solutions to attract customers and users (Anonymous, 1984); advertising agencies were confronted by conceptual and technological issues for using creative material across

different broadcast platforms (Vilardi, 1984); and users' behaviours were widely conjectured.

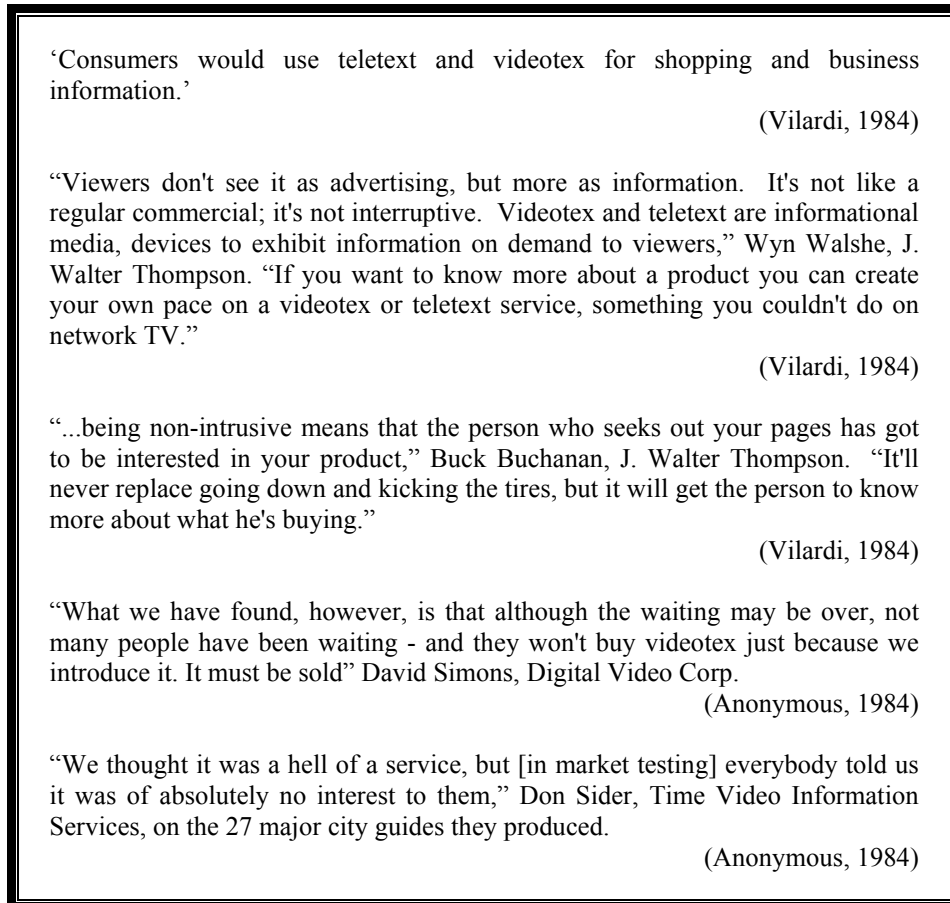


Figure 3.2.1: Speculations about consumers' needs, desires and behaviours regarding teletext and videotex technologies in the 1980s. Source: Anonymous 1984 and Vilardi 1984.

Some of these issues are illustrated by the quotes in Figure 3.2.1. Like the interactive television industry in early 2001 in the UK, it also became apparent that the adage "if you build it, they will come" was not going to transpire. Teletext and videotex would have to be sold to the consumer on their terms (Anonymous, 1984) and not as the great empowering information package as the industry saw it.

Aside from these very similar challenges, teletext and videotex have been deemed to be precursors to the Internet and interactive television (Tydeman and Kelm, 1986; Sheldon, 1997; Ryan, 2000; Middleton, 2001) due to their introduction of interactivity and greater control over information access through the television. This familiarization aspect is important as it allows individuals to orient themselves easier in new interactive technologies, such as the Internet and interactive television (Ryan, 2000; Srivatsa, 2001).

3.2.1.4 The Internet

The Internet's contributions to the development of interactive television are significant. While it is not a direct television technology, it has been an important contributor to establishing an interactive media benchmark from the consumer's perspective. It is the only new interactive media that has achieved critical mass and has an emerging literature to explain it (Rust and Varki, 1996).

“People now interact naturally with information and entertainment they're receiving over the Internet. We're all getting used to the notion that it's OK to interact, to have a conversation, with a digital appliance. Just think how often you hear the word 'click' today.”

Roger Keating, founder and president of Zatso.
(Freeman, 2000)

Figure 3.2.2: Computer-mediated interaction has become common place.

People are comfortable with clicking and interacting with computer-mediated media (Figure 3.2.2). They are adjusted to using media actively for any number of needs such as researching topics of interest, forming cyber communities and entertaining themselves with online games and video streaming. There has been much fear that such a versatile media could diminish the use of other media. However, history and

research show that individuals continue to use old media because they continue to fulfil certain needs better than the new (Coffey and Stipp, 1997; Ferguson and Perse, 2000); they have different purposes and thus do not completely cannibalize each other (Coffey and Stipp, 1997; Bhatia, 1999). In the case of the Internet and television, the television is still the best media for entertainment, while the Internet is ideal for information and communication (Coffey and Stipp, 1997; Papacharissi and Rubin, 2000).

Furthermore, research has found that there are differences between users and non-users of the Internet. Internet users tend to be high users of information rich media such as newspapers and radio (Stempel, Hargrove and Bernt, 2000). In relation to television use, heavy Internet users tend to be low television users before and after acquiring the Internet (Bhatia, 1999). Like the use of teletext, the use of the Internet tends to be goal driven with the audience being more attentive (Morgan and Pritchard, 2000) and amicable to the information they are given. The desire to control their environment may also be an issue for Internet users who have been shown to watch more rental videos than non-users (Perse and Dunn, 1998). Even more importantly is the perception of the media which can have an influence on how an individual evaluates it as a need satisfier (Perse and Dunn, 1998; Dholakia and Bagozzi, 2001). One study found that those who had positive attitudes to the Internet saw it not only as an information tool, but also as a personal communication tool, while those with less experience or adverse attitudes dismissed it for this latter role (Papacharissi and Rubin, 2000).

The travel industry has ideal products for selling on the Internet. Like teletext and videotex technologies the Internet allows regular updating of information and thus perishable products, such as seats on flights, are able to be better managed. The Internet also allows access to a global audience as the Internet is being adopted worldwide (McNeill, 1997). It is used as a distribution channel by cyberagents and high street stores, although the majority of leisure travellers browse it for information on destinations and deals instead of purchasing online (McNeill, 1997; Lang, 2000; Morgan, Pritchard et al., 2001). Some speculate this is due to the perceived lack of security (McNeill, 1997), while others point to the emotional and social risks involved in the shopping process of large and important products and the security and reassurance offered by a travel agent (McNeill, 1997; Renshaw, 1997; Lang, 2000).

All of the issues discussed in relation to the Internet have an effect upon how people will perceive and use interactive television. The expanses of information available on the Internet and the complicated navigation will become the benchmark for interactive television services. However, the audiovisual capabilities of television may dominate over those capabilities of the Internet. And even more importantly, they may not all transcribe to the new medium as consumers refine their definition and uses of interactive television through their actual behaviour.

3.2.2 Previous Interactive Television Trials

Aside from media technologies foreshadowing today's interactive television, interactive television itself has been trialled in various incarnations. A number of

trials were conducted through the 1970s to the late 1990s in the United States of America, Japan, England and France to name a few (DeFleur and Ball-Rokeach, 1989; Carey, 1997), including the much talked about QUBE and the Full Service Network (FSN). It is important to acknowledge at this point that the term interactive television has been used in the past for various forms of television including community run television stations (Carey, 1995) or distance education (Carey, 1997; Hobbs and Christianson, 1997). However these are not relevant to the concept of interactive television in this research and thus will not be discussed further. A selection of past trials are documented below and others are listed in Table 3.2.1.

3.2.2.1 QUBE

QUBE was an early two-way cable broadcast project. It began in 1977 in Columbia, Ohio by Warner-Amex (DeFleur and Ball-Rokeach, 1989; ITA, 2004) and later expanded to five more cities, finally reaching 325,000 households. It was hailed as “a supermarket of electronic services” by then chairman Gustave Hauser (Freeman, 2000). A set-top box and numeric keypad facilitated the interactivity. The interactivity was very limited and featured in sport, game shows, current affair and educational programs in the form of audience polls, household viewing behaviour and program ratings. (DeFleur and Ball-Rokeach, 1989; Neuman, 1991). The project showed that people found interest in interacting with their television (Swedlow, 2000), though not enough to fund the project which lost US\$30 million by its demise in 1984 (DeFleur and Ball-Rokeach, 1989; Neuman, 1991; Swedlow, 2000). Other reasons cited for the end of QUBE are the financial problems of related business units, the lack of commitment by interactive content providers, user privacy issues

and a mismatch of user expectations with technology capabilities (DeFleur and Ball-Rokeach, 1989; Carey, 1997; Swedlow, 2000).

	iTV Trial Name / Owner	Year	Comments	
United States of America	National Science Foundation	1970s	Sponsored three major interactive cable television trials for education, community services and worker training purposes.	
	USA Department of Health, Education and Welfare	1970s	Supported services for health care.	
	QUBE Warner & American Express	Late 1970s	Initiated as an example of what was possible over cable to help attain franchising.	
	Indax Cox Cable	Early 1980s	Qube's competitor with home banking, shopping, information services and education content; text and graphic based, no video.	
	Time Teletext	1980s	Market testing was 'lukewarm'.	
	AT&T and Bell Atlantic	1990s	Trialed a service with employees including educational programmes, sport and games.	
	Viewer Controlled Cable TCI, AT&T and US West	1990s	Service offered movies-on-demand; popular but cannibalised other entertainment spending.	
	Main Street GTE	1990s	Offered video-on-demand; participants liked service but were not prepared to pay full costs.	
	Full Service Network (FSN) Time Warner	1990s	Offered a wide range of interactivity, main purpose was to act as a shopping mall.	
	Your Choice TV	1990s	-	
	In Touch TV	1990s	-	
	Cable Test System CableLabs	1990s	Offered high definition television via cable in Colorado.	
	Interaxx Television Network Trail in Cora Springs	1990s	Cable users used the 'Home Station' to surf the Internet, send emails and interactive programming	
	Interactive Channel	1990s	In Denton, Texas	
	Stargazer Bell Atlantic	1990s	Video-on-demand service.	
	Think Link	1990s	In Sterling Heights	
	Europe and Other	Castro Valley Trial Viacom and ATT	1993/4	-
		Video on Demand Test Rochester Telephone Co.	1990s	In New York
Biarritz (France)		1984	Provided video calls, interactive text services, extra channels and better reception.	
British Telecom		1995 - 1996	Offered movies-on-demand, home shopping, electronic banking and games; positive results that established a service in London.	
Telia (Sweden)		1990s	-	
Telecom Italia (Italy)		1990s	-	
Deutsche Telekom (Berlin)	1990s	-		
Videoway (Montreal and Quebec City)	1990s - current	Successful service using four channels to provide interactivity; games and interactive programming most popular.		

Table 3.2.1: Details of interactive trials. Source: Carey, 1997, Jaaskelainen, 2001, Rose et al, 1999.

Further issues were that people still spent a lot of leisure time outside of the house and the variety of today's cable television was not available. Many commentators, such as Bill Smith (NetSmith Services) and Roger Wilkerson (Wilko Communications), also cite the inexperience of the audience with interactivity as contributor to QUBE's demise (Freeman, 2000).

3.2.2.2 Full Service Network (FSN)

The other major interactive television project was the Full Service Network (FSN) initiated by Time Warner in Florida from 1994 to 1997 (Motavalli, 2002; ITA, 2004). The offer included simple interactivity and the video-on-demand technology and it was built on the business premise that consumers would “transfer a lot of their offline purchasing to their cable boxes” (Motavalli, 2002, p13). However, while it was a popular service in the 4,000 homes taking part, participants limited their experience to ordering movies and the occasional pizza, but did not exploit the other t-commerce (ie. television commerce) opportunities (Freeman, 2000). Furthermore, participants did not see the extra costs to justify the service, especially with the Internet emerging as a much more interesting technology at the time (ITA, 2004). While FSN closed down due to mainly financial issues, it was held as a worthwhile experiment as it gave insight into “the types of services consumers would use and how they'd interface with a remote control” (Freeman, 2000, p86).

3.2.2.3 Japanese Interactive Cable Experiments

Interactive television trials were also carried out in two Japanese cable-enabled towns which had young, professional and proactive information consumers (Tennant,

1993). The first, the Tama Community Communication System, was established in 1971 as a research project and wrapped up in 1980 due to enough research data having been gathered and the community not willing to carry the costs by themselves. The most popular services were similar to today's telefax and teletext services. In the former, daily relevant information transmissions would be printed out on a home printer while the latter was called the FLASH service and allowed access to a database of updated community information. Unlike the American trials, two-way interactive systems for voting or answering questions were not as popular.

The second trial Hi-OVIS, Highly-interactive Optical Visual Information System, was created in Higashi-Ikoma in July 1978 and ran for experimental purposes til 1986 (NMDA, 1996). The community was able to control the programming by essentially producing their own content from their homes. Although production participation was low, the attitude to viewing the locally produced programming was positive. The system also offered discussion programs about the community – much like teleconferencing – however success was limited. There was also the opportunity for viewers to shop via their television, however, this was mainly used for researching products rather than purchasing. On the up side, voting was used by 50% of participants and the ability to request information and programme requests were the most popular.

3.3 The Past Preparing the Future

“new technology...emerges not from flashes of disembodied inspiration but from existing technology by a process of gradual change to and new combinations of, that existing technology”

(McKenzie and Wajcman, 1999, p9)

Figure 3.3.1: New technology’s link to old technology.

As with other things, technology is a product of its predecessors (Figure 3.3.1). As each of the technologies discussed in the previous sections emerged, they offered the consumer a new experience, a new understanding and a new awareness of what media could and should do for them (Straubhaar and Lin, 1989; Pyungho, 2001). The experiences with previous interactive media have essentially educated consumers in the interactive media concept. The remote control and the VCR have taught the viewer to be active and selective essentially on impulse (Everett, 1997; Swedlow, 2000; Vorderer, 2000), teletext has accustomed viewers to use their television for information as well as entertainment (Tydeman and Kelm, 1986; Middleton, 2001), while the Internet has established a benchmark for interactivity and choice of information. It is also interesting to note that consumers are often the ones that pioneer the resulting use of a media technology by how they adopt it to their lifestyles, rather than the technology dictating its place in their lifestyles (Rogers, 1995; van den Bulck, 1996; Jaaskelainen, 2001). Hence, as consumers become experts in the older interactive media they are laying the foundations for their understanding of new interactive media.

This ‘past preparing the future’ notion can be explained by the theory of knowledge transfer. This refers to “how knowledge acquired in one situation applies (or fails to apply) in other situations” (Singley and Anderson, 1989, p1). This essentially sees internalised knowledge acquired from past experiences in familiar domains being used to understand or function in unfamiliar situations (Gregan-Paxton and Roedder John, 1997; Docampo-Rama, 2001). However, this transference is dependent upon the individual’s ability to identify when previous knowledge is relevant to a new situation (Singley and Anderson, 1989).

There is also a difference in how people transfer knowledge based upon their level of expertise with a domain. It is suggested that novices will transfer knowledge based on simple attribute connections while experts look for relational connections and it is the latter that find transference to completely new situations easiest (Gregan-Paxton and Roedder John, 1997; Docampo-Rama, 2001). That is, the more experience one has in a given area, the easier it will be to grasp new ideas in a similar field of knowledge. This notion is also supported from a different perspective in that “greater amounts of prior information are associated with a higher likelihood of integration of persuasive information, the ease with which information is processed and greater attitude-behavior consistency” (Manfredo, Bright et al., 1992). Thus it is suggested that individuals with a lot of experience with interactive media will be more accepting and comfortable with the use of interactive television than those that have had very little interactive media experience.

Another factor to consider is an individual's 'technology generation', which is defined by the interaction style that they were exposed to in their formative years (between 10 – 25 years old) (Docampo-Rama, 2001). Individuals whose formative years were until 1980 are the 'electro-mechanical generation' because they interacted with media on a mechanical or electronic basis. The next generation (from 1980-1990) understand their media through displays (display generation) such as the liquid crystal display (LCD) on VCRs. The 'menu generation' (after 1990) moved from LCDs to on-screen menus when interacting with media (Docampo-Rama, 2001). This formative year learning may also impact upon how well knowledge transfer occurs as it outlines the interaction language that an individual is familiar with.

An example of knowledge transfer from one media to another is that of the interactive community television trials in Reading, Pennsylvania (Carey, 1995). Here, people could phone in or be part of a studio audience that could communicate with people in other studio audiences. Their communication behaviour reflected the conventions of telephone conversations and radio operator practices. This demonstrates that "people initially borrow behaviours from other more familiar situations and treat the new communication form as if it were the more familiar" (Carey, 1995, p227).

Together with the transfer of utilitarian knowledge comes the transfer of expectations of the end user upon the new technology. It is quite common for new technologies to be heralded as the "ultimate 'x' experience" by the marketers, however, consumers ultimately decide what a technology is used for and they are interested more in what

it can achieve for them, rather than the technology itself (Gallagher, 2001). And if this new technology does not meet its promotional hype it would be expected to at least meet the benchmarks set by the consumers' experiences with other interactive media. In investigating the effect of VCRs, cable and remote controls on the television experience, Perse and Ferguson (1997) are astute to point out that "future research should examine whether newer technologies raise expectations about television" as this may explain why "increased benefits may not be so noticed or appreciated" by the end consumer (Perse and Ferguson, 1997, p327). It has also been suggested that use of previous media such as teletext, digital television and the Internet will affect the perceptions of interactive television (Brodin, Barwise et al., 2002). Thus, if the interactive television technology is to improve the television experience via interactivity, it is not only previous knowledge that needs to be considered but also the expectations from a consumer's previous experience with television and interactive media technologies.

3.4 Interactive Television - Today

"Interactive television is not a single technology or service but a family of diverse systems and applications that trace their history to the very beginning of television."

(Carey, 1995, p220)

Figure 3.4.1: Interactive television.

Figure 3.4.2 charts the evolution of the television environment from the 1950s to an estimation of the near future. The major change in terms of the viewer experience is a progression from 'passive' viewing to 'interactive' viewing. But what does this

interactivity refer to? There are those that hold television never to be a truly passive medium since viewers participate in the narratives and are active in the selection of programmes and changing of channels (Mountford, Mitchell, O'Hara, Sparks and Whitby, 1992; Vorderer, 2000). However, if others argue this form of interactivity to be so rudimentary that it is essentially passive, what is real mass media interactivity?

1950 - 2000	2001 - 2005	2005 - ?
<ul style="list-style-type: none"> • Passive viewing • Shotgun advertising • Lean back style • Basic/premium channels • Basic program guide 	<ul style="list-style-type: none"> • Passive/interactive viewing • Operator based programming • Targeted advertising • Lean up style • Basic/premium/VOD channels • Advanced program guide • Internet connectivity • Hard drive capability • Home networks 	<ul style="list-style-type: none"> • Interactive viewing • User driven programming • Customised advertising • Lean forward style • Premium channels • Entertainment on demand • Hi-speed fibre 'net connectivity • Hard drive standard capability • Video telephony standard capability • Home network capability

Figure 3.4.2: The interactive television viewing (r)evolution. Source: Stroud, 2001.

Interactivity is a relatively new topic of research and has only been investigated over the last 10-15 years in terms of mass media (Downes and McMillan, 2000). Given this, there is still no definitive definition (Heeter, 1989), however, there seems to be an understanding that it exists on a continuum (Rose, Dormann et al., 1999; Varan, 2001) and it can refer to the uses of the media (ie. user behaviour) as much as the technological capabilities of the media (Heeter, 1989; Vorderer, 2000). The definitions in Figure 3.4.3 are good examples of how interactivity is understood in the mass media and communications literature and these seem to agree on a number of characteristics.

“Interactivity is fundamentally the ability to control information.”
(Bezjian-Avery, Calder and Iacobucci, 1998, p24)

“...interactivity may be perceived to consist of five dimensions: 1) playfulness, 2) choice, 3) connectedness, 4) information collection and 5) reciprocal communication.”
(Ha and James, 1998, p461)

There are four continuous dimensions to interactivity... “1) The degree of choices available, 2) The degree of modifiability, 3) The quantitative number of the selections and modifications available and 4) The degree of linearity or nonlinearity” as suggested by Goertz (1995).
(Rose, Dormann et al., 1999, section 2.4)

“interactivity may be defined as: a measure of a media's potential ability to let a user exert an influence on the content and/or form of the mediated communication.”
(Rose, Dormann et al., 1999, section 2.5)

“the extent to which a person perceives he or she controls over the interaction process, ...[the] communicative counterpart... personalises and responds to his or her communicative behaviour” personal characteristic perspective from Wu (2000, p41)
(Sohn, Leckenby and Jee, 2003, p3)

"the extent to which messages in a sequence relate to each other and especially the extent to which later messages recount the relatedness of earlier messages."
(Sohn, Leckenby et al., 2003, p4)

“From the communications point of view, media that seems to be the most interactive allow a form of communication that most closely resembles a natural communication between individuals.”
(Vorderer, 2000, p25)

Figure 3.4.3: Selected definitions of interactivity.

From these it seems that interactive media allow the user to control the environment and participate in a ‘conversation’ where their messages or choices are responded to in an immediate and intelligent way. Additionally, Heeter (1989) indicates that an interactive media tends away from the mass and to the individual via a complexity of choices, the ability of the individual to add their own content and carry out interpersonal communication. Furthermore, Downes and McMillan (2000) report that consumers see interactive media as being informative rather than attempting to persuade them. When applying this interactivity concept to the interactive television

concept, an overlap occurs not only in the concepts used in the definitions (eg. control; see Figure 3.4.4) but also in the nature of the applications currently available.

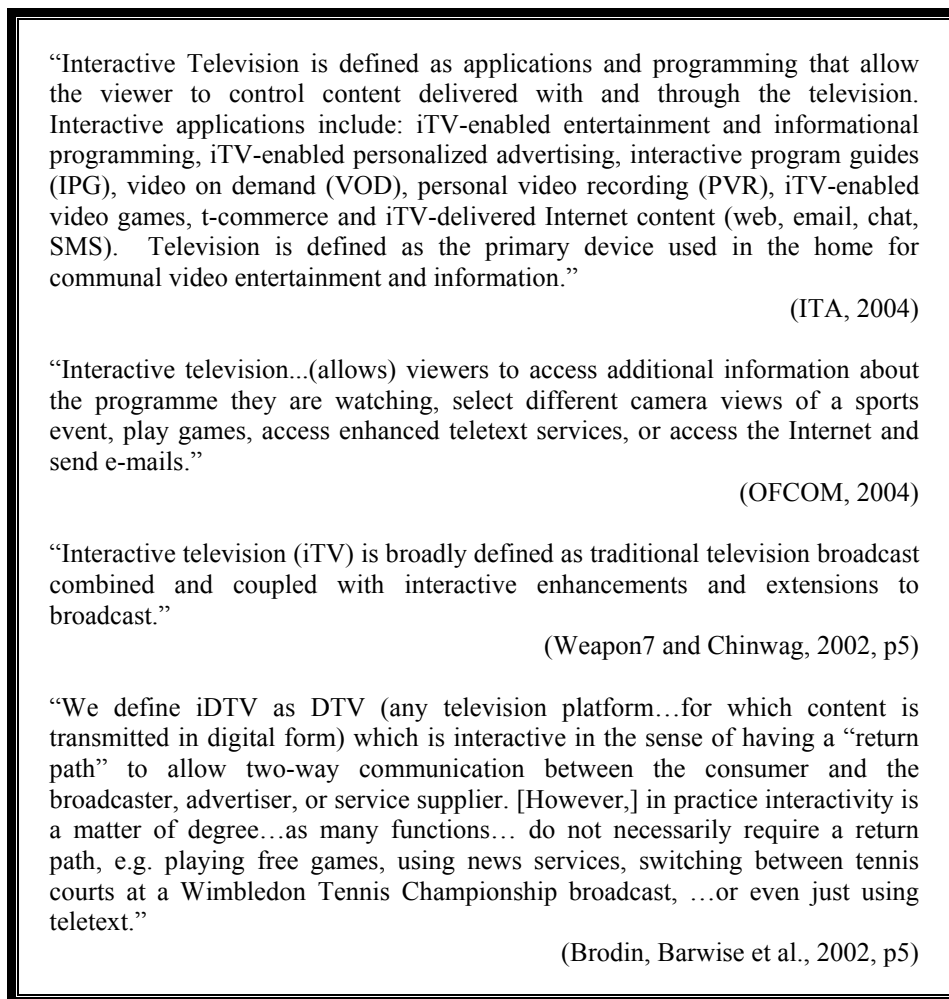


Figure 3.4.4: Selection of descriptions or definitions of interactive television.

3.4.1 iTV’s Interactive Bits

The move from analogue to digital signals has allowed current iTV technology to develop as it has across all types of platform including cable, satellite, terrestrial and even telephone lines. Digitisation not only makes it possible to transmit more

information via a given conduit, but also allows interactivity. There are two main forms of interactivity, that which uses only the ‘front’ channel and that which uses the ‘back’ channel.

3.4.1.1 Channels of Interactivity

Front channel interactivity is similar to that afforded by a CD-ROM or DVD that allows the user to access existing content non-linearly. In the interactive television context this form of interactivity occurs when an application is downloaded into the set-top box and used from there, or when a user switches between parallel streams of data, or when a viewer accesses content from a personal digital video recorder (PVR or DVR) like TiVo. This form of interactivity does not require the back channel that would enable a truer form of interactivity according to definition (see above discussion on definitions of interactivity).

The back channel is used when information is sent from the user back to the provider. This may be to request a brochure or sample, to take part in a quiz or competition or to purchase a product. It can also be used to monitor viewing patterns and collect viewing preferences. There are three forms of the back channel. The live connection via cable or phone line is the most truly ‘interactive’ as it allows the user to connect instantly with the provider through the television remote. A version of this is the flourishing trend to use the mobile phone to interact via SMS texts (Nars, 2003, www.text.it/home/default.asp?intPageId=441). The second form stores the day’s requests and interactions and then processes them to the provider in down-time. The third form of interactivity with the television is mostly used in the United

States of America and is termed ‘tele-webbing’ or ‘2-screen synchronised iTV’ whereby the viewer uses the Internet to respond to or take part in the television programme simultaneously (www.itvdictionary.com/t.html).

Both the front and back channel forms of interactivity are used in interactive television in various applications. Typical applications in the interactive television landscape include electronic programme guides (EPGs), programme enhancements, interactive advertising, micro-sites, dedicated advertising locations (DALs) and interactive games.

3.4.1.2 Electronic Programme Guides

Electronic programme guides (EPGs) are on-screen television guides and with interactive television they not only show what programmes are on but can also be used to search for, call up (in video-on-demand situations), or automatically select programmes of interest (Moch, 2000; Swan, 2000). They have also been shown to be ideal areas to feature banner advertisements as viewers access them an average of 6 times a day (Broadcasting&Cable, 2000; Anderson, 2001).

3.4.1.3 Enhanced Programming

A programme enhancement is any application that adds value to the programme and is often non-commercial in nature. Programme enhancements come in all types of forms. They can be a synchronised alternative stream, a graphic overlay or digital text (Swedlow, 2000; Anderson, 2001; Mayer, Mohn and Zabbal, 2001). It is important to note that not all interactivity improves the viewing experience. That which works the best attempts to “understand and anticipate viewers’ needs”

(Mercier and Barwise, 2004, p23) and adds true value to the programme or the viewing experience either by being intrinsic to the programme concept (Higgins, 2001; YooMedia and Netimperative, 2002; Barwise and Mercier, 2004) or providing genuine choice (Mercier and Barwise, 2004). Analysts suggest that when it is successful it can retain viewers up to three times more than a linear programme (McDonald, 2001).

Programmes such as *Big Brother* (<http://www.channel4.com/entertainment/tv/microsites/B/bigbrother/index.html>) and *Banzai!* (www.channel4.com/entertainment/tv/microsites/B/banzai_new/) are prime example of interactive-based programmes. *Big Brother* requires viewers to vote out housemates while *Banzai!* is a narrative-led game show where viewers are invited to ‘bet’ on the outcome of challenges for the contestants. The news applications provided by Sky and the BBC are examples of situations where genuine choice is available to the viewers and this is reflected in their frequent regular usage (Mercier and Barwise, 2004).

There are a number of other programme enhancement examples. One of the earliest was the multiple camera angles and player statistics availed by the BBC during the Wimbledon coverage in 2001, with chat facilities added in 2003 (www.broadbandbananas.com/vvsports.html). The BBC’s *Walking with Beasts* offered viewers the ability to switch between parallel streams that showed the programme in its regular version, the version with scientific narration, the making-of footage or information on the animal in question. Star trivia facilities during the *Brit Awards 2000* improved the viewing experience for 66% of viewers, while the *UEFA*

Champions League enhancements pleased 72% of viewers (Anderson, 2001). ICE Interactive's travel show trial *Destinations* provided interactive travel tips to 65% of its viewers, 33% of which also engaged in the show's chat facility (Purins, 2001). The interactive game shows, like *Who Wants to Be a Millionaire?*, are able to further exploit their linear participatory nature by allowing viewers to take part in real time for high scores or prizes (Newsweek, 2000).

3.4.1.4 Interactive Advertising: Ads, Overlays, Micro-Sites and DALs

In the traditional television environment, advertising is the basis of the business model. However, in this new era the viewer can avoid advertising not only by switching channels and leaving the room but also by skipping them or removing them with personal or digital video recorders (PVR or DVR) (Barwise and Mercier, 2004); some estimate up to 88% of ads are avoided (Dornan, Brooks and Carter, 2000). This is of serious concern for a media that is traditionally largely funded by advertisers (Frutkin, 2000; Brodin, Barwise et al., 2002). However, propositions have been made to develop software 'locks' for commercials so that they must be watched or to employ permission marketing where the viewer pre-selects the types of advertising that he or she will accept (BroadcastingandCable, 2000; Morton-Stone, 2000).

While such technology is being debated, many practitioners hold to the notion that successful advertising in this new environment must continue to be valuable and engaging for the viewer rather than depend upon software. This is even more important as advertising's role shifts from persuasion to informing (Forrest, Kinney

and Chamberlain, 1996; Rust and Varki, 1996), echoing the notion of interactivity discussed in Section 3.4. Interactive advertising has also been identified as an ideal contact point for the beginning of transactions for certain products (Peppers and Rogers, 1996), however, till now this has been rare due to backend and consumer limitations.

Interactive advertising comes in many of the traditional formats as well as some new ones. Product placement becomes interactive by the possibility of buying a product being used in a programme via the remote control (BroadcastingandCable, 2000). However, this has been very limited in practice due to various financial and ethical issues surrounding it, such as royalties for the actor presenting the product and potential influences of the advertiser upon the narrative (Frutkin, 2000), as well as technical restraints of particular platforms (Anderson, 2001).

Ad spots in commercial breaks can also be made interactive by prompting the viewer to press a remote control button (often the red one as used by *Sky*) and then presenting the offering; these are essentially direct response commercials but can also be used to build the brand (Gillespie, 2000; Brodin, Barwise et al., 2002; TRP, 2002; Saha, 2003). The interactivity can take on two forms: impulse response or telescopic. Impulse response interactivity is essentially when a brochure or a free sample is offered to be sent out to the viewer via a banner ad or a micro-site and the viewer needs only to commit a button press at that moment (Stroud, 2003). The telescopic approach offers the viewer more immediate information on the product. This may come in the form of a dedicated advertiser location (DAL), an infomercial

video, or a series of lengthening commercials providing increasing detail (Reading, 2002; Varan, 2003; GNP, 2004) and requires the viewer to commit time as well as the button press.

There are a number of differences between an impulse ad with a banner or a micro-site and a telescopic DAL approach. The impulse banner approach overlays the banner onto the broadcast stream while the micro-site continues the broadcast stream in a $\frac{1}{4}$ screen in the corner while presenting the information in text on the remainder of the screen. A telescopic DAL approach essentially leaves the broadcast stream and exposes the viewer to only the text, graphics or video that provides the more detailed information. In both instances the advertiser can collect viewer information either by request or by the data collected automatically by the set-top box, which can then be used to build a lead database.

The response rates for these types of ad vary depending upon the product being advertised (IDS, 2003), as does the type of interactivity offered. However, on average an interactive ad will receive a 0.6-0.9% rate of response compared to its regular television counterpart of 0.02-0.1% (Anderson, 2001). Other analysts suggest that interactive responses are three times (IDS, 2003), or even 10 to 20 times that of analogue television response rates (Brodin, Barwise et al., 2002).

One of the current problems with interactive advertising response rates is that while they are respectable ad for ad, they are still relatively low when compared to other direct response marketing devices. This is because the interactive television viewing

population is still very small compared to regular television viewers, Internet users, or newspaper readers (Saha, 2003). Furthermore, advertisers and agencies are still hesitant to use interactive advertising given the significant costs involved in the production, testing and implementation of interactive campaigns, especially without a clear understanding of what the interactive metrics represent (Brodin, Barwise et al., 2002; Mercier and Barwise, 2004). However, it seems that large advertisers such as *Proctor & Gamble* and *Rimmel London* and those with high-ticket items looking for leads (such as cars and holidays) have found some success with interactive advertising nonetheless. This will further improve as the interactive television market grows and viewers take interaction as second nature.

As with traditional advertising, different types of products will have different objectives and will thus call for different interactivity devices (Riseley, 2000). Three examples from the SKY platform are ideal to illustrate this (as taken from Stroud, 2003). An impulse response device consisting of banner overlays on the ad was the solution that *Nivea* used to reach their objectives of distributing samples of a new moisturizer and understanding the target audience more. When the viewer pressed the red remote button during the ad an overlay appeared which prompted them to press select for a sample to be sent to them using the details in their subscription record. This resulted in a 1.5% response rate (7,791 packs sent) from women 16-34 years of age.

Rimmel London had slightly different objectives for the promotion of a new foundation: to raise awareness in the target market, attract new customers, to build a

relevant database and to confirm the success of the lipstick campaign the year before. The previous lipstick campaign had used a mini-DAL collecting personal information and sending out a sample and gained a 3.2% response rate (52,000) with 68% opting in for future marketing information (YooMedia and Netimperative, 2002). To corroborate this success, *Rimmel London* implemented a similar campaign for the foundation resulting in 1,719 hours being spent with the brand over 60,565 respondents (Stroud, 2003). Thus it seems that for cosmetics this form of interactivity works well.

As a high-ticket item, cars need a different approach. In the early French experiences with interactive advertising for cars there were two schools of thought; one which saw interactive ads as quick lead generators and the other believed that they should deliver “qualified, considered leads” (Riseley, 2000). In the former the viewer would be offered to be contacted by a dealer and the latter would first provide product information and then some screening questions before forwarding the details to a dealer. It was the second style that *Jaguar* undertook in its recent UK campaign for its X-Type which was aimed at increasing awareness in its younger target audience and building a relevant database. On pressing the red button the viewer was taken from the ad into a DAL that contained product information not only in text but also via ‘bespoke video’. 476,000 viewers interacted (including 32% of the target audience who saw the campaign) and spent on average 4 minutes with the campaign (Stroud, 2003).

One of the few transaction based interactive advertising campaigns was that of *Dominos Pizza* where viewers could order a pizza via their television remotes as early as 1999 (Dornan, Brooks et al., 2000). It used the subscriber's identity details from the set-top box to process the order and in 2001 not only were 21% of customers entirely new to *Dominos* because of the interactive advertising campaign, but each order was 35% more than telephone sales. Furthermore, *Dominos* estimates that interactive television accounts for 3% of its UK-wide sales and it is three times as high as its Internet sales (BusinessWeek, 2001; Brodin, Barwise et al., 2002). This function was also available from its 'walled garden' or shopping area presence.

3.4.1.5 Interactive Service Portals and Games

There are also advertising opportunities outside of the broadcast stream in 'walled gardens' or interactive service portals and interactive games. These exist in interactive areas of the provider (such as *SKYActive* on *SKY* or *HomeChoiceActive* on *HomeChoice*) and often contain numerous services such as shopping, dating, banking, holidays and some providers also offer Internet access. However, using the Internet over the television has not really taken off and this suggest that it is an entertainment media rather than an information media. This is also reflected in the types of services that are finding some success on interactive television: those that "do not directly compete with the functions usually performed over the PC" (Brodin, Barwise et al., 2002, p41). The Henley Centre found that interactive television outperformed the PC for travel services (26% to 14%), music (37% to 15%), online games (62% to 12%) and browsing shops (73% to 24%) (Brodin, Barwise et al., 2002, p41). Much of the use of interactive services occurs during commercial breaks

or while waiting for a programme (Austin, 2003). Viewers mostly browse for product information or entertainment and currently most shops are supported by call centres to process transactions. However the goal is to enable transactions via the remote control and set-top box, which already occurs on occasion.

Interactive games on interactive television take the form of small, fun games. They are more similar to early video games than current PC or console games and have been used by advertisers to give players an extended brand experience in an entertaining fashion (Ghose and Dou, 1998). Interactive games were hailed in the early years as the ‘killer application’ and as a lucrative revenue stream (pay-per-play) given their addictive nature (Brodin, Barwise et al., 2002). However, in recent years these stand-alone applications have seen a decline in participation (Mercier and Barwise, 2004), with only 44% playing such games in April 2003 compared to 54% in October 2002 and 57% in July 2001 (Austin, 2003).

A recent example of an interactive television game used for advertising is the *Kit Kat* sponsored *X-tream Salmon* where the aim of the game is to pogo the salmon up the waterfall with the power of the chocolate bar. Most of the 300,000 viewers who played the game were from the right target market and spent an average of 13 minutes each with the game (Stroud, 2003). Given the length of time with the brand and the completely voluntary nature of participation, this was a valuable brand building exercise for *Kit Kat*. While this game offered no samples or prizes, others have been known to give away products to high scorers and in some cases the entertainment value is enough.

3.4.2 The United Kingdom Market

While interactive television received a lot of attention in the United States of America in the 1970s and 1980s, it has found its home in the United Kingdom (UK) in the 2000s. Currently (2004), of all the markets that are employing interactive television, the United Kingdom has the highest penetration (despite recent market hardships) with 50.2% of all households (approx. 12.2 million households) having access to digital television services and thus interactive television (OFCOM, 2004). The US has a 42% penetration, while Japan is at 17% and Europe at 13% (Stroud, 2003). One of the reasons why interactive television has been so successful at building critical mass in the UK is that they have had a successful experience with teletext, which has made them accustomed to goal-directed information search via their television remote controls (Rose, Dormann et al., 1999; Freed, 2001; Brodin, Barwise et al., 2002; OFCOM, 2004). Furthermore, like teletext, interactive television has received substantial support from the government in developing the technology (especially via the BBC). The government has also used policy support by aiming for the analogue signal to be switched off by 2010 (OFCOM, 2004) meaning that all of the UK will have access to digital and, in turn, interactive television.

Within the UK market there are a number of different digital and interactive television providers. Multi-channel pay-TV is very common in the UK and these providers have used this to drive the current interactive television uptake (Barwise, 2002). Aside from additional channels and programming the other main adoption

drivers have been superior video and audio quality with interactive services figuring little (Riseley, 1998; Barwise, 2002). However, it will be up to free-to-air programming to further attract viewers to interactive television as digital payTV catches up with its analogue subscribers (Barwise, 2002). Table 3.4.1 lists the current interactive television market make up and shows that SKY (satellite) has the majority of the market with 58%, followed by the cable providers (ntl: and Teletwest) at 18% and 24% of households are using terrestrial providers such as Freeview. The remainder is catered for by the two ADSL platforms that use broadband telephone lines (0.1%).

Platform	Number of Households	Percentage of Market
SKY / BSkyB (Satellite)	6.9 million	57.5%
Ntl: (Cable)	1.3 million	10.6%
Telewest (Cable)	0.95 million	7.6%
Digital Terrestrial (Freeview)	3.2 million	24.2%
ADSL	8,887	0.1%
HomeChoice	3,550	0.04%
Kingston Interactive (KIT)	5,337	0.06%
TOTAL	12.3 million	100%

Table 3.4.1: United Kingdom digital television market. Source: OFCOM, 2004.

While the estimates of digital television penetration (and thus interactive television access) are relatively consistent, estimates of actual interactivity, interactive services usage and consumer experiences are sketchy and diverse at best. This is mainly because different research uses different measures of interactivity. For example, a study by BMRB in 2001 reported that at least 50% of digital television viewers had interacted with a programme and 12% with interactive advertisements (BMRB, 2001). On the other hand, an Office of Communications (OFCOM; UK's regulatory

body for communications) survey during the same year found that 19% used interactive services once a week (with this being 15% in 2002) (Towler, 2003) and that despite the low usage rates almost half (48%) of those surveyed agreed with the statement “Interactive services such as SKY Sports and SKY News Active enhance television viewing for the viewer” with only 25% disagreeing (Towler, 2003, p27).

From the platforms or providers there are also differences in reporting. A survey of ntl: customers put interactive service usage at 90% every month and 59% at least once a week (YooMedia and Netimperative, 2002). A presentation by SKY in 2003 reported that 60% of viewers had interacted with a programme, 66% had seen an interactive ad, but 49% had actually interacted with one and 62% of interactors had had a positive experience (Stroud, 2003). In some contrast to the Sky data, BMRB reported in 2003 that 77% of digital SKY and cable viewers had pressed the interactive button, 44% had used interactive services and 40% had interacted with a programme (Austin, 2003). Between these reports, different measures of interactivity have been used with different outcomes giving no clear view of how viewers actually use interactive television in the UK, but people seem enthusiastic about the concept. Clearly there is need for more understanding of how viewers use interactive television and clearer measurements of their behaviour.

3.5 Interactive Television Research

The majority of regular figures that come out on interactive television usage are generated by the platforms, government bodies such as OFCOM and market-player commissioned studies, with minimal academic research. Research into interactivity

and advertising in the 1990s may have focused on the Internet and computers but some findings can be related to interactivity in the television environment. Furthermore, as interactive television is essentially a mass media that can be personalised (rather than a personal media) it is fortunate that a number of field studies have looked at how consumers use interactive television, if only on the surface. There are also a number of academic studies that address interactive television as a promotional media and more that cover other aspects of the technology (see <http://itv.eltrun.aueb.gr/theses/> for a selection).

3.5.1 From Interactive Media Research

As we move from the traditional ‘passive’ to the new ‘interactive’ viewing positions in front of the television, researchers have suggested that interactive television needs to be mindful of and exploit the traditional television viewing motivations and environment (Lee and Lee, 1995). Furthermore interactive applications should be aware of the social nature of television (Lee and Lee, 1995) and the interactivity in them should suit the objectives of the application and the wider communication objectives (Ghose and Dou, 1998). However, more importantly on the theoretical level, there is a call for current communications and media theories to be audited in light of the new media and adjusted to take into account the new user behaviour and experience (Heeter, 1989).

The media theory of ‘uses and gratifications’ has been proffered to be suitable for understanding new interactive media (including interactive television) since it holds the assumption of an active audience who often partakes in goal-directed behaviour

(Becker and Schoenbach, 1989; Heeter, 1989; Williams, Strover and Grant, 1994; Morris and Ogan, 1996; Newhagen and Rafaeli, 1996; Perse, 1998). Ha and James (1998) investigated the Internet use with such an approach and concluded that the five dimensions of interactivity (playfulness, choice, connectedness, information collection, reciprocal communication) facilitated by the Internet, service various communication needs of website owners as well as web users (Ha and James, 1998). Furthermore, the authors hold that the dimension of choice “engenders an internal emotional sense of satisfaction” which in turn empowers the user (Ha and James, 1998). This has already come out in some interactive television research (see Tanjic, 2001). However, the literature also acknowledges that uses and gratifications and other communications theories need to evolve as the interactive media evolves, as certain parameters may not be applicable to the new environments (Morris and Ogan, 1996).

3.5.2 Consumer iTV Adoption Research

“Consumers, not technologists, will dictate the future... Thus, while the technology may be dramatic, it is not the technology but consumer demand and interest that will drive the future.” Sumner Redstone, Viacom. Speech to the National Press Club, October 1994.

(Lee and Lee, 1995, p10)

“...most consumers aren’t interested in technology, only in what it can do.”

(Gallagher, 2001, presentation)

“The future success of iDTV and its role in society depends on how well consumers respond to what it offers.”

(Brodin, Barwise et al., 2002, p2)

Figure 3.5.1: Selected quotes illustrating how consumers will be the architects of the future of interactive television.

As with all technologies, consumers will adopt interactive television to service their current needs (see Figure 3.5.1). Given the gap between the industry's and consumer perspective on what interactive television should be used for it is important to know how consumers are currently using it and their attitudes towards it. A number of companies and organisations have conducted one form or another of consumer research spanning from why viewers adopt interactive television, through how they use it and to what they would like from it.

On the whole, consumers have reported interactive television mainly to be an entertainment medium which is enhanced rather than interactive and thus is complementary to the PC rather than a replacement for it (Brodin, Barwise et al., 2002). Interestingly, some see it as lying “conceptually between teletext and the Internet” (Brodin, Barwise et al., 2002, p15). The reasons for adoption (Table 3.5.1) are largely based on a better television experience while the interactive services seem to be of interest but not a significant reason for getting digital and thus interactive television (Brodin, Barwise et al., 2002; TRP, 2002; Barwise and Mercier, 2004; Mercier and Barwise, 2004). In one survey, non-adopters were asked why they had not yet got interactive digital television and the main reason was that they were happy with their current television selection (Dornan, Brooks et al., 2000). Estimates suggest that even when all of the UK has turned to digital television transmission, 20% of the population will not change their behaviour to take advantage of what digital television has to offer, namely interactivity (Mercier and Barwise, 2004).

Reason For Adoption	% of Those Surveyed
Better Quality sound and picture	51%
More movie channels	43%
Greater choice in types of programming	40%
Source: Pace Report 2001 as cited in Freed, 2001	
More TV channels	72%
Better picture quality	31%
Better coverage	30%
Better sound quality	18%
Better programmes	14%
Access to PPV events	14%
Games	11%
Online Shopping	4%
Source: CIA MediaLab research as reported in Brodin, 2002.	
Reason for Non-Adoption	% of Those Surveyed
Not interested in additional channels	34%
Too expensive	28%
Watch too much/not enough TV	13%
Analogue/PayTV is sufficient	10%
Don't have equipment	4%
Don't know enough about what it offers	3%
Too complicated to use	3%
Thinking about it / Already ordered	3%
Not available in this area	2%
Don't Know	9%
Source: Ofel Residential Survey as reported in Dornan, Brooks and Carter, 2000.	

Table 3.5.1: Reasons for adopting or not adopting interactive television in the UK.

Even recently there is still some hesitation to actually use interactive services. Some viewers have been disappointed in the functioning of the interactive ads and services, indicating that they could be faster, more interesting and more worthwhile (BMRB, 2001; Austin, 2003). There has also been controversy over how easy interactive television is to use. In a survey of interactive television users, 67% agreed that interactive television was easy to use (Austin, 2003). However, in a study for OFCOM, interactive television was found to be the 16th most difficult technology to use out of a selected 19 (Freeman and Lessiter, 2001), well behind ATMS, mobile phones and the VCR (Figure 3.5.2).

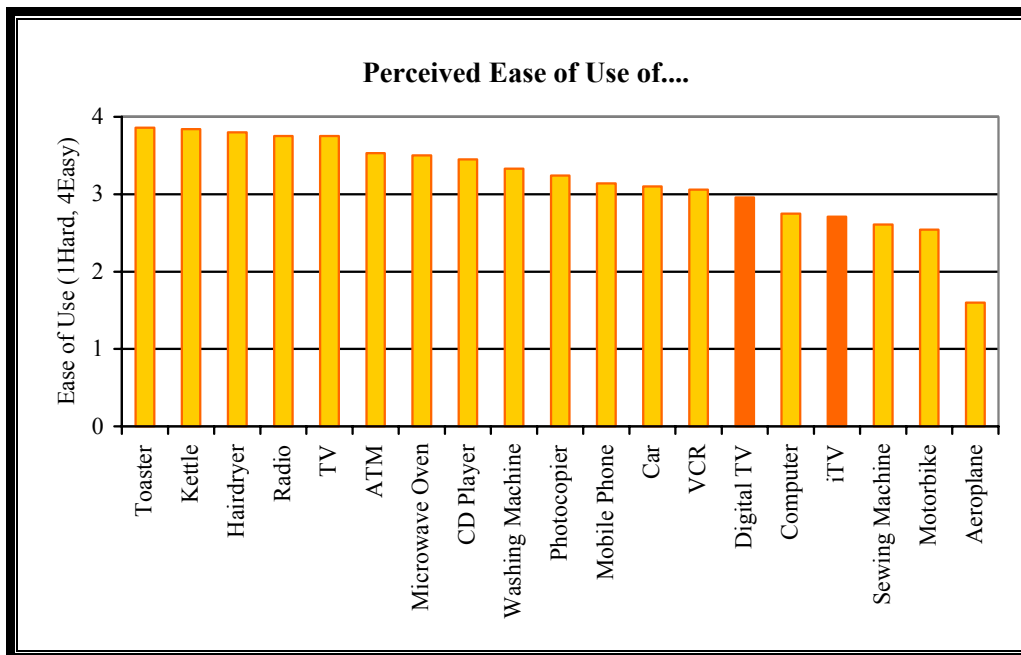


Figure 3.5.2: Perceived ease of use of selected technologies. Source: Freeman and Lessiter, 2001.

So while the industry needs to improve their offerings, they also need to educate the public more clearly about what is really available, such as *SKY* did with their ‘Lil’ Red Button Man’ campaign for their *Active* portal (Anonymous, 2002, <http://www.broadbandbananas.com/marketing.html>). This education must be upfront about what interactive television can and can not do. This is because it can be a high impact medium which, if it does not meet a viewer’s expectations, will disappoint and can dissuade a viewer from the product, programme or interactive television itself (Varan, 2003).

As with most technologies the very early adopters of interactive television tended to be younger, affluent, male, paid entertainment consumers and technology savvy (Riseley, 1998). However, of those that have since joined the interactive television experience there seems to be little gender or social class difference, but with a slight slant towards families with children and little representation of the over 55 year olds

(Brodin, Barwise et al., 2002; Austin, 2003). Table 3.5.2 also shows that while most digital television viewers have interacted with their television, it is the younger age groups (15-24 and 25-34) that are more likely to interact (84% and 85% respectively).

Segmentation	Digital Viewers	Had Interacted with TV*
Male	51%	79% of males
Female	49%	74% of females
15-24	39%	84%
25-34		85%
35-44	40%	76%
45-54		77%
55+	21%	61%
AB	23%	78%
C1	28%	76%
C2	24%	81%
DE	25%	74%

Table 3.5.2: April/August 2003 results of the Audience Interaction Monitor (AIM) by BMRB. Note: interaction data from April survey, digital viewers from August survey. Source: Austin, 2003.

As the interactive television market has grown and consumers have adopted the technology into their lives, research has attempted to define market segments. A market analysis report from Gartner Research (O'Donovan and Daum, 2000) proposes two types of digital television consumers: TV-Centric consumers and Interactive consumers. TV-Centric consumers are heavy television users who subscribe to multi-channel providers. They are attracted by “digital TV’s promise of yet more choice” (p13) but not necessarily interactive services. Their understanding of technology is defined by appliances and they prefer to do their shopping on the high street. On the other hand, interactive consumers are PC literate, techno savvy and “see technology in terms of tools to help organise their lives” (p13). They are not attracted by more choice alone, rather the online services that will help them save

time and control their viewing experience. These two consumer groups also appear in other segmentation classifications, to a more or a lesser degree.

In the segments identified by INTECO (Table 3.5.3), the interactive consumer seems to be reflected not only in the ‘Have PC and Internet Access’ group but also in the male users. Families with children and those that do not own a PC seem to be more TV-centric. While single person households are after time-saving features reminiscent of the interactive consumer.

Segmentation	Interested in iTV for...
Do not / will not own PC	Entertainment, shopping and simple functions like checking bank statements.
Have PC and Internet Access	Wide range of interaction including email and Internet access through TV.
Families with Children	Interactive educational programming and games.
Single Person Households	Functional, time-saving services like supermarket shopping and travel ticket booking.
Female	Shopping for holidays, clothes and groceries.
Male	Email, Internet access and tailored news coverage.

Table 3.5.3: Differences between segments for interests in interactive television uptake.
 Base: 1000 UK households with annual income over £25,000, January 1998, by INTECO.
 Adapted from: Riseley, 1998.

Segment	Demographic Characteristics	Uses iDTV for...	% of DTV households
Boys with Toys	Predominantly male, high income, no children.	PPV sport and PPV movies, playercam, games and all online services	7%
Match of the Day Man	Predominantly male, mixed income.	Sky Sports, player-cam, fan commentary and online services; not banking or betting	5%
Ikea Generation	Young families, good income.	TV as entertainment centre: radio and games; not PPV	21%
Royle Family	Male and female; lower income with children.	TV as focal point: PPV movies, online shopping, quizzes, competitions and radio	3%
Richard Madeley Fan Club	Females with children, lower incomes.	PPV movies and radio; no interactive services	12%
The Other Half	Predominantly female, mixed social background and income.	Does not use interactive services	52%

Table 3.5.4: Segmentations of iDTV users (from Continental Research, 2001).
 Adapted from: Brodin, Barwise and Canhoto, 2002.

These are further echoed in the segments identified by Continental Research detailed in Table 3.5.4, where the consumers that are interactively inclined belong to segments such as ‘Boys with Toys’, ‘Match of the Day Man’, ‘Ikea Generation’ and ‘Royle Family’. Those loyal to the television as pure entertainment are the ‘Richard Madeley Fan Club’ and ‘The Other Half’. Interestingly, in this survey in 2001 it was the majority of UK households that were part of these TV-centric mindsets (67%) and only 36% were inclined to take advantage of the interactive possibilities.

Freeman and Lessiter (2003) furthered their research on attitudes towards interactive television usability with the creation of consumer segments based on ease of use (Table 3.5.5). In the seven digital television classifications the most interactive individuals belong to the ‘technology enthusiasts’ (17% of UK) and ‘busy professionals’ (7% of UK) groups, which while skilled to handle digital television they risk being disappointed by the level of sophistication of interactive television. ‘TV Families’ and ‘discernable viewers’ are consumers that would be able to handle the level of technology, but would only be interested in doing so if they were interested in the content (42% of UK).

Lastly, the heavily TV-centric consumers are defined as those that would perceive interactive digital television as too difficult to use (33% of UK). These include individuals with no interest in technology such as the ‘strong resisters’, ‘telly traditionalist’ and those that will adopt it only out of due course, the ‘swung by the offer’ consumers. Unlike the previous segmentations, these categories suggest that the majority of the UK population are capable of working with interactive digital

television, but whether they want to integrate it as a major part of their lives is rather dependent upon ‘what’s on it’.

iTV Classification	% have dTV	% of UK	Description
Technology Enthusiasts	65%	17%	Early adopters who love technology for the sake of technology and are savvy with its use. idTV may fail them because of their high expectations from other technology.
TV Families	46%	30%	Young working families with kids that enjoy TV and will be influenced by children to adopt dTV.
Swung by the Offer	34%	7%	Older females that have no need for dTV but will adopt via auto upgrades and for widescreen.
Telly Traditionalists	30%	20%	Older, heavy TV viewers low on ‘gadgetry freakery’ and only average confidence in using new technologies.
Busy Professionals	23%	7%	Higher than average income professionals who have no time or use for TV and thus dTV offers no obvious benefits for them. Furthermore, due to work they see other technologies as more efficient for interaction.
Discerning viewers	11%	14%	Older, possibly retired professionals that give TV a low priority in their lives and so do not feel a need to adopt dTV.
Strong Resistors	6%	5%	Know little about dTV, do not like technology, are apathetic to dTV and perceive dTV difficult to use.
% of UK	Groups Included	Higher Order Classification	
33%	Swung, Traditionalists, Strong Resistors	It’s too complicated for me...	
42%	Families, Discerning	I can deal with it if there’s content I want...	
25%	Enthusiasts, Professionals	It’s too slow and clunky for me...	

Table 3.5.5: Summary of classification of attitudes towards interactive television usability.
Adapted from: Freeman and Lessiter, 2003.

These studies of consumer attitudes are a useful way to start to understand how consumers will react to and use interactive television, however, the true picture will only emerge as interactive television is adopted, integrated and finds its everyday niche as the novelty factor wears off (Carey, 1997). To gain a higher understanding of what is happening now and may happen in the future for interactive television, some research has concentrated more on the conceptual side of interactive television usage.

3.5.3 Conceptual Research

There are a number of active academic research centres for interactive television around the world, such as the Athens University of Economics and Business (Greece; <http://itv.eltrun.aueb.gr>), the Dowden Center in Grady College, University of Georgia (USA; <http://itvresearch.org/default.asp>), the Future Media programme at the London Business School (UK; <http://www.london.edu/marketing/Future/index.html>), the Interactive Technology Group at Brighton University (UK; <http://www.cmis.brighton.ac.uk/Research/ITRG/home.htm>) and the Interactive Television Research Institute (ITRI) at Murdoch University (Australia; <http://www.itri.tv>) to name a few. These research centres have produced a number of valuable articles and theses, three of which relate to how advertising works in the interactive television environment.

Core to interactivity is the concept of choice. It is typical for viewers to choose to watch a programme, choose to interact with an ad and choose what information to share with an advertiser. Sometimes these choices are difficult and sometimes quite easy. Tanjic (2001) looked at what whether the ability to choose an ad made it more effective. The study's results indicate that it is not interactivity per se that will lead to greater ad effectiveness but rather the viewer's ability to make a meaningful choice. This requires advertisers to be aware of and understand the viewer's needs and allow them to act in an environment in which they are seemingly in full control. For interactive television environments this is crucial for making the experience work in the advertiser's favour.

Another study looked at the effect of interactivity within the ad using micro-sites (Yeo, 2001). Here, it was found that interactivity with the ad itself was linked to higher levels of cognitive elaboration as per the Elaboration Likelihood Model (Petty and Cacioppo, 1986). Furthermore, the interactive ads were associated with higher levels of involvement than the linear ads by producing a greater number of central than peripheral thoughts. However, these findings did not translate into higher ad impact in the same way. One ad was for a popular brand of cookies which allowed viewers to take part in a poll on a new flavour, while the other was for a brand of PC and provided some product information. The cookie ad provided more than viewers expected when entering the micro-site and the overall attitude from viewers was positive. The PC ad on the other hand seemed to under-perform and this disappointed viewers and saw no impact upon the effectiveness of the ad. So while there was clear support for the notion that interaction is engaging, the impact upon the ad's effectiveness relates rather to managing viewer's expectations.

With the arrival of PVRs (personal video recorders) also comes the ability to move on from micro-sites and DALs towards realising telescopic ads. These are ads that allow the viewer to drill down into more information which has been cached on the PVR's hard disk rather than being sourced from the provider's head end. Telescopic ads have been found to be very effective for some product categories. While they do not necessarily improve the attitudes held towards the ad itself, for a number of products (eg. Complex products such as luxury cars and charity organizations) they do improve the attitude towards the brand and more importantly, the intentions to purchase the product when compared to a 30-second spot or an infomercial (Reading,

2002). These studies show that interactive television can stand to improve the effectiveness of advertising if the expectations of the viewer, the integrity of the brand and the overall marketing strategy are managed correctly.

3.6 Chapter Summary and Preview

Interactive television has a long history – one that stretches beyond the analogue interactive cable projects through entertainment and information technologies and to the beginning of television itself. This slow and steady evolution has developed a progressive language by which today’s viewers / users / consumers can understand this new incarnation of television that is interactive. It uses digital transmissions via cable, satellite and terrestrial means to provide not only a greater array of choice but also the possibility to access programming or information in a non-linear fashion – essentially on demand – and the opportunity to converse (to a degree) with the provider.

As interactive television continues to grow, it needs to be mindful of how users are adopting it. It is reportedly favoured as an enhanced rather than interactive medium and thus it must fully exploit the strengths of its television roots while taking advantage of the opportunities that interactivity avails. Interactivity is best when relevant, purposeful and rewarding for the viewer and should not interrupt their experience. Meanwhile, interactive advertising stands to be more effective than its linear counterparts in a number of guises but must be managed well so as to build brands, databases and customer relations.

Through government support and its successful experience with teletext, the United Kingdom is currently the most developed interactive television market world wide, with half of households able to access it. While its initial adopters were male technophiles the current user is more representative of the wider UK population. The majority will integrate interactive television into their lives as it meets their needs, however, there will still be a portion of viewers that will interact only minimally with their televisions. Thus interactivity with the television will continue to exist as a continuum rather than discrete levels. The following chapter details the research questions and then outlines, discusses and critiques the method used to explore the research questions.

Chapter #4

Research Questions, Method Rationale, Implementation and Critical Analysis

Chapter Overview

This chapter begins by presenting the research questions and hypotheses foreshadowed by the previous literature reviews. It then explores the development of the research method used, including the instruments. The implementation and the process results are discussed before a critique of the method is conducted.

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4.1 Introduction

From the tourism and interactive television (iTV) literature reviews it becomes apparent that there are many different research opportunities still available in these relatively new fields. While tourism can be considered to be the younger sibling of disciplines such as consumer behaviour, psychology, geography and the like, interactive television is a very new media that requires inquiry from the fields of usability, media theory and marketing to name a few. From this plethora of investigation opportunities, a focus will be taken by this research on how one is and can be used in the context of the other so as to benefit both the consumer and the provider: how is interactive television used and how can interactive television be used in the tourism phenomenon by the potential traveller and the industry?

4.2 From the Literature

Having explored the holiday decision process, it is clear that information sources contribute significantly to the traveller's holiday decision process. By gathering information, travellers combat the uncertainties that such an intangible product produces and reduce the personal risks involved in such an important purchase. There is much that a traveller brings to the problem solving process, including past experiences, motivations and personal constraints. These will not only govern the overall decision process but also the selection of information sources and how these may be used.

The information search approaches that were reviewed in Chapter 2 offer similar but progressive ways to comprehend the use of information sources in the holiday planning process. Each builds on and refines ways of describing and interpreting how specific sources relate to traveller characteristics, trip behaviours, or, even in some instances, other sources. While the categories established from these investigations are useful snapshots for marketers, they are limited and a more conceptual approach is required that allows an easy translation of the traveller's to the marketer's world. It must be able to accommodate the ever-changing landscapes of communication technology and the travel industry, by focusing on the factors important to the information search and planning process.

Two factors that govern the use of an information source are its utility and the stage at which the planning process is in. The more useful a source is the more it will assist in the planning process and thus be more decisive, while a less useful source will merely contribute to the new found knowledge. There are different stages in the planning process, from deciding whether to go and where to go to how to get there and what to do. Different sources cater to different stages by providing different information. Thus a traveller will consult one source above another because it fulfils the needs of that planning stage better. This temporal use information can also be useful to the industry to better exploit communication channel strategies. By building upon the concept put forward by Fodness and Murray (1998) a useful tool to assist in understanding possible differences or relationships between sources and thus roles, within the holiday planning process can be created. However, a number of innovations must be made including the review of the suitability of the dimensions

and the formulation of explicit measures. This will then allow statistical rigour as well as interpretive skills to explore the relationship between information sources.

4.2.1 Notes on the Fodness and Murray Framework

Fodness and Murray were not the first to attribute the spatial, temporal and operational dimensions to information sources (see also Bloch, Sherrell and Ridgway, 1986; Perdue, 1993; Vogt and Fesenmaier, 1998; Beirne and Curry, 1999; Chaudhuri, 2000), however, they used multidimensional scaling to examine their co-existence. Since the dimensions were allocated by interpretation of the statistical analysis of only one set of binomial data (whether the source was or was not used), the defined dimensions must be approached with care. As illustrated above, the temporal and operational (source utility) dimensions stand to be very functional in understanding the use of information sources, however, the spatial dimension seems somewhat redundant as sources can not be internalised in degrees; they are either internal (eg. personal knowledge or memory) or external. Furthermore, the value of spatial differentiation is minimal to marketers trying to understand source inter-relationship, as their interests lie in the employment of sources that are external to the traveller.

The second key issue with the framework is that the information sources were plotted from binomial data (whether the source was or was not used). While binomial data has been commonly used in past literature to establish the effectiveness of a source, there has also been a call for measurement of such concepts to be more explicit (Gitleson and Crompton, 1983). A binomial measurement may include a source that

has had little impact upon the decision-making process, while an explicit measure will differentiate it from a highly influential source.

	Of Little Use	Extremely Useful	Did Not Use
Personal Experience	1.....2.....3.....4.....5.....6.....7.....	0	
Guidebook	1.....2.....3.....4.....5.....6.....7.....	0	

Figure 4.2.1: Extract from the questionnaire, part#1 -measuring the typical utility of information sources in planning an overseas holiday.

Thus in this research the source utility and temporal use dimensions will be measured via explicit scales, giving its relative importance and time of use. An information source’s utility will be evaluated on a 7 point scale where 1 represents ‘of little use’ and 7 refers to ‘extremely useful’ (Figure 4.2.1). The temporal dimension measure offered a greater challenge since anything but measuring actual source use in real time would involve participant’s personal approximation of when they used a source in the planning of a holiday. Previous research has most commonly used an overall estimation of planning time, period or horizon such as ‘I plan 1 month ahead’ (eg. Gitleson and Kerstetter, 1994). While this approach is user friendly in the questionnaire, it does not allow distinctions between different sources. The travel industry would argue for real-time measurements such as days, weeks, or months when each source is used, but in pre-testing of the instruments used in this research it was found that process stage options were more user friendly than real-time measures. These process stage options included ‘before I decide on the destination’, ‘early in the planning process’, ‘late in the planning process’, ‘just before going on holiday’ and ‘throughout the planning process’ (Figure 4.2.2).

	Before I decided on destination	Early in my planning	Late in my planning	Just before going on holiday	Through-out my planning	Did Not Use
Personal Experience	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Guidebook	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 4.2.2: Extract from the questionnaire, part#1 – measuring the typical temporal use of information sources in planning an overseas holiday.

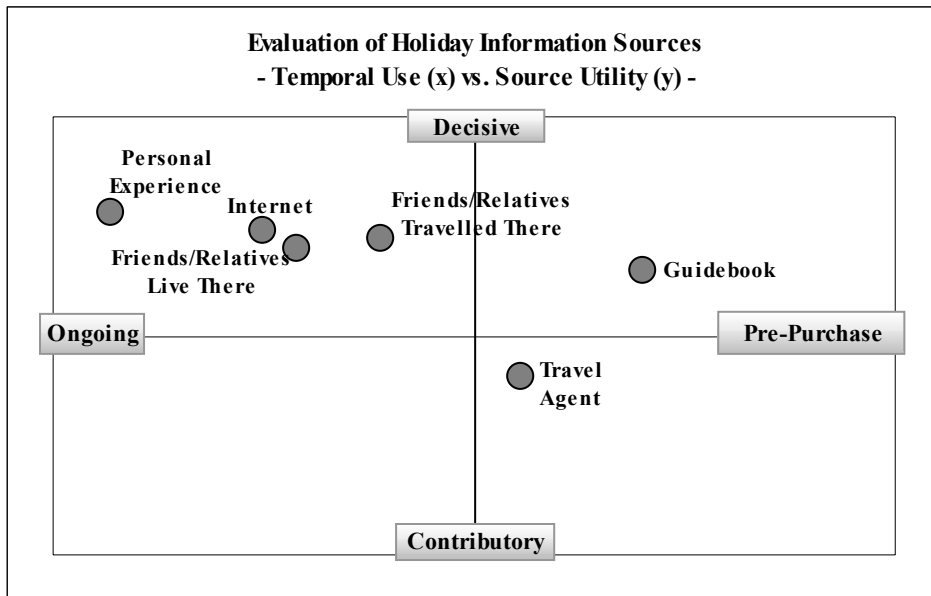


Figure 4.2.3: Example of sources plotted on the temporal use and source utility continuums.

Such explicit measures of the utility and temporal use of individual information sources could then be plotted on a two-dimensional grid (Figure 4.2.3) after appropriate conversion. The scores were converted into axis scale points; -3 to +3 for the utility dimension and -2 to +2 for the temporal dimension. For more information on this conversion see Chapter 5, Section 5.1.1. It is anticipated that this refined two-dimensional grid will bring more light to how information sources are used in relationship to each other. By combining the explicit measures with a diagrammatic representation the results can be explored either statistically or graphically.

In addition to exploring a new approach to understanding information source use, it is also important to consider the type of sources investigated. Past research is highlighted by varied and often out dated, information source lists. Few studies have included broadcast media, market-specific media such as teletext in the UK, or new technologies such as the Internet and interactive television in their comparative analysis. It is imperative that such sources are included, as there have been important advances not only in the technologies themselves but also their use in promoting and distributing tourism products. For example, the last 10 years has seen a surge in magazine lifestyle television shows, television travel shows and tour operator travel channels. These then provide new types of information and even purchase opportunities, to the traveller. The information sources involved in this research will include traditional sources such as personal experience, guidebooks and the travel agent plus the broadcast and interactive technologies (Table 4.2.1).

Traditional Information Sources	
Personal Experience	Travel Agent
Friends/Relative who live there	Friends/Relative who had travelled there
Guidebook	Tourist Board/Authority
Newspaper or Magazine Articles	Ads in Newspapers or Magazines
Broadcast / Interactive Information Sources	
Ads on TV	Shopping areas on idTV services
TV Travel Shows	Ads on idTV services
Internet/Websites	Shows on idTV services
Teletext services	

Table 4.2.1: List of information sources. Note: idTV =interactive digital television.

Another issue to be considered with information sources is that UK travellers have ready access to many international destinations, some closer (eg. Europe and northern Africa) and some further a field (eg. USA and Australia). The differences between these short-haul and long-haul holiday destinations manifest themselves in

diverse information needs and thus different information search strategies and in turn information sources. An individual's travel experience and experience with a particular destination has been linked to different information search strategies, however, it is suggested that it may also be the individual's planning experience. As a traveller becomes more aware of the information sources available to them, they will be more open to new sources such as interactive television.

The literature also showed that previous media experiences and knowledge can be transferred to new media experiences. Viewers have learnt the art of impulsive selectivity from the remote control and time-shifting and variety beyond the broadcaster with the VCR. Teletext has allowed them to use their televisions for goal-directed information seeking while the Internet has given them a deluge of information at their fingertips. Interactive television use cannot be explored without giving consideration how this media history has coached individuals in the ways of technology skills and expectations.

Current promotional opportunities offered by interactive television have taken their lead from the television broadcasting background and are still in evolution as business models are resolved. Currently the travel industry employs two forms of promotion using interactivity on television. The most common and least demanding is the Impulse format utilizing a call to action during the ad. This causes little interruption to the broadcast stream and typically allows viewers to request a mail out brochure with further information on the destination. Using this strategy destination marketing organizations, tour operators or travel agents allow viewers to

take immediate action but attend to the information at their own convenience after it arrives in the mail. This is used to build potential visitor databases and in some cases it also collects information beyond mailing details to get a better understanding about the market. However, despite the ability to collect response rate data by the provider platform, little is known about how effective these ads are and why people request brochures.

The other approach the travel industry currently takes is having exclusive travel channels that allow viewers to peruse a collection of destination videos and search a database of offers and other information. While the travel industry currently does not use these destination videos in conjunction with promotional vehicles, other industries have utilised this Telescopic approach with some success. The nature of travel's product lends itself to such a media-rich experience of the product and this has been proven in part by the success of the travel channels and travel shows. However, no investigation has been made into how such information-rich media could enhance promotional vehicles.

Lastly, there is a clear lack of research in the interactive television arena in general and in consumer behaviour in particular. While media and audience theory can be used as a base it needs to be re-evaluated and evolve in light of the new interactive media and interactive television in particular. Early research from a variety of sources and disciplines denotes that interactive television needs to exploit its television roots, the higher quality of which is what is driving interactive television's adoption in the UK. Furthermore, any interactivity must serve the objective of the

communication and be meaningful to the user and ideally fulfil expectations. Such interactivity will then transfer its positive or negative connotations on the featured product or programme. However, this research comes from only a handful of studies that have only begun to fill the gap in understanding what interactive television is, how it is used and how it affects current media, advertising, marketing and consumer behaviour models and theories.

4.3 Avenues for Research – The Investigations

From the literature comes a number of research issues which focus around the broader issue of gaining a better understanding of the holiday decision process associated with long-haul travel in the context of new media, in particular interactive television. The first step in this is the traveller's use of information sources in utility and temporal use terms (Investigation#1, Figure 4.3.1).

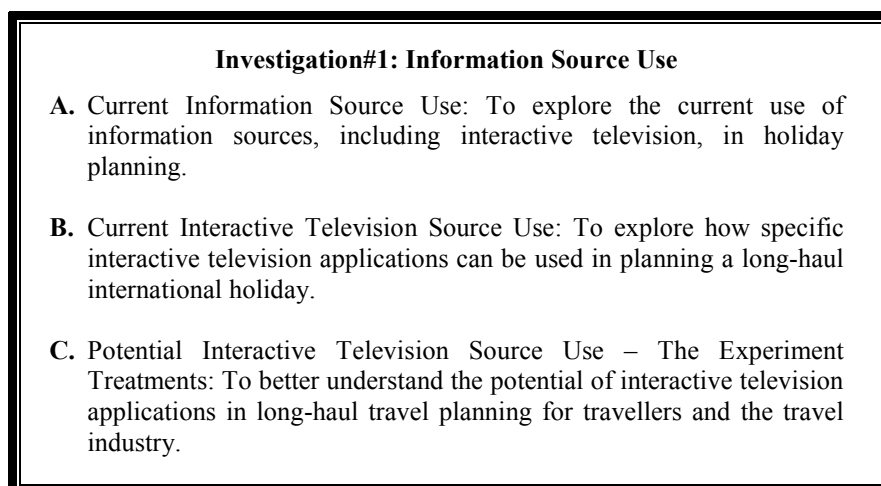


Figure 4.3.1: Research objectives for the use of common information sources and interactive television in the holiday planning process.

This will be explored in three parts, with the first looking at participants' current or past use of common information sources (#1A). The second phase incorporates participants' current use of interactive television sources into this landscape (#1B). The third explores interactive television's potential as a holiday information source through the evaluation of experiment treatments in the context of a long-haul holiday (#1C).

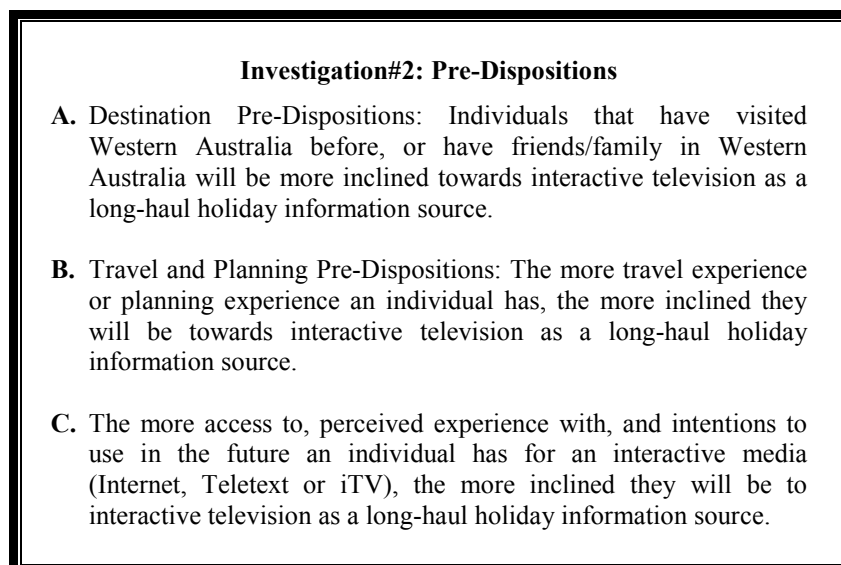


Figure 4.3.2: Research hypotheses for the possible pre-dispositions towards interactive television as a long-haul information source.

Investigation#1 will be augmented by an exploration of pre-dispositional factors that would incline individuals towards using interactive television for holiday planning (Investigation#2). The three pre-existing factors that will be examined are how familiar participants are with the destination in question (Western Australia; #2A), previous travel and planning experience (#2B), and previous interactive media experience (including the Internet, teletext and previous interactive television use; #2C). As a positive association is expected between these factors and interactive television attractiveness, these will be investigated as hypotheses (Figure 4.3.2).

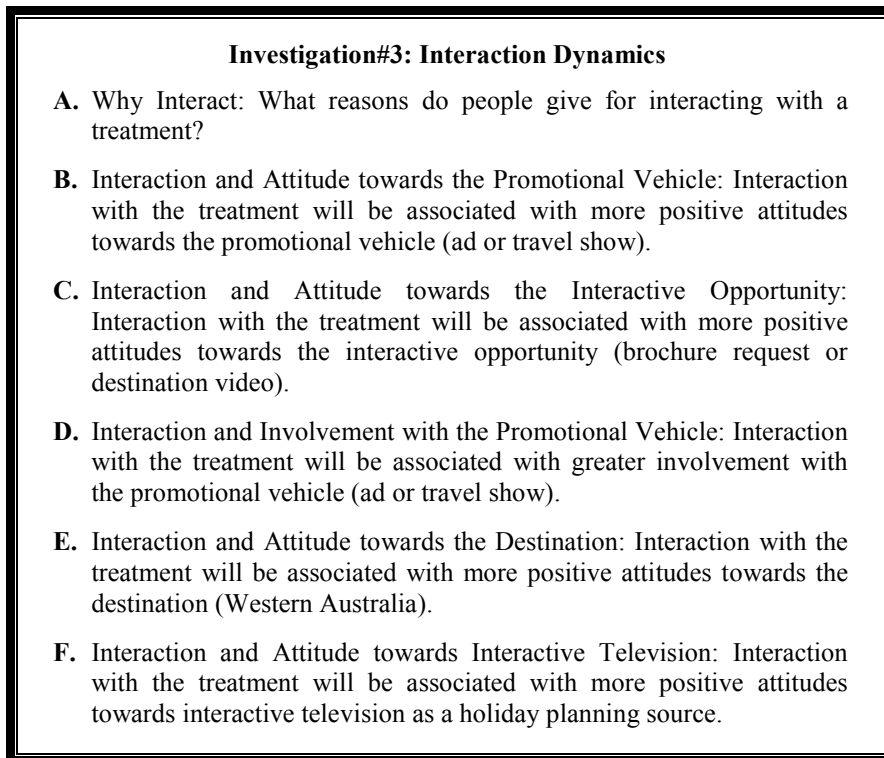


Figure 4.3.3: Research hypotheses and objective for understanding the dynamics of interaction in the interactive television experience upon the holiday decision process.

The last major area of investigation will concern the dynamics of interactivity (Investigation#3). This will be explored in relation to advertising effectiveness measures such as an individual's attitudes towards the promotional vehicle and attitude towards the destination. It will also look at individual's inclination towards interactive television. It is anticipated that this line of investigation will assist in understanding why individuals choose to interact (#3A) and the effects that it may have (#3B-F). Figure 4.3.3 details this objective and hypotheses.

Through these three avenues of enquiry this research aims to assist in closing the gap in the tourism literature on how different information sources are used in relation to one another in particular in planning a long-haul holiday and how a nascent

technology such as interactive television fits into this landscape. Through the use of current interactive television promotional applications it seeks an understanding of how the applications work and what their strengths and weaknesses are (Investigation#1). It also aspires to associate past experiences with tendencies towards interactive television so as to understand why some individuals may have a greater affinity to utilising interactive television's interactive services and functionalities, in this case in the context of their holiday planning process (Investigation#2). The final avenue strives to understand the effects, if any, that interacting with an application has on the promotional vehicle, the product and interactive television in general (Investigation#3). These three paths will then assist in gaining a better understanding as to the adoption of interactive television into the holiday planning process, the potential of interactive television as a lead generation tool for the tourism and travel industry and a clearer understanding as to how different promotional vehicles can be combined with different interactive opportunities.

4.4 Research Method

For a study that investigates an emotionally charged subject such as holiday travel and a nascent technology like interactive television, an appropriate methodology must be engaged to cover new and complex variables. Catering to stakeholder criteria, budget considerations and participant access issues, a video-on-demand platform was used to facilitate the interactive television treatments in participants' own homes, while responses were gathered via pre- and post-treatment

questionnaires. Given the innovative nature of the method, this chapter will not only detail the method selection, experiment design (including instruments) and implementation, but also address the method critically.

4.4.1 The Method Rationale

As with most research projects there are many potential ways to approach the experiment and there are criteria to adhere to. In this case, there were three main criteria: the research was to look at tourists from the United Kingdom to Western Australia as a case sample; the research was to be conducted in London; and it was to use a sample representative of the population (ie. not to source participants from student populations). After consideration of established formats such as the experimental laboratory or Internet simulations, an alternative was selected in the form of an established video-on-demand (VOD) platform that supported interactive television technologies.

4.4.2 The VOD Platform as a Quasi-Experimental Method

While there is much to be said for the true experimental approach in investigating conceptual hypotheses (particularly in the control of variables), certain characteristics would not best serve the aims of this research. In both the epistemological and practical arenas, this approach would encounter numerous obstacles. In the parameters of this research, an experimental laboratory proved to have high setup costs, intense administration requirements and substantial recruitment costs associated with the heavily used nature of London as a research market. Furthermore, while the highly controlled environment caters to maximisation of the internal validity, the artificial environment has been argued to

“produce results that have little direct application to ‘real-world’ settings” (Wimmer and Dominick, 1987, p90) and hence, questions the external validity. On the other end of the scale, conducting the research completely online via the Internet was also considered but rejected. While this approach would allow easy and affordable administration of participants, it is considered to be a decidedly different media experience compared to interactive television (Varan, 2002) and thus could only be a simulation at best.

An alternative to these two distinct options was video-on-demand technology via an established platform or provider. Video-on-demand technology is a form of interactive television as it allows two-way communication between the content provider and viewer, amongst other things. It is most commonly conducted via fibre optic cable or ADSL lines (although there are satellite and terrestrial providers that then use telephone lines as the back channel) and most providers offer a variety of programming on-demand as well as mall-type shopping. This technology allows personalised treatment administration within the participants’ homes and in line with their own schedules - it essentially uses each participant’s lounge room as the laboratory. This means that any number of participants can be processed at any time with little administrative attention while still controlling the treatment administered. When coupled with a self-administrated questionnaire this provides an ideal quasi-experimental approach to researching interactive television issues.

While a quasi-experimental approach means diminished control over “the scheduling of treatments... [and] the ability to randomise test units’ exposure to treatments”

(Kinnear, Taylor, Johnson and Armstrong, 1996, p209), data collection is still controlled. Moreover, measures can be taken to gauge the effects of uncontrollable variables, such as conducting a small number of in-person sessions or interviewing participants on their experience. Such a natural laboratory also may bring with it interfering variables such as noise and interruption, which have been argued to potentially confound results. However, it is reasoned that as these confounding factors are experienced by participants on a regular basis, the resulting interference would be of little detriment to their behaviour in the testing situation and rather be representative of their typical viewing environment. Thus, these confounding variables essentially enhance the ability to extrapolate the test behaviour to the natural environment.

In addition to the organic benefits of using a VOD provider as the testing vehicle, there are a number of practical advantages. The provider's subscriber base offers a ready population to draw upon which have similar interactivity experiences, thus reducing experimental novelty. Furthermore, the platform itself is an ideal avenue for promotion of the study and also allows participants to register for the study 'on-screen' (ie. via their televisions). From a resource perspective, hardware and administration costs are reduced which can then go towards participant rewards. These need only be a fraction of those associated with an experimental laboratory due to minimal participant effort to take part. And probably the most important aspect is that the VOD technology allows actual interactive television scenarios to be deployed (as opposed to simulations) to numerous participants simultaneously, thus increasing the rate at which participants can be processed.

4.4.3 The VOD Platform as an Innovative Research Method

In addition to the ready population, the reduction in novelty and the greater direct comparability to the wider population, this approach also allows exploration of the VOD platform as a low-cost, conceptual research method into interactive television. Much of previous research in the interactive television field has come from the industry platforms, BSkyB in particular, in the form of monitored campaigns. This research consists of data collected by the platforms' system and reports 'red button' response rates and indicates viewer propensity to share personal information for marketing purposes. However, it does not cater to gaining insight into viewer behaviours. This has been addressed to a limited extent by proprietary usability research, which has generally used small experimental laboratory studies to answer marketing rather than conceptual objectives. However, by using a VOD provider, its monitoring and narrowcasting capabilities are able to be coupled with a questionnaire which will assist in gaining insight beyond that of campaign-based results and further into the behaviours of viewers.

If the research was to be conducted anywhere in the United Kingdom there would have been the choice of two VOD providers – HomeChoice or Kingston Interactive Television (KIT). However, as the target market for the research was Greater London, KIT's Hull location (north east England) was inappropriate and HomeChoice was selected. HomeChoice is a part of the Video Networks company and their business consists of providing video-on-demand content such as movies, serials, music videos and lifestyle programmes to subscribers via ADSL lines in the

Greater London area. The HomeChoice service also has a shopping area called HomeChoice Active (formerly, HomeChoice High Street), which contains travel, financial and home exercise products. Unlike other pay-TV platforms that allow interactivity, their programming is not scheduled on numerous channels rather it is ‘on’ 24/7 for viewers to access it via a menu or code.

Aside from their subscribers being based in London, HomeChoice was a befitting platform as they had also, prior to this study commencing, recently finished market research for a music distributor using an on-screen survey with 650 participants. Their technology allowed participants to register their interest in the market research and complete a set of 22 multiple choice questions on-screen. While the ability to register participants via the television screen was very attractive to the study, the information required from the questionnaire was deemed not suitable to on-screen, remote-control responses. The questionnaire will be discussed in section 4.5.3. In addition, HomeChoice’s technology would also allow the six intended treatments to be transmitted to six individual geographical areas, thus eliminating cross-contamination issues. Initial estimates had the subscriber base at 11,500 but due to restructuring of their products and subscribers shortly before the commencement of the study, the potential population of the study was reduced to around 3,500 households.

4.4.4 Complementary Measures – The Lab Sessions and Call Backs

To strengthen and verify the findings of the study a number of additional measures were taken. Firstly, it was decided to also have a small number of participants

partake in an experimental laboratory setting. This small group of about 12 people would be able to be observed and questioned in-person in addition to the completed questionnaires. This in-person sample could then be used to evaluate the quality of the main sample's questionnaires. HomeChoice's usability lounge room was used to process these participants, which were sourced from administrative staff in the Video Networks building.

A second measure was also used to identify any viewer issues: call backs. A random sample of participants in the main sample would be chosen to phone back and asked a short set of questions as to their experience with the treatment. These participants would be equally likely to come from regular treatment cells, interacted with treatment cells, or non-interacted with treatment cells. The questions would mainly pertain to why they had or had not interacted during the experiment (if given the opportunity) and what they might use interactive television for in the future. It was anticipated that these extra measures of conducting in-person sessions and call-backs would contribute to demystifying the questionnaire answers and shining light upon participant viewing behaviours. Details of the implementation and outcome of these measures are discussed later in this chapter (Section 4.6.4).

4.5 Experiment Design

In designing the experiment a number of things had to be considered. This section details the concepts involved, the test configuration, the stimulant content and the creation of the questionnaire.

4.5.1 The Treatment Cells

The experiment was designed to test two factors: promotional vehicle and level of interactivity. The promotional vehicles were selected upon current tourism promotion practices: a television commercial and a travel-show segment. The television commercial or ad is used by many destination marketing organizations (DMOs) to create awareness, desire and maintain their image. The travel-show segment is used by DMOs as a below-the-line device and is often the product of journalist familiarization tours that DMOs sponsor.

Three interactive situations were created. The first would offer no interactivity (ie. be linear) and thus act as a control. The second would reflect an impulse response ad where by the viewer is offered the opportunity to request a brochure. The third would be of the telescopic approach and give the viewer an opportunity to watch a destination video on demand. The linear control treatment would represent regular television practices, while the impulse (brochure request) reflects current use by DMOs of interactive television. The telescopic (video-on-demand) treatment would take the concept used by some travel channels on interactive television platforms, but instead of offering this video from a menu it would be offered during the ad or travel-show segment. Given the exploratory nature of this research the choice of testing application types currently in use was deemed to be the most appropriate and logical course of action. Such an approach has also been advocated by those in the interactive television industry (Weapon7 and Chinwag, 2002). Table 4.5.1 shows how this results in a 2x3 factorial design, or six treatment cells.

Interactivity Option	Promotional Vehicle	
	TV Ad	Travel Show Segment
Control (Linear)	Control Ad 1	Control Show 2
Impulse (Brochure Request)	Impulse Ad (Interactive Ad w. Brochure Request) 3	Impulse Show (Interactive Show w. Brochure Request) 4
Telescopic (Destination Video)	Telescopic Ad (Interactive Ad w. Destination Video) 5	Telescopic Show (Interactive Show w. Destination Video) 6

Table 4.5.1: Experiment design.

These six different treatment cells offer possible exploration of a number of things. Comparison of cells 1 & 2 with 3 through 6 could highlight differences that interactivity could make. Evaluation of cell 1 with 3 and 5, or cell 2 with 4 and 6, would indicate whether an interactive opportunity makes a difference to a certain promotional vehicle. By contrasting cells 3 and 4 with cells 5 and 6 the specific interactive options are compared and lastly, cell 3 versus cell 5 and cell 4 versus cell 6 would evaluate whether a specific interactive option works better in a particular promotional vehicle. Although this design requires more participants and more cautious analysis than a simple 2x2 design, it was chosen because it would allow an analysis of the current promotional tools of the tourism industry in an interactive context, thus providing DMOs with options rather than an answer on one possibility only.

4.5.2 The Stimulant Content

Each treatment cell was operationalised as a ~30-minute programme stimulant. It was important that the media used was consistent not only in content but also tone. The base for the ad vehicle was visualised as a 30-second commercial for Western Australia (WA) designed for the international market. This would then be inserted with two buffering ads into the commercial break of a programme that would be demographically as unbiased as possible (see Figure 4.5.1). Similarly, the travel show segment would be a highly engaging story on WA and be accompanied by two other long-haul destination stories, but would not contain an ad break (see Figure 4.5.2). Each stimulant would be limited to a maximum of a half-hour so as to minimize participants' required effort.



Figure 4.5.1: Basic structure of the ad stimulant.

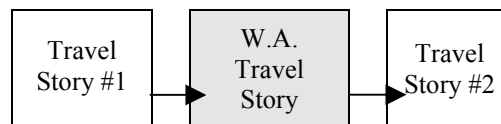


Figure 4.5.2: Basic structure of the travel show segment stimulant.

Furthermore, it was anticipated that British-made media would be available for use. This would reduce any issues arising out of unfamiliarity with production values, concepts, presenters and the like that may reflect poorly on the overall experiment effects. However, due to copyright and royalty issues, the sourcing of such media, other than the filler ads, would be constrained to Australia where the research team had more influence to access such content.

Through the assistance of the Seven Network Australia, an episode of *The Great Outdoors* was acquired for the travel-show segment stimulants and the special presentation of *Great Little Gardens* for the programme in the ad stimulants. The WA segment sourced from *The Great Outdoors* was a story on swimming with whale sharks at Ningaloo Reef, which was accompanied by a story on exploring Patagonia (Chile) and a resort in Phuket (Thailand). For the ad treatments, one small garden makeover and one courtyard makeover story were chosen from the *Great Little Gardens* episode and a commercial break was inserted between them. Unfortunately, no international commercial was available for WA at the time and a 20-second interstate spot featuring the Tree Top Walk in Walpole was used instead. The two filler ads were sourced from Proctor & Gamble in London and were for a shampoo and a facial cream. In addition, the beginning of the stimulants had to be clearly identified as part of a study and the end needed to feature a reminder to fill out the survey. These were achieved through a graphic and voice over.

To account for the differences in interactivity, the stimulants had to be held constant but also be individually tailored. As the interactive opportunity was essentially a device for more information on WA, each treatment would need to carry a standard ‘for further information’ device. This was achieved by using the industry standards of a freecall contact number and a website address on all six treatments during the promotion vehicle (ad or show segment). While these details were already accounted for in the ad (a London number was superimposed on the original Australian

number), they had to be inserted into the WA travel story as a small overlay at the bottom of the screen.

The treatments featuring the interactive opportunities also had to have consistency. A call-to-action button was placed in the top left-hand corner. The look of the button conformed to that of the HomeChoice platform and the positioning of the button was determined by the standard dominating the current UK market. The text on the button was limited by the design criteria of the HomeChoice platform and read “Send Me A Brochure” for those able to request a brochure and “More On WA” for those able to view a video on demand.

The control stimulants that had the standard contact information were viewed linearly by participants. The stimulants that offered the impulse response (brochure request) would deviate to a graphic and voice over thanking the participant for their request and would then return them to the start of the next piece of media. The telescopic approach (video-on-demand) button took participants to the start of a 6-minute destination familiarization video. This video was sourced from the Western Australia Tourism Commission (WATC). It was re-purposed for the experiment by adding map graphics that identified the region of the screening footage and a voice over script was adapted from the text in the WATC’s general destination brochure. At the end of the video, the participant is returned to the beginning of the next piece of media (ie. the next travel story or the next gardening segment). Figures 4.5.3 to 4.5.8 illustrate each complete stimulant, with selected screenshots in Appendix 4A.

Treatment 1: Control Ad (Linear program with ads)

Research Intro. Screen with Voiceover and music	Great Little Gardens Part#1	P&G Ad #1	P&G Ad #2	W.A. Ad*	Great Little Gardens Part#2	Research Outro Screen with Voiceover and music
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* Control WA ad has a phone number and website address on it.

Figure 4.5.3: Control Ad stimulant (cell 1 from Table 4.5.1).

Treatment 2: Control Show (Linear travel show)

Research Intro. Screen with Voiceover and music	The Great Outdoors Introduction & Story #1	W.A. Whale Sharks Story#2*	The Great Outdoors Story#3 & Conclusion	Research Outro Screen with Voiceover and music
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* Control WA show has a phone number and website address on it.

Figure 4.5.4: Control Show Stimulant (cell 2 from Table 4.5.1).

Treatment 3: Impulse Ad (Linear program with interactive ad with brochure request)

Research Intro. Screen with Voiceover and music	Great Little Gardens Part#1	P&G Ad #1	P&G Ad #2	W.A. Ad*	Great Little Gardens Part#2	Research Outro Screen with Voiceover and music
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'Send Me A Brochure'

Screen thanking for brochure request with voiceover and music	Great Little Gardens Part#2	Research Outro Screen with Voiceover and music
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* WA ad has a phone number and website address on it.

Figure 4.5.5: Impulse Ad (cell 3 from Table 4.5.1).

Treatment 4: Impulse Show (Linear travel show with interactive WA segment with brochure request)

Research Intro. Screen with Voiceover and music	The Great Outdoors Introduction & Story #1	W.A. Whale Sharks Story#2*	The Great Outdoors Story#3 & Conclusion	Research Outro Screen with Voiceover and music
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'Send Me A Brochure'

Screen thanking for brochure request with voiceover and music	The Great Outdoors Story#3 & Conclusion	Research Outro Screen with Voiceover and music
---	---	--

*WA story has a phone number and website address on it.

Figure 4.5.6: Impulse Show Stimulant (cell 4 from Table 4.5.1).

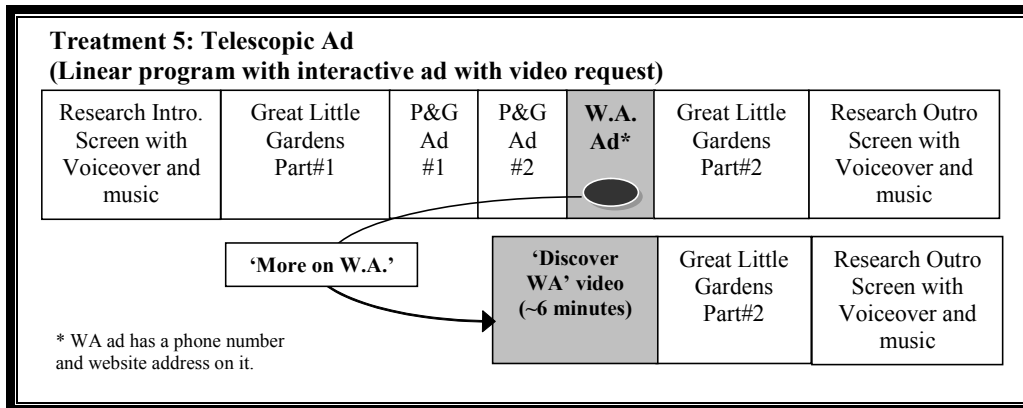


Figure 4.5.7: Telescopic Ad Stimulant (cell 5 from Table 4.5.1).

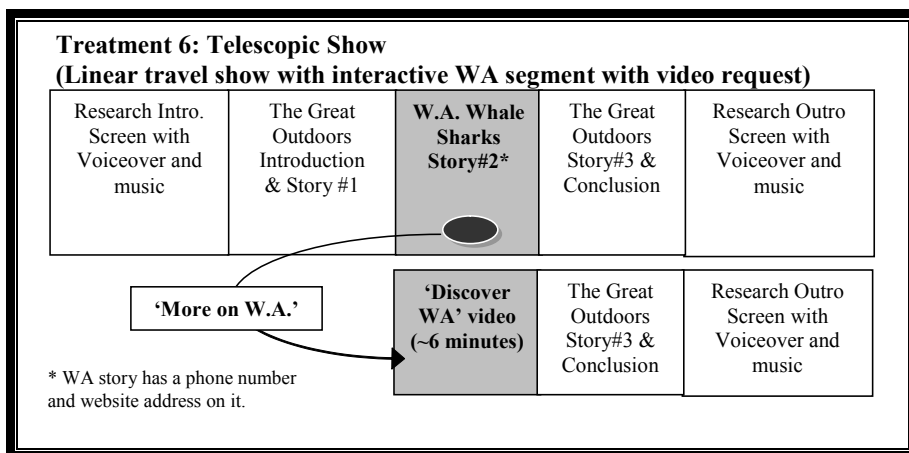


Figure 4.5.8: Telescopic Show Stimulant (cell 6 from Table 4.5.1).

4.5.3 The Questionnaire

With the guideline of the research objectives outlining the information needs from participants, the form of the questionnaire quickly became apparent. Due to the detail and variety of answers sought, an on-screen (television) format would not be suitable. Furthermore, since it could not be guaranteed that all participants would have Internet access, a web format was also declined. Rather, a self-administered paper survey was opted for.

Given the nature of the required information and the experiment stimulant for each treatment, the survey would require two parts. The first part would cover participants' previous interactive media experiences, travel and planning experiences, destination familiarity and attitude, as well as demographics – providing a participant profile on media experience and holiday behaviour. The second part would be dedicated to measuring their experience with the treatment stimulant. In particular: their attitudes towards the promotional vehicles, the interaction options and Western Australia (WA), as well as the attractiveness of selected information sources and intentions to visit WA. Thus, the survey's two parts were instructed to be completed before and after the stimulant, respectively. This was done not only to make a clear differentiation in the source of the answers, but also on a practical level it would allow the long experiment time to be broken up, thus minimising fatigue effects.

A general survey was created and then tailored to each of the six treatments. Copies of each can be found in Appendix 4B. Scales and measurements were adapted from those proven in other studies as far as was possible. In other instances, new scales were created for the situation with the advice of senior academics, a post-graduate panel and a small focus group in testing. The details of the questionnaire are as follow.

4.5.3.1 Part #1 – Interactive Media Experience

The first part of the questionnaire referred to participants' interactive media experiences including HomeChoice, other interactive digital television providers

(idTV; including BskyB, Freeview, ITV Digital, ntl and Telewest), teletext services and the Internet. These media were selected on their applicability to the UK market as well as being technologically related to interactive television in general. HomeChoice was the platform used in the experiment (for more information see Section 4.4.3). A range of other pay and free-to-air idTV providers made up the bulk of the iTV market and it is common for consumers to have two or more providers (OFCOM, 2004). Teletext has occupied a strong place in the holiday sales market in the UK and is one of the first forms of interactive media that has been well embraced by the UK public (Ryan, 2000). Finally, the Internet was included because of its significant adoption not only for information but also e-commerce in general and the travel and tourism industry in particular.

Three **experience** measures were taken for each media as the ability to distinguish between levels of experience is important (Bezjian-Avery, Calder et al., 1998). Firstly, the length of **access** the participant had to that media, measured in four categories: less than 1 month, 1 – 6 months, 6 – 12 months and more than 12 months. These categories were selected to distinguish between new, immature and experienced users. It was deemed unnecessary to give options of more than one year as the slope of the technology learning curve slows at this point. Measuring an individual's access time to a media has been commonly used as an objective quasi-measure for their experience with the media. However, as access does not necessarily translate into use and practice a supplementary measure was created. This subjective measure was looking at the individual's **perceived experience** of the

interactive media and consisted of a semantic differential scale from 1 (Inexperienced) to 7 (Very Experienced).

The last measure of experience with interactive media focused on the **types of uses**, again on a 7-point semantic differential scale (1=Rarely, 7=Very Often). An attempt was made to keep the items as similar as possible for comparison purposes. However, due to the different technologies and interfaces involved, the first two items for each were specific to that media. The items (Table 4.5.2) covered the fundamental purposes of the media, browsing for general goods and services, buying general goods and services, browsing for holiday information and buying holidays.

Scale Item	Home-Choice	Other idTV Providers	Teletext	Internet
Watching News/Movies/Shows/Sport	✓	✓		
Requesting Brochures/Information	✓	✓		
News and other Of-Interest Information			✓	✓
Entertainment			✓	
Entertainment/Email/Chat				✓
Browsing in the shopping area	✓	✓	✓	✓
Buying goods/Services	✓	✓	✓	✓
Looking for Travel/Holiday Deals *	✓	✓	✓	✓
Buying travel/Holiday Deals *	✓	✓	✓	✓

Table 4.5.2: Scale items for the type of media use; part #1 of survey instrument.

The purpose of these scale items was two-fold. Due to the varied possible uses of each media this would indicate the types of experience participants had had with the media. This was especially important for the interactive television platforms. For example, a participant may have had lengthy access to a platform and consider themselves experienced, but use the platform predominantly for watching programming rather than interacting. The second purpose concerned the use of these

platforms as information sources to research and purchase holiday products (asterixed items in Table 4.5.2). This would also clarify other source use measures later in the questionnaire. Through these three questions on interactive media experience, a more rounded and explanatory view of the participant was anticipated.

4.5.3.2 Part #1 – Travel and Planning Experience

Participants' travel and planning experiences were also covered in part one of the questionnaire. Of interest in this case were participants' overseas holiday experiences, particularly those within the last 10 years. This period was chosen as it is highly unlikely that participants' memory would accurately recall their whole life and would minimise reference to childhood holidaying. Furthermore, 10 years was deemed more appropriate than the more common 5 years, as overseas travel may not occur sufficiently within five years so as to establish an understanding of the cumulative effects of holidaying experience. Participants' travel experiences were measured by the number of trips taken, destinations of trips and the nature of trips, while planning experiences focused on how selected information sources were typically used.

The first question asked **how many overseas holidays** the participant had been on in the last 10 years and allowed answers via three categories: 1 – 3 trips, 4 – 7 trips and more than 7 trips. Categories were used to make the answer as effortless as possible for the participant. Previous experience with surveys that require participants to give an accurate number are deemed to be more work for the participant and can often be falsely interpreted as more accurate by the researcher. It was sufficient for the

purposes of this study to gauge whether the participant had travelled a little, moderately or a lot on such holidays.

Next, a list of **destination regions** was given to gauge the differences in the types of travel experiences participants had (Table 4.5.3). The geographical regions used by Lonely Planet guidebooks directed the definition of regions, and long-haul regions were identified by distance away from the United Kingdom (using as an example Morrison, Verginis and O'Leary, 2000). Regions rather than individual destinations were chosen so as to provide an effective, succinct list, as well as being deemed sufficient to distinguish between different cultures and types of holidays. For example, a trip to Central Europe is still significantly different from Western Europe and both are very different from the nature of a trip to South East Asia. There was also an 'other' option.

Destination Regions		
North America*	Far East*	Western Europe
Central America*	South East Asia*	Central Europe
South America*	India/Pakistan/Nepal*	Eastern Europe
South Pacific*	Middle East	Mediterranean
New Zealand*	Northern Africa	Other...
Australia*	Middle/Lower Africa*	

Table 4.5.3: The overseas destination regions used in questionnaire part#1. Note: * considered to be long-haul destinations for UK travellers.

The next four questions dealt with the typical nature of the overseas holiday: **form of travel, travel party make-up, the length of the trip and motives**. Each used categorical answers, mainly adapted from general literature and industry-based market research instruments (Table 4.5.4 and Table 4.5.5). The nature of the trip is important to gauge as it allows a better understanding of information source uses.

Trip Element	Answer Categories		
Form of Travel	Independent	Package Holiday	Organized Tour
Travel Party Make-up	On my own	Friend/partner/spouse	Family/friends
	People I meet on the trip	Tour Group	
Length of Trip	Less than 2 weeks	2-4 weeks	1-3 months
	3-6 months	6-12 months	More than a year

Table 4.5.4: Items to measure the nature of the typical overseas holiday and their answer categories –part#1.

Holiday Motives/Criteria	
To visit family/friends	Friendly/welcoming
Good family/children destination	Good for relaxing
Safe place to visit	Interesting environment and wildlife
Lots of famous sites	Good for adventurous/outdoor holiday
Good value for money	Plenty of things to see, do, learn
Close to home	To experience the history and culture

Table 4.5.5: Motive measurement categories – part#1

For example, an individual that typically travelled to visit relatives and friends (VFR) on short holidays would have decidedly different information needs than one who travelled independently on month long holidays. This, in turn, would most likely be characterized by the use of different information sources – VFR travellers would use their friends and relatives mainly while independent travellers would look to travel agents and guidebooks. Furthermore, the United Kingdom travel market has a considerable package holiday market (MAI, 1999; Lovegrove, 2004) and it is important to gauge how much of the sample would typically travel this way, as it would in turn, characterize their information source use.

Lastly, a question was included to gauge how recently participants had been on their **last overseas holiday**. Four categories were available in answer: in the last 6

months, in the last year, in the last two years, over two years ago. This was to complete the travel experience profile of the sample as well as to establish the accuracy of memory and any reasons for particular patterns in information source use. For example, if the majority of the sample had last been on an overseas holiday more than 2 years ago, their information source use may be more traditional and include less of the newer technologies and their recall may not be as accurate.

To gauge participants’ experience in planning holidays a predetermined list of selected **information sources** was compiled. These 14 sources were drawn from the tourism literature, market research instruments and those of particular interest to the current study (Table 4.5.6). While most sources are self explanatory, some require further explanation. A review of each source’s background is available in Chapter 2.

Information Sources	
Personal Experience	Newspaper or Magazine Articles
Travel Agent	Ads in Newspapers, Magazines or TV
Friends/Relative who live there	TV Travel Shows
Friends/Relative who had travelled there	Shopping areas on idTV services
Guidebook	Ads on idTV services
Internet/Websites	Shows on idTV services
Tourist Board/Authority	Teletext services

Table 4.5.6: Pre-determined list of information sources –part#1. Note: idTV =interactive digital television.

It was deemed appropriate to differentiate between relatives and friends who had travelled to a destination and those that lived there, as each provides different information opportunities. Relatives or friends that live at a destination are often relied upon not only for information but often are responsible for organising parts of the itinerary, while those that have travelled there are an information source only. On the other hand, the “Internet/Website” item was kept at the general level instead

of splitting it into various types of websites. While it would have been interesting to see the differences in use of personal (eg. personal travel logs), official (eg. tourist boards) and product distribution (eg. *Travelocity*) websites, it was considered to be secondary to the purpose of this research and would extend the list unnecessarily.

Another unique move was the splitting of mass media such as newspapers, magazines and television along advertising and content lines rather than the media itself. The literature on media use suggests that media are often used for particular purposes by the end-consumer (Becker and Schoenbach, 1989; Davis, 1989; Berger, 1991) and this is also true for destination marketing organizations (DMOs). Advertising is above-the-line promotion that DMOs can use to create awareness, build an image, or present a special offer to those primed to travel. Meanwhile, content such as print articles or television travel shows are below-the-line promotions that are used to maintain awareness or a destination image and communicate experiential information. Thus, in this case it is more practical to appropriate the division along information type rather than the media itself, since DMOs may use the media for distinct purposes. This division is further justified by the research's perspective of investigating promotional vehicles such as the television commercial (ad) and the travel show (content). In testing these two vehicles there must be a pre-test measure to compare the results against and thus this classification. Finally, the interactive digital television sources have been separated into shopping areas, ads and programmes for similar reasons, but also because the media is very new and an accurate picture of how participants currently use it in the holiday planning context is necessary.

This list of sources features twice in the questionnaire. Firstly, to measure the **utility** of each source on a 7-point semantic differential scale (1=Of little use, 7=Extremely useful), including a ‘Did Not Use’ option. This scaled measure was used to improve upon the often used dichotomous measure of ‘used/not used’. Such extra detail has been called for throughout the literature (Gitleson and Crompton, 1983; Snepenger, Megad et al., 1990; Mansfeld, 1992) and will allow a greater understanding as to the role of each source. The second time it gauges when (**temporal use**) participants used each source in the planning process. In this instance there are five options that move from the very early stage of deciding where to go on holiday to just before the participant goes on the holiday, plus an option that covers the whole process. The categories read: ‘before I decide on my holiday destination’, ‘early in my planning’, ‘late in my planning’, ‘just before going on my holiday’ and ‘throughout planning my holiday’, plus ‘did not use’.

This ‘process’ format was decided upon after some testing; it was the easiest to understand and use for participants. Chronological categories (eg. 2 weeks before, 1 month before, 6 months before, etc.) were not adopted because, while they may be useful for DMOs’ media scheduling, test groups deemed it too difficult to use. This was put down to not knowing when they actually first used the source or rarely planned more than a month or two ahead. The process format gives insight into the reasons why sources are used, by implying the role they may play. Different sources will provide different types of information that will cater to the information needs at a particular time in the planning process. For example, the information that is sought

by a traveller before deciding on a destination will be intrinsically different to information that is required just before embarking on the holiday.

Participants were also asked to indicate how experienced they were as a **traveller** and **planner**. These subjective **perceived experience** measures were to support the objective answers given in previous questions about the number of overseas trips and the destinations visited. Each was measured on a 7-point, semantic differential scale (1=Inexperienced, 7=Very Experienced) and participants were asked to limit their evaluation to those instances where they were responsible for the travel so as to discount family holidays as children.

4.5.3.3 Part #1 – Other Information

A number of questions were also posed in part one of the questionnaire that did not relate directly to past travel and planning experience. These questions covered intentions of **future use of selected sources, destination familiarity, attitude towards long-haul travel** and **personal demographics**. The demographics were the last set of questions in part one and were collected for segmentation purposes. They consisted of gender, age, occupation, household income and household make-up, the categories of which were derived from those collected by the British national census. For details see questionnaires in Appendix 4B.

Given the Theory of Reasoned Action it was also important to gauge participants' intentions to adopt interactive television or other media for future holiday planning purposes (Dholakia and Bagozzi, 2001). The participants' future intentions to use

teletext, the Internet and iTV for holiday planning purposes were measured via four categories: ‘use for information on a destination’, ‘use for booking holidays’, ‘use for information and booking’ and ‘would not use’. The answers to this question would serve as a pre-test measure which would be followed up in part two. To a lesser extent it would also provide an indication of how their past experiences (previous questions) with that media went (Cassidy, 2000).

A set of questions were developed to measure participants’ attitudes towards long-haul travel in terms of inhibitors and facilitators. These nine items (Table 4.5.7) were written in the spirit of the facilitator and inhibitor scale used by Um and Crompton (1990) and were answered on a Likert scale using the five categories of strongly disagree, disagree, neutral, agree and strongly agree.

Travel Attitude Items	
1	Travelling on holiday is important to me
2	I like talking with others about travelling
3	Travelling to far-away places is exciting
4	I prefer to travel within my own country rather than overseas *
5	I prefer to travel to countries similar to my own *
6	Holidays to far-away destinations are too expensive *
7	Long flights put me off holidaying at far-away destinations *
8	I am nervous of holidaying at far-away destinations because of terrorism fears *
9	I intend to go overseas in the next 5 years

Table 4.5.7: Travel attitude items –part#1. Note: * these items are reversed in the analysis.

Items 1, 2 and 3 were adapted from a product involvement scale (Bruner and Hensel, 1996, p382). Item 4 investigated participants’ preferences for domestic versus international holidays, so that their international holiday experiences could be taken into an overall holidaying perspective, while item 5 referred to their adventurousness and comfort with foreign environments. Items 6 and 7 were developed to test their

tolerance to the two most common practical constraints of long-haul travel: cost and travelling time/distance. These were put in the negative because the positive version (eg. ‘Long flights don’t put me off...’) may produce answers that are not as strongly held.

Item 8 was created to cater to the terrorism crises heralded by September 11th (2001) and reinforced by the Bali Bombings (October 2002) shortly before the fieldwork was to begin. The study needed to establish whether the international political climate would in some way interfere in participants’ desires to travel, particularly to long-haul destinations. The last item was another measure of participants’ involvement with overseas travel via their likelihood of doing so within the next five years. While these items served a number of individual purposes, they also worked together to give a sense of participants’ involvement and attitude towards travelling overseas and particularly towards long-haul destinations.

Finally, participants’ familiarity with British Columbia (Canada), Western Australia (Australia) and South Africa was measured. The information on Western Australia was collected as a pre-test measure of familiarity, desire to visit and experience, as destination familiarity and involvement can be influential upon the attitudes towards the promotional vehicle (eg. ad) and the product itself (Manfredo, Bright et al., 1992). British Columbia and South Africa were chosen as they are considered to be competitors and similar to Western Australia in holiday opportunities (eg. nature-based) by the Western Australian Tourism Commission (ATC, 2001). The role of the competitors was to reduce the attention on Western Australia before exposing

participants to the stimulant. The items asked for each destination were derived from previous industry market research instruments (Table 4.5.8). The first three items were answered via a 5-option agreement scale and later used as a quasi attitude scale. The last two items were answered as yes or no. Participants were then prompted to watch the experiment stimulant before continuing on to the second part of the questionnaire.

Destination Familiarity Items	
1	I know a lot about this place
2	I find this place appealing
3	I would like to visit this place
4	I have visited Western Australia
5	I have friends/relatives in Western Australia

Table 4.5.8: Items used for destination familiarity –part #1.
Note: Western Australia used as example only.

4.5.3.4 Part #2 – Evaluating the Stimulant

One of the major concepts that part two of the questionnaire explores is involvement as interactivity is said to heighten involvement (Forrest, Kinney et al., 1996; Hodgson, 1996; Perse and Dunn, 1998; Dholakia and Bagozzi, 2001). To explore how participants were involved in the treatment content, the first question in part two asked participants to list any **thoughts** they had during either the ad or travel story on Western Australia (WA) in regards to the ad/show, topic or themselves. The purpose of this was two-fold. Such open answers would provide insight into the participants' opinions on the destination, content and the research, as well as help explain their other answers.

Secondly, the thoughts could be classified into central and peripheral thoughts to gauge the level of participant involvement. Central thoughts would be any that

recalled or described the content, referred to going on holiday, commented on WA or similar. Peripheral thoughts would be those that were about the production values, the presenters and the interactivity opportunities. See Appendix 4C for the various thought categories created in the analysis. According to the ‘elaboration likelihood model’ (Petty and Cacioppo, 1986), central thoughts imply a higher personal involvement in the topic than peripheral thoughts. In addition, these thoughts could also give insight into how participants completed their treatments (eg. did not watch it, watched only half, etc.).

The involvement gauged by the central and peripheral thoughts was supported by an adapted **involvement scale** (Bruner and Hensel, 1996, p874). The original 5-item scale was decreased to three items after test subjects felt some items were indistinct and unnecessary. The three items (‘the story was of interest to me’, ‘the story was relevant to me’ and ‘the story involved me’) were evaluated via a 7-point, Likert scale from ‘not at all’ to ‘very much’. During preliminary analysis these three items delivered a Cronbach’s alpha of 0.85.

The **attitude towards the ad/show** was measured with a 5-item, 7-point semantic differential scale. This was adapted from previous scales (Bruner and Hensel, 1996, p809) and decreased to five items for ease of completion after testing a longer list of nine items. Four of the items ran from the negative to the positive (bad/good, dull/dynamic, unappealing/appealing, uninformative/informative) and one was inverted to control for automatic answers (interesting/uninteresting). Cronbach’s alpha was 0.91.

The next question established whether, if the opportunity was given, the participant **interacted** with the stimulant. This was a simple yes/no answer, which then directed the participant to the next appropriate question. This question was also used for as a backup for administration purposes, in that if they had interacted to request a brochure, they would be sent one in the mail. If they had interacted, they were guided to the **attitude towards the interaction** items.

Attitude Towards Interaction Items			
Bad	Good	Easy	Difficult*
Not Useful	Useful	Unenjoyable	Enjoyable
Unappealing	Appealing	Uninformative	Informative
Not Convenient	Convenient		

Table 4.5.9: Semantic differential labels for items measuring attitude towards interaction opportunity. Note: * inverted for analysis.

This was similar to the items used for the ad/show attitude, however, items were modified to express the objectives of the interactive opportunity (Table 4.5.9). In analysis these items produced a 0.83 Cronbach’s alpha. The attitude measurement was followed up by a yes/no question about whether the participant would again interact in this way, in the future. This was as a support to the attitude question as well as an indication of future **behavioural intentions** towards interactive television in the holiday context.

The next set of questions measured the **utility** and **temporal use** of the ad/show and the interaction opportunity during the holiday planning process. The interaction opportunity (impulse brochure request or telescopic destination video) was only measured for those participants that interacted with the stimulant. The same scales

as those used for the information source lists in part one were used (see Section 4.5.3.2). This would then allow the individual treatment stimulants to be plotted and thus compared, against information sources used in the past.

The stimulant experience was then also compared to other forms of receiving destination information in terms of **attractiveness** or the openness of the participant to that source. The information forms included interactive television, a freecall phone number, a website address, a teletext service and a travel agent. Each was required to be given an attractiveness score from 1=Unattractive to 7=Very Attractive. While each source was included for each treatment the order was adjusted to reflect the treatment's stimulant experience (see questionnaires in Appendix 4B). The intention of this question was not only to gauge how attractive the interactive opportunity made interactive television, but also how it compares to the more traditional calls to action (freecall number and website) and the less direct ways of getting information (teletext and travel agent). This comparison scoring approach has been advocated by previous research (Perse and Dunn, 1998). It was also decided to phrase the question in light of the treatment topic, WA. While this may limit the generalisability of the answers it results more internal consistency as it provides participants with a single, relevant context for their answer.

Finally, the **destination familiarity** question set for WA was repeated to gauge whether there was any change due to the stimulant. However, this time the question was worded: 'What are your impressions of Western Australia as a holiday destination?'. Lastly, participants were asked whether they would **consider Western**

Australia for their next overseas holiday. This was answered with a yes or no and then a reason given. It was important to ask for a reason as this would allow the analysis to distinguish between those that had already made plans for their next holiday and those that did not want to travel to WA outright. This ended the questionnaire. The back page carried questionnaire return instructions as well as details on where they could get more information on WA. This included the opportunity to have a brochure sent to them by the researcher if they did not have the opportunity to request one during the stimulant.

The questionnaire was sent out to the participants in ‘The Lab Pack’, which also included an introductory letter, the terms and conditions of the study, an instruction flyer and a freepost envelope for the return of the questionnaire. See Appendix 4D for introductory letter and terms and conditions leaflet.

4.5.4 Recruitment and Rewards

One of the last things to finalize before moving on to the implementation of the research experiment was how participants would be recruited and rewarded for their time and effort. Given that HomeChoice had discontinued their monthly programme guide shortly before the commencement of the research, it was decided to promote the research via a 15-second HomeChoice-produced promotion on the top level of the service. The ‘top level’ refers to the content that is seen as soon as users switch on the HomeChoice service, also known as the main menu. On seeing the promotion, viewers were able to opt-in and register via a freecall phone number or through an on-screen registration. In both instances participants had to pass

screening questions, which limited participation to HomeChoice subscribers over 18 years old who had travelled overseas in the last 10 years. Participants were also asked a question of skill to adhere to the UK prize draw rules. The question was: “Where in HomeChoice do you find The Lab? a) FilmChoice, b) SoundChoice or c) Active?” The answer (Active) was in the promotion voice over and if correctly given, allowed entry into the prize draw. In addition, the study information was posted on HomeChoice’s website, though registration was still only available through the HomeChoice television service and the freecall number.

While the promotion clearly identified it as a research project, participants were essentially enticed by the participant rewards. It was decided that due to limited funds and the anticipated high participation rate, a small reward would be given to all participants and then a major prize would be raffled off. To receive the reward and to be entered into the prize draw, a participant would be required to return their completed survey by the project close date. Initial compensation consisted of a five-pound Marks & Spencer shopping voucher, while the major prize was two airline tickets to Western Australia courtesy of Emirates Airlines. As an attempt to limit the bias of the sample to Western Australia but still make the major prize sufficiently attractive, the tickets were promoted as two tickets to Australia. It was anticipated that this would still bias the sample somewhat, in that individuals having an interest in Australia would be more likely to register than those who had no interest. However, to promote the prize any more vaguely was considered to be detrimental to the study and would be in contravention of the UK competition guidelines of complete transparency. To that effect, details of the prize were required to be

included in the terms and conditions that were available to participants on the HomeChoice website and in The Lab Pack (see Appendix 4D).

4.6 Implementation

To summarize the method thus far, the HomeChoice platform was utilised to transmit the six treatment stimulants to six separate geographical subscriber groups. Each group would be required to complete part one of a similar yet tailored questionnaire, before watching their treatment stimulant and then completing part two of the questionnaire.

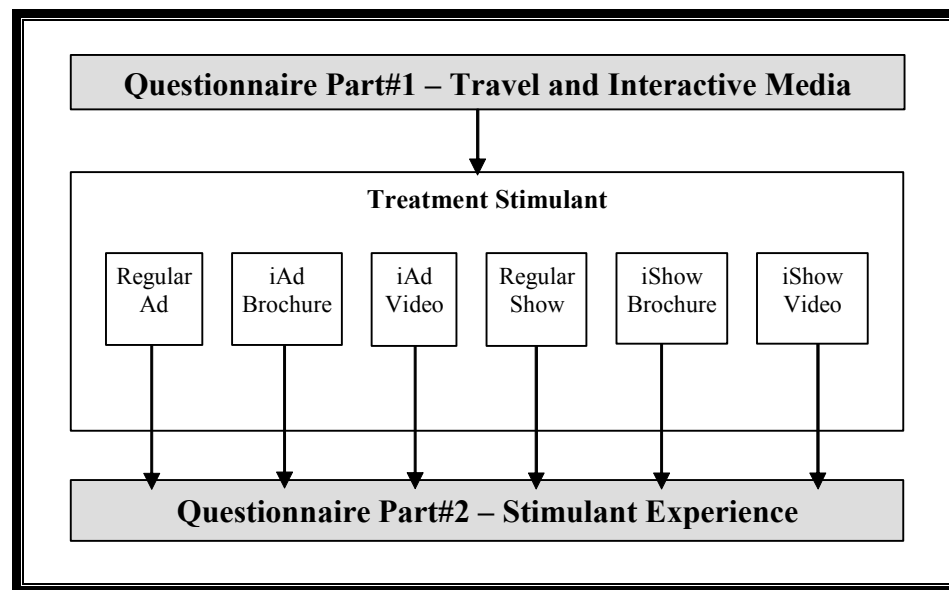


Figure 4.6.1: Core of the experiment.

By returning the survey before the close date, participants were rewarded with a £5 shopping voucher and entered into the draw for two tickets to (Western) Australia. While the core of the experiment process looks as in Figure 4.6.1, the administration and run details were more involved. This section will give an overview of the

anticipated run of the study and then have a more detailed look into the actual implementation of the study in terms of promotion and registration, reminders and returns and finally a review of the sample.

4.6.1 Overview: Run of the Study

The study ran between the 3rd February 2003 and the 4th March 2003 from HomeChoice's shopping area, HomeChoice Active, as 'The Lab'. This area contained an introduction to 'The Lab', instructions on how to join the study and the registration screening questions, a link to the experiment stimulant and notification of terms and conditions availability. Participants came upon the registration questions either via a promotion on the top-level of the HomeChoice service or via the Active menu and could register via the television or a freecall number.

Upon registration, participants were sent 'The Lab Pack' containing an introductory letter, an instruction leaflet, terms and conditions, the questionnaire and a freepost envelope for the return of the questionnaire. Participants had until the 4th March to register and until the 7th March to return their questionnaire so as to be eligible for the voucher and the prize draw. The researcher accepted surveys received until the 11th March for purposes of the study (approximately 17) due to the peak of registrations and returns at the tail-end of the study and while these were still sent the £5 voucher, they were not entered into the prize draw.

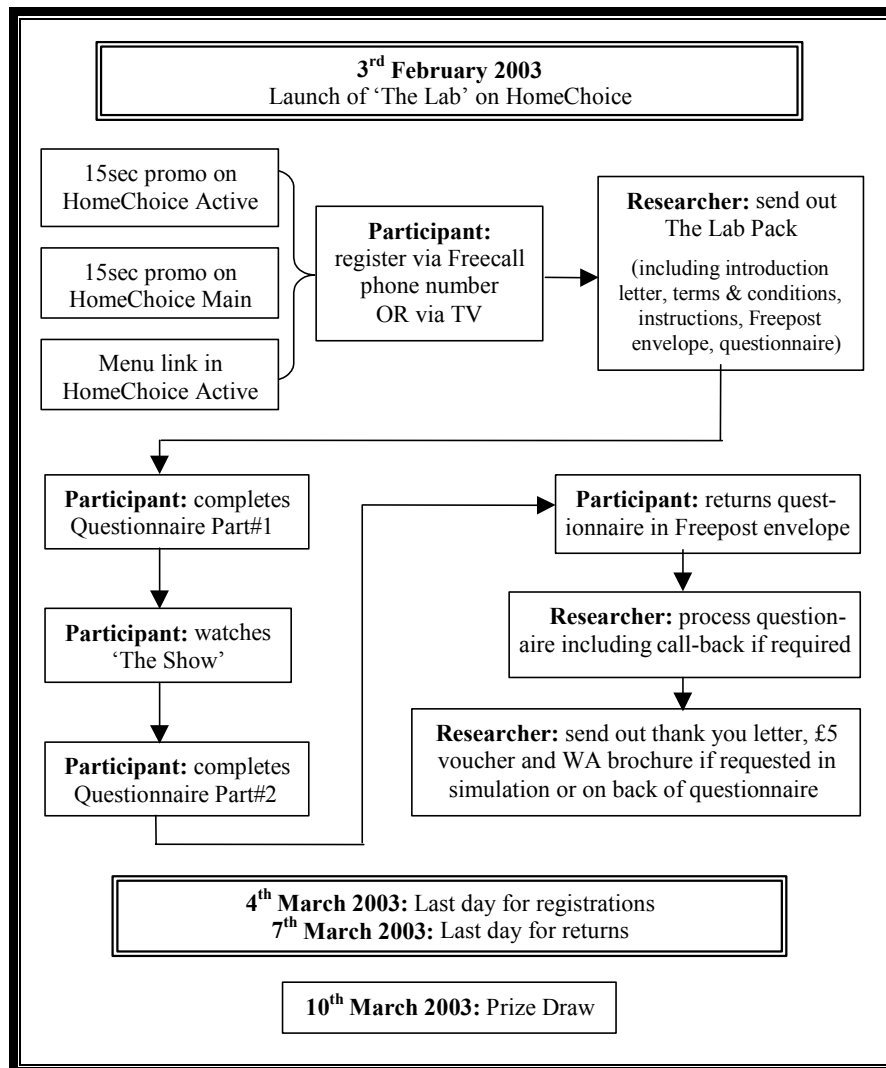


Figure 4.6.2: Important dates and research run of the study.

Upon receiving the survey the researcher processed it into the database, phoned the participant if any answers were missing, sent out a thank you letter with the £5 voucher and, if requested, a brochure on Western Australia. The participant was also put into the prize draw if they had answered the question of skill correctly (approximately 16% of returned surveys were ineligible). The winner was drawn on the 10th March and notified by phone and in writing and then announced in The Lab on the HomeChoice service for a week. The Western Australia Tourism

Commission's London office undertook the prize administration. Figure 4.6.2 illustrates this process.

4.6.2 Promotion and Registration

For the participant, the experiment was introduced via a 15-second promotional piece on the top level of the HomeChoice platform. This promotion ran on the main menu constantly for the duration of the study, with the location in the promotional loop varying. That is, when a viewer they switched their HomeChoice service on, they would see the study promotion as the first if it was in first place that day or if it as in 7th, there would be six promotions proceeding it. From the promotion, viewers could choose to opt-in to the study and register either via the freecall phone number or on-screen.

Overall there were 376 registrations, of which 87.5% were via the television and 12.5% via the freecall number. From the analysis, there were 394 attempts to register via the television. Of these, 329 were valid registrations, while 65 were invalid. The most common reason for invalidity was that the screening questions were not completed (75.4%), followed by individuals not agreeing to share their address details with the researcher (21.5%).

Registrations did not display any patterns on a weekly basis. However, on a daily basis (Figure 4.6.3), registrations peaked in the evenings between 17:00 and 22:59, with 155 or 47.1% of all valid registrations being made during this time. There was also a small peak in the morning between 10:00 and 10:59 (n20, 6%). When

registrations were compared to the promotion timetable (Figure 4.6.4), no significant overall patterns were apparent.

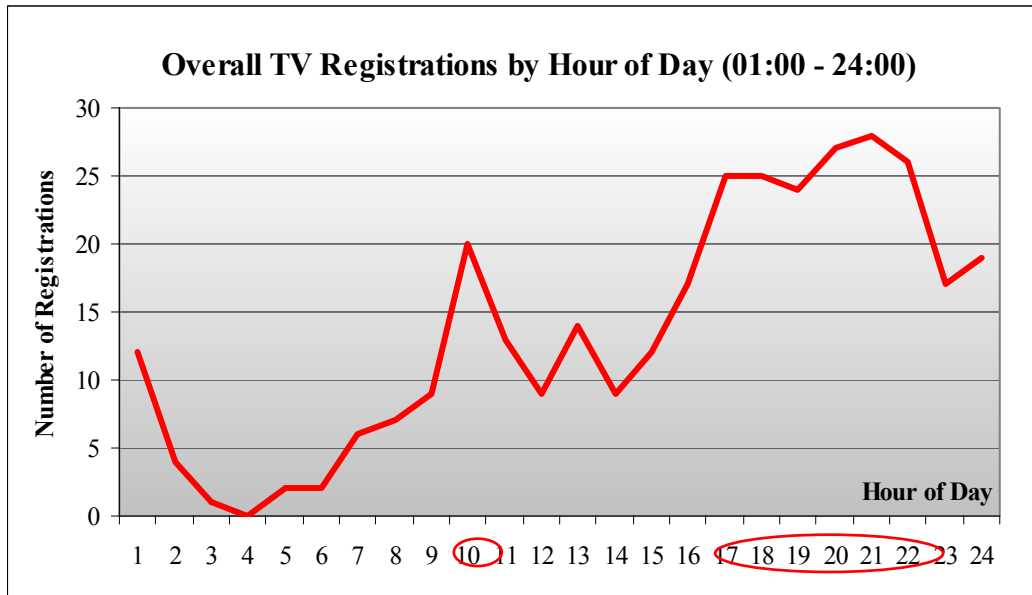


Figure 4.6.3: Overall television registrations for the study presented by hour of the day. Note: Circled hour of the days refer to registration peaks.

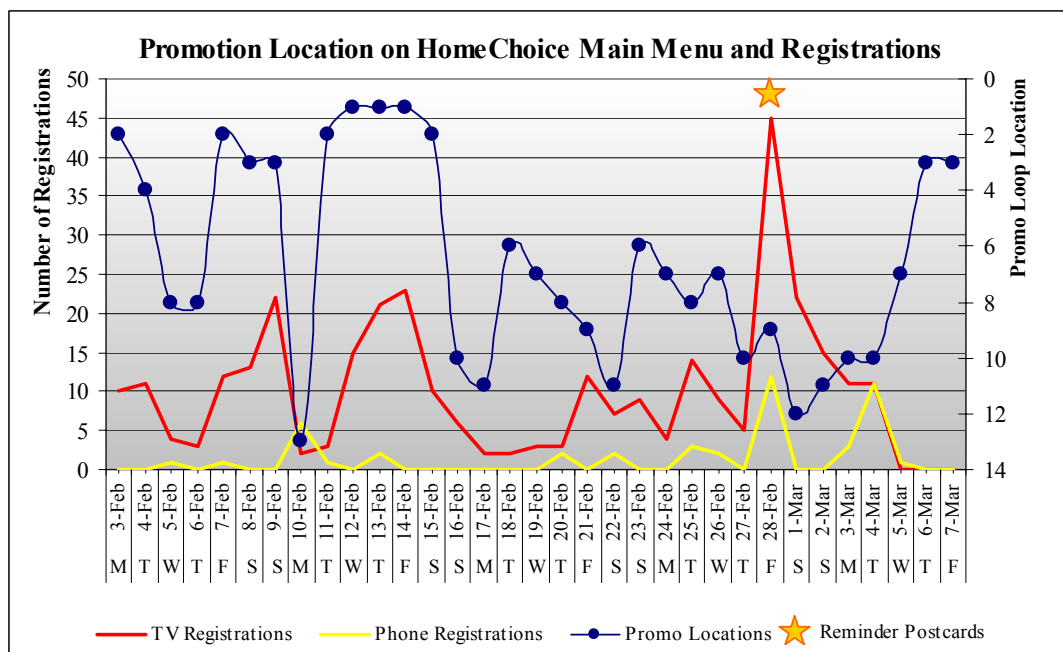


Figure 4.6.4: Registrations via television and phone versus the location of the 15-second promotion on the HomeChoice main menu.

However, on the 13th – 14th February registrations increased as the promotion was placed first in the promotional loop. While this may seem to be due to the change in the location of the promotion, other factors may also be involved as other peak registration times (eg. February 9th and 28th) do not correlate with such a prominent location.

Registrations also reflect other supplementary promotional efforts. One such change was the change in menu listing from ‘The Lab’ to “Win a trip to Oz” on the 21st February in an effort to boost awareness and registrations after registrations slowly dwindled. Another was the mail out of postcards for the 28th of February via HomeChoice to participants who had not yet registered. Around 1500 postcards were sent to subscriber households that had as yet not registered. The send out was proportional, so that the treatment areas that required more registrations received the most postcards. This effort created a peak not only in television registrations but also in telephone registration. In hindsight this tactic should have been applied earlier in the study and then again as a second wave near the end of the study. However, due to the anticipated uptake of registrations, the time required to organize the postcards and budget limitations, the one wave was all that was possible.

One of the things learned from the phone registrations after the postcard mail out was that many HomeChoice subscribers hardly used the video-on-demand service and thus did not see the on-screen promotion. Rather they had subscribed for the broadband Internet connection. This was reinforced by the survey in which a proportion of participants listed another use type of HomeChoice as the Internet.

This was an artefact of HomeChoice’s product re-structure in October 2002 which saw their base product bundling the video-on-demand and Internet offers together.

In terms of registrations across the six treatment cells, registrations were varied despite fairly similar group sizes (Table 4.6.1). HomeChoice had defined the groups according to the technical capabilities of the system to split along postcode areas. Due to a lack of information about subscribers, the groups could not be confirmed to be demographically similar before the study. However, information collected during registration indicates that they are similar to each other and the overall registration group at least on the age and gender factors. Viewers that registered to take part in the study were typically male (60%) and between 31 and 44 years of age (44%).

Treatment	Group Size*	Number of Registrations	% Male	Ave. Age 31–44 yrs
Control Ad	410	45	52%	55%
Control Show	437	56	60%	52%
Impulse Ad	397	73	49%	34%
Impulse Show	404	66	65%	44%
Telescopic Ad	352	75	69%	44%
Telescopic Show	489	61	61%	44%
Overall Sample	2,489	376	60%	44%

Table 4.6.1: Group sizes, number of registrations and typical demographics for each treatment. *Note: Group size refers to those at the start of the study, as subscribers increased, so too did the reach of the study, but exact numbers were not available.

In review, participants clearly preferred to register on-screen and during their evening viewing time. According to the amount of registrations received on any particular day, it seems that the mail out was the most effective form of promotion due to the usage of the HomeChoice service for the Internet in lieu of VOD. When registered, participants received their ‘Lab Pack’ and every effort was made to ensure the speedy return of completed questionnaires.

4.6.3 Reminders and Returns

The strategy for encouraging returns was two-fold: voiceover reminders and postal reminders. Aside from emphasizing the closing date for the return of questionnaires in the study’s documentation and promotions, participants also received an initial and final written reminder and the television promotion’s voice over was updated. The reminder schedule is summarised in Table 4.6.2.

Date of Reminder	Reminder Type	To Registrations of	Postal Class
19 th February	Initial	3 rd - 13 th February	2 nd
20 th February	Initial	14 th February	1 st
25 th February	Initial	15 th - 20 th February	2 nd
27 th February	Final	3 rd - 20 th February	1 st
4 th March	Final	21 st – 28 th February	1 st
Date of Reminder	Reminder Type	Message	Treatments
26 th February till end of study	TV promotion voiceover change	Last chance to register. Return by 7 th March.	All
Date of Reminder	Reminder Type	Message	Treatments
5 th March	Phone call	Return by 7 th March.	All, random.
6 th March	Phone call	Return by 7 th March.	All, random.

Table 4.6.2 : Reminder tactics used during the study.

The initial written reminders were sent out in blocks, approximately 7-14 days after registration. Thus for those who had registered from the beginning of the study until the 13th of February, initial reminders went out on the 19th of February. This same initial reminder was sent to the remaining non-returns on the 20th February for those registering on 14th February and on the 25th February for registrations between the 15th – 20th February. A final written reminder was sent in the last week or so of the study to participants in two waves: the 27th February (registrations between 3rd – 20th February) and the 4th March (registrations between 21st – 28th February). For those participants that registered after the 28th of February, their introductory letter in the

‘Lab Pack’ was amended to emphasize even more the closing date for questionnaire returns.

In support of these written reminders, the television promotion had its voiceover updated on the 26th February to encourage last minute registrations and prompt returns for the 7th March close date. Furthermore, as a last attempt to increase returns, phone calls were made to non-returns in a random manner over two evenings (5th and 6th March) urging people to return their completed questionnaires. While there is no real way in which to measure the success of the written or promotion reminders, the phone call reminders were measurable to an extent. Of the 56 reminder calls made to participants who had not as yet returned their surveys, 16% of those returned their questionnaires by the closing date.

Treatment	Group Size*	No. Reg-istrations	Returns		
			Count	% Regs.	% Rtns.
Control Ad	410	45	19	42%	11%
Control Show	437	56	31	55%	19%
Impulse Ad	397	73	29	40%	18%
Impulse Show	404	66	27	41%	16%
Telescopic Ad	352	75	29	39%	18%
Telescopic Show	489	61	29	48%	18%
Overall Sample	2,489	376	164	44%	100%

Table 4.6.3: Group sizes, number of registrations and returns (number, percentage of registration and percentage of returns) for each treatment.

Overall, 164 completed, valid questionnaires were returned. This represented 44% of the registrations and 6.6% of the subscriber base available at the beginning of the study (Table 4.6.3). The dispersion across the six groups was slightly uneven. While both interactive ad treatments and the interactive show with video-on-demand treatment accounted for 18% of returns each, the interactive show with brochure request, regular show and regular ad treatments accounted for 16%, 19% and 11%

respectively. Unfortunately, this rate of returns failed to deliver the minimum number of questionnaires to each cell that was anticipated by the experiment design so as to allow the use of parametric statistical analysis. Consequently, the anticipated analyses had to be amended to use non-parametric statistics.

4.6.4 Complementary Measures – The Lab Sessions

As planned, a small group of individuals were processed through the usability lounge room on the HomeChoice premises. This involved 12 volunteering administrative staff from the HomeChoice office that had travelled overseas in the last 10 years and were over 18 years of age. Participants each received £10 worth of shopping vouchers for their time, but were not entered into the prize draw. Participant allocation to treatments was derived in part by the technology. That is, treatments were confidentially allocated to particular days first to enable the streaming of the correct stimuli and then participants signed up for the session that best suited their availability.

Prior to their allotted session participants were asked to complete part one of the questionnaire and bring it with them. In the usability lab, each participant was briefed to view the stimuli as they would at home and complete part two of the questionnaire at the end. The researcher exited the usability lab but kept watch over the participant while they viewed the treatment stimuli. On completion of the questionnaire the participant was asked a number of questions as to their behaviours and attitudes to using interactive television for travel planning (Table 4.6.4). Participants were then debriefed and given their voucher.

Interactive Treatments
Why did you/did you not press the button available?
What did you expect would happen when you pressed the button?
Did the video/brochure request meet your expectations? How could it have been better?
If you could pick anything, what would want to do with iTV in relation to planning your holidays?
Control Treatments
If you would have had the opportunity to interact with the ad/story, would you?
If yes, would you request a brochure? What about clicking for a video on WA?
If you could pick anything, what would want to do with iTV in relation to planning your holidays?

Table 4.6.4: Post-treatment questions posed to The Lab Session participants.

The participants in this group were similar in demographics, interactive media experience and travel experience to the main sample (see Section 4.8.7 for more details). From this group it was found that most used the fast-forward capabilities of the HomeChoice system and this was not only through the ads but also through the programme content. Of those that interacted with their treatment most (57%) did so out of genuine interest in the destination with the remainder doing so out of curiosity. Those that chose not to interact mainly did so because they were not interested in the destination while the remainder preferred not to interact with the viewing experience.

Most found that the interactive opportunities did do what they expected them to do, however, participants also had a range of suggestions on how they would prefer to interact with their televisions for holiday planning purposes (see Lab Session post-treatment question notes in Appendix 4E). Most exposed to the impulse response opportunity were happy with its format and would only suggest that it also be available in a mall or DAL site for reference to at a later stage. This was expected as the brochure request is an established format not only in the tourism and travel

industry, but also in automobile, financial services and even consumer good product categories in some incarnation. The telescopic opportunity received more comment.

Some found that the destination video provided in the telescopic approach would be better presented in a travel channel, shopping mall environment where they could choose which video to watch when. This would allow them to continue viewing their programme without interruption and let them spend time with the video when they are ready to. This could be instead of or in addition to the video appearing with the interactive ad or travel show segment. Another suggestion was to make the video itself interactive. For example, after a short introduction, allow the viewer to choose the region of Western Australia they would like to find out more on using a menu or the map provided. This is reflective of participants' experience in a CD-ROM, DVD or even an Internet environment. In fact, a number of participants commented that if interactive television would provide the level of detail, choice and interactivity that the Internet did, they would consult it before their computer for holiday purposes. This was especially the case for the purposes of researching and booking holiday products such as flights, tours and accommodation.

The answers of the Lab Session participants indicate that while they are content with what interactive television currently offers they are awaiting the Internet-like potential of interactive television.

4.6.5 Complementary Measures – Main Sample Call-Backs

The second measure implemented were the call-backs of the main sample. Participants selected at random and an informal conversation was conducted to gather information on their behaviours during the experiment. If part of an interactive treatment they were asked why they did or did not interact with the ad or show, while those part of a regular treatment were asked whether they would have wanted to interact. Further questions were asked as to what they would and would not interact for or in which situations. Overall 40 call-backs were conducted and the reasons given for their interaction choices are summarised in Table 4.6.5.

Did You Interact?	Behaviour Reason	Interaction Answer	Overall Callbacks
Yes	Curiosity	12%	5%
	Interested	88%	41%
No	Not interested	55%	30%
	Did not see button	30%	16%
	Partner interacted already	10%	5%
	Prefer not to interact	5%	3%

Table 4.6.5: Call back reasons for interacting or not interacting with the treatments.

This indicates that participants interacted if they were genuinely interested in the destination or attaining more information, rather than just out of curiosity. Parallel, those that did not interact generally did so out of non-interest rather than other reasons. These results echo results reported in a recent article. This article recounted that the main reason for not interacting was due to no interest in the product (54%), followed by no interest in interactive marketing (28%), not wanting to think about using it (5%) and not wanting to interrupt the programme (5%) (Stroud, 2003).

4.7 A Profile of the Participants

The implementation of the study resulted in 164 valid returns from 376 registrations and a 3,500 subscriber pool. While this presented fewer participants than expected for a purely quantitative study, the nature of the questionnaire and the participants allowed a more qualitative view of the issues at hand. This section will cover the demographic characteristics of the sample, their familiarity with Western Australia, overall travel, planning and interactive media experiences, future media use intentions for holiday planning and briefly, a look at the rate of interaction with the treatments. Finally, the sample will be compared to those tested in the Lab Sessions.

4.7.1 Demographic Characteristics

The VOD platform segmented their subscribers into six streams by postcodes. It was possible that this would result in treatments targeting dissimilar communities. However, a review of the census data for the segmentations (Appendix 4F) shows that the six streams are similar in age distribution, gender ratios and wages. The experiment design intended to select participants who were representative of London, if not United Kingdom, at least on age. As there was no such information available from the VOD platform, it was anticipated to do this through the age question in the screening questionnaire, so as to avoid an over representation of younger individuals (eg. 20-35) who typically adopt new media.

Unfortunately, due to the study relying on participants to opt-in and the eventuating low participation rate, it was not possible to control for age groups as each registration and return was needed. The study sample eventuated to be similar to the

London population in that the 20-34 age group was the most dominant, however, the general population had a larger over 50s contingent (Table 4.7.1). Further comparison between study participants and the borough from which they came indicated that the study sample was not representative (Appendix 4F). Participants earned more (sample \bar{x} £838 vs. London \bar{x} £711), were more likely to be male (sample \bar{x} 63% vs. London \bar{x} 48%) and less likely to be over 50 (sample \bar{x} 15% vs. London \bar{x} 22%). This discrepancy may be due to the relative nascency of the technology to which participants subscribe and must be taken into account when considering the findings of this research.

Age Group	UK	England	London	Study Sample
20-34	34.3%	34.5%	42.7%	46.4%
35-49	36.1%	36.0%	34.7%	37.8%
50-64	29.6%	29.5%	22.6%	15.8%

Table 4.7.1: Age group distribution of study sample and UK, England and London for ages between 20 to 64.
 Source for London, England and UK figures: UK Census 2001.

The registrations and the returns were similar in that participants were typically male (63%) and aged between 31 and 44 years of age (51%). This skew towards males in the sample was not unexpected, as it is typical for males to be early adopters of new technologies, which the HomeChoice platform – and interactive television in general – can still be considered to be. The sample was also predominantly professionally or technically employed, lived with their partner or spouse and had a combined household income between £25,000 and £45,000. However, between the treatments themselves, this overall picture was not always the case (Table 4.7.2).

The Impulse Show cell had the highest percentage of men (83%) and mostly lived alone (35%). The Control Ad cell was the youngest (74% between 20 and 39 years

old) and earned the least (37% earning under £25,000). Furthermore, both telescopic cells earned more than £65,000 (41% and 45%, respectively). As with the comparisons in Appendix 4F these differences between treatments must be taken into account when interpreting the research findings.

Treatment	% Males	Largest Age Group	Occupation Professional/ Technical	£25-45k	Household Make-up Partner/Spouse
Control Ad	53%	20-39: 74%	21%	u.£25k - 37%	37%
Control Show	65%	35-49: 52%	29%	32%	45%
Impulse Ad	52%	35-49: 38%	38%	38%	31%
Impulse Show	83%	20-34: 62%	41%	45%	Alone - 35%
Telescopic Ad	63%	20-34: 44%	33%	o.£65k - 41%	59%
Telescopic Show	59%	20-34: 45% 35-49: 45%	28%	o.£65k - 45%	59%
Overall Sample	63%	20-34: 46%	32%	35%	43%

Table 4.7.2: Demographics (%) for each treatment and overall.

4.7.2 Familiarity with Western Australia

Another factor that needed to be controlled to the best of the study’s abilities was the bias that the main prize may have created. As previously stated, the main prize was two tickets to Perth and promoted as two tickets to Australia to decrease any direct bias. The questionnaire included questions that were to gauge how familiar participants were with Western Australia (WA).

Treatment (n)	Previously Visited WA		Friends/ Relatives in WA	
	Yes	No	Yes	No
Control Ad (19)	11%	89%	21%	79%
Control Show (31)	16%	84%	32%	68%
Impulse Ad (29)	14%	86%	31%	69%
Impulse Show (29)	21%	79%	45%	55%
Telescopic Ad (27)	11%	89%	33%	67%
Telescopic Show (29)	28%	72%	55%	45%
Overall (164)	17%	83%	37%	63%

Table 4.7.3: Sample’s previous experience with and links to Western Australia.

Only 17% of participants had visited WA before and only 37% had relatives or friends living in WA (Table 4.7.3). This is in relation to 43% of all UK visits to WA being for visiting friends and relatives purposes (WATC, 2003). This trend was also consistent across the six treatment cells with one exception (Telescopic Show: 55% had relatives or friends in WA and 28% had previously visited WA). This study acknowledges that these links to WA may have affected certain answers and behaviours, however, it was not possible to adjust data due to small cell sizes.

4.7.3 Travel and Planning Experience Profile

From the statements used to gauge participants' attitudes towards travel and long-haul travel in particular, the sample seems to be avid travellers that enjoy different cultural experiences (Table 4.7.4). The substantial costs and travel time involved in long-haul travel seem to be of concern or constraint only to a small proportion of the sample (cost: 21%, travel time: 20%). Surprisingly the political climate (eg. September 11th 2001 and the Bali Bombing, 12th October 2002) was not a deterrent to almost two-thirds of the sample. The majority (95%) of the sample is planning to travel internationally in the next 5 years.

Statements	Strongly/ Disagree	Neutral	Strongly/ Agree
Travelling ... is important to me	4%	8%	88%
I like talking to others about travelling	7%	17%	76%
Travelling to far-away places is exciting	2%	7%	92%
I prefer to travel overseas ...	5%	17%	78%
I prefer to travel to different countries...	11%	16%	73%
...far away places are not too expensive	21%	37%	42%
Long flights do not put me off...	20%	16%	54%
I am not nervous... of terrorism fears	16%	19%	65%
...go overseas... in next 5 years	1%	4%	95%

Table 4.7.4: Indications of attitudes towards travel and travelling to long-haul destinations.

Note: words in bold convert the original statement to the positive for interpretive purposes.

In addition to being enthusiastic long-haulers, the sample appears to be well travelled, with more than two-thirds having had more than 7 international holidays in the last 10 years (68%). These holidays included anywhere between 1 and 14 different destination regions (\bar{x} 5.3) and most participants evaluated themselves as quite experienced travellers (\bar{x} 5.45). Interestingly, despite the well catered for package holiday market in the UK, the majority (79%) of participants typically travel independently on their international holidays.

Most of the participants take their international holidays with their friend or partner, with the duration being equally less than 2 weeks (49%) or 2-4 weeks (49%). More than half (55%) of participants have had their last overseas holiday within the last 6 months of the questionnaire. As far as motives are concerned, the most important criteria for an overseas holiday is that it is value for money (67%). However, it must also offer lots to do, see and learn (60%), the opportunity to relax (60%), with a dose of culture and history (56%). More than half (51%) of the participants visit their friends and relatives when holidaying internationally.

In terms of the sample's planning experiences, most were active planners using an average of 8.87 sources. The most commonly used source was personal experience with 98% of participants typically using it, followed by the Internet (95%), friends or relatives who had travelled there (90%), guidebooks (88%) and travel agents (80%). Those sources used by the least number of participants included all three iTV sources (19% on average), teletext (46%) and mass media advertisements (58%).

These source usage rates however, do not necessarily reflect how useful a source is (Table 4.7.5). The top five remained relatively unchanged, except for the travel agent dropping to ninth place in the utility scores (\bar{x} 3.43). Thus even though travel agents are one of the most consulted, they are not one of the most useful. The least useful continued to mirror the least used sources. Temporally, most sources were used to help to decide on where to go for the holiday (category 1) including personal experience and most mass media sources.

Information source	Used by % of Sample	Utility Mean*	Temporal Mode**
Personal Experience	98%	5.67	1
Internet/Websites	95%	5.44	2
Friends/Relative who had travelled there	90%	5.33	2
Guidebook	88%	4.89	2,3,4
Travel Agent	80%	3.43	2
Friends/Relative who live there	77%	5.19	2
Newspaper or Magazine Articles	72%	3.74	1
Tourist Board/Authority	66%	3.91	2
TV Travel Shows	63%	3.65	1
Ads in Newspapers, Magazines or TV	58%	2.74	1
Teletext services	46%	2.73	2
Shows on idTV services	21%	2.58	1
Shopping areas on idTV services	19%	2.33	1
Ads on idTV services	18%	2.25	1
*Utility Mean calculated from score on 1 (lowest) to 7 (highest) scale.			
**Temporal Mode categories: 1=Before deciding on destination; 2=Early; 3=Late; 4=Just before going on holiday.			

Table 4.7.5: Sample's information source usage rate, utility score and temporal score as used in typical international holiday planning.

The remaining sources were reported to be used early on in the planning process (category 2) probably to help evaluate alternatives and flesh out details. Only the guidebook was used significantly over more than one temporal period, namely after a destination was decided upon. On average participants perceived themselves to be fairly experienced planners (\bar{x} 5.27). The impacts and meanings of these findings will be discussed further in Chapter 5 and 6. However, it can be seen from this

simple analysis that participants are typically active planners in their international holiday preparations using a variety of sources.

4.7.4 Interactive Media Experience Profile

The sample is also well-versed in interactive media (see Table 4.7.6 for details). As the testing platform, all participants had access to HomeChoice, mostly for over a year (86%) and regard themselves to be above average experienced users (\bar{x} 4.88). The most popular use was watching programmes (\bar{x} 4.51), with browsing for information on general goods/services and holidays coming equal second (\bar{x} 1.30).

	HomeChoice	Other idTV Providers	Teletext	Internet	
Activity (1-7 scale, \bar{x})					
Watching Programmes	4.51	5.52	-	-	
Requesting Brochures	0.64	0.70	-	-	
Of-Interest Information	-	-	3.88	5.83	
Entertainment	-	-	1.93	-	
Entertainment/Email/Chat	-	-	-	6.37	
Browsing goods/services	1.30	1.37	1.23	5.60	
Buying goods/services	0.49	0.82	0.68	4.87	
Browsing Holidays	1.30	1.51	2.47	5.06	
Buying Holidays	0.50	0.52	1.23	4.25	
Other – Internet (n16)	6.61	-	-	-	
Access (category %)					
None	-	50.0%	29.9%	-	
<1 month	2.4%	1.0%	0.6%	1.8%	
1-6 months	2.4%	9.0%	-	-	
6-12 months	9.1%	3.0%	1.2%	0.6%	
>12 months	86.0%	37.0%	68.3%	97.6%	
Perceived Experience (1-7 scale, \bar{x})					
-	4.88	4.82	5.02	6.29	
Participants who have experienced other idTV providers (n82, %)					
	1st	2nd	3rd	4th	5 th
BSkyB	48.0%	-	-	-	-
Freeview	21.0%	13.4%	-	-	-
iTVDigital	12.0%	9.8%	-	-	-
Telewest	5.0%	2.4%	10.9%	1.2%	-
ntl:	14.0%	3.7%	-	1.2%	1.2%

Table 4.7.6: The sample's use of, access to and perceived experience with selected interactive media, plus details on other idTV providers used by participants.

Purchases through the HomeChoice platform of goods/services or holidays was rare (goods/services \bar{x} 0.49; holidays \bar{x} 0.50). As previously mentioned, a number of participants also identified HomeChoice as their Internet connection and with an average of 6.61 (1 to 7 usage scale) it seems to be a significant part of the subscription motive.

In addition to HomeChoice, 50% (n82) of participants also had access to one other interactive digital television service, the most common being BSkyB (48% of the 82). Freeview was second most popular (21%), followed by ntl: (14%), the now defunct iTVDigital (12%) and lastly, Telewest (5%). A further 15% (n24) also had experience with a second alternative iTV provider, with Freeview leading (46% of the 24). While a small number of participants also had had experience with a third (11% of 82), fourth (2% of 82), or even a fifth (1% of 82) service provider.

As with HomeChoice, most participants had had more than one year experience with these alternate providers (75%) and also evaluated themselves as being above average in their experience with the service (\bar{x} 4.82). Again, watching programming was the most heavily engaged in activity with these alternative interactive service providers (\bar{x} 5.52). While information gathering on both general goods/services and holidays outweighed purchasing, the alternative idTV services were used more often by participants for holiday information (\bar{x} 1.51) than the HomeChoice service was. An evident factor in this difference would be that a provider like BSkyB has a more established and wider choice of holiday-oriented information (inspirational and product orientated) while HomeChoice is less well rounded in this area. Thus, while

HomeChoice and the other idTV service providers are used predominantly for viewing programmes, participants have begun to use them for goal orientated information gathering, which seems to rely upon the content provided.

Participants were also asked about more established interactive media, such as teletext and the Internet. While teletext has not necessarily been adopted worldwide as it has been in the UK, it has been a stalwart in the UK information and holiday market for many years now. This is evident in that 71% (n115) of participants have had experience with teletext and 97% of these have used it for more than one year. The perceived experience with teletext is slightly higher than interactive television scores at an average of 5.02 and while the main activity of the latter was to watch programming, teletext, given its information nature, is used most often for news or of-interest information (\bar{x} 3.88). Supporting its holiday market success was the second most common activity of browsing for holiday information (\bar{x} 2.47), which is twice as much as the browsing undertaken for general goods and services. This trend was upheld with the purchasing of holidays (\bar{x} 1.23 versus goods/services \bar{x} 0.68).

Since the Internet is also an information based media, participants used it often for news and of-interest-information purposes (\bar{x} 5.83), however, the ability to communicate with others via email and chat rooms was an even more engaged activity at an average of 6.37. While teletext had favoured the research and purchase of holiday products, the Internet is more often used for researching and purchasing general goods/services (goods/services: browsing \bar{x} 5.60, buying \bar{x} 4.87; holidays: browsing \bar{x} 5.06, buying \bar{x} 4.25). Participants reported a higher penetration level for

the Internet than teletext, with 98% having used it for more than a year and a correspondingly higher perceived experienced score (\bar{x} 6.29). Thus while one may assume that teletext would be the more favourable due to mere time in the media market place, the two-way interactivity allowed by the Internet – especially in terms of communication – seems to have contributed to its extensive adoption.

Thus, overall, around half of all participants have had experience with other idTV providers in addition to their HomeChoice experience and most have had teletext and Internet experience. Participants feel most comfortable in their abilities with the Internet, while they feel they are similarly experienced with the interactive television services and teletext. From the usage data, it seems that participants are quite specific in their use of interactive media and this relates to what the media is best at - eg. Watching programmes on iTV platforms, information via teletext services and using the communication capabilities of the Internet. This trend may have important implications for the future of interactive services on digital television. See Chapter 6 for an exploration of such possible pre-dispositions towards interactive television.

4.7.5 Future Media Use Intentions

Participants were also asked in part one of the questionnaire how they would use the three interactive media of teletext, the Internet and interactive television in future overseas holiday planning. The details in Table 4.7.7 clearly indicate that participants would use the Internet for both information and booking (76%), while interactive television would be mainly used for information on holidays (37%).

Future Use	Media
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	Teletext	Internet	iTV
Would Not Use	42%	1%	25%
For Information Only	27%	14%	37%
For booking Only	10%	9%	4%
For Information and Booking	21%	76%	34%

Table 4.7.7: The sample’s future use intentions for teletext, the Internet and interactive television in overseas holiday planning.

Teletext would be used by more than half of the sample for some purpose (mainly information gathering, 27% of total sample), but 42% would not use it in their future holiday planning. This initial data suggests that the Internet is the most flexible for holiday planning while interactive television is seen predominantly as an information source rather than a purchasing portal and in comparison teletext seems to be the least preferred media.

4.7.6 Rates of Interaction

Also of note at this stage is that out of the 114 participants in the interactive treatments, 49 (43%) chose to interact with the treatments (Table 4.7.8). Of those who interacted, more interacted for the video (n29 overall) than the brochure (n20 overall) in both the ad and travel show treatments. As previously indicated, the survey also gave participants the opportunity to get a brochure on Western Australia from the researcher.

Treatment	Returns	Interacted	Requested brochure on back page of questionnaire
Control Ad	19	-	6
Control Show	31	-	7
Impulse Ad	29	10	4
Impulse Show	27	10	5
Telescopic Ad	29	16	6
Telescopic Show	29	13	6
Overall Sample	164	49	34

Table 4.7.8: Number of returns, participants who interacted with the treatment stimulant and requested a brochure from the back page of the survey.

Thirty-four participants (21%) took this opportunity, of which 9 had the opportunity to request this brochure via their treatment but chose not to. This seems to suggest that there may be a reason for these individuals not wanting to request a brochure via the television. Potential reasons behind this will be explored in Chapter 7.

4.7.7 In Comparison to The Lab Session Participants

As mentioned in the earlier method rationale section (Section 4.4.4) it was important to gain a better understanding of the overall sample by processing a small number of laboratory-based participants. This group would assist in evaluating the platform method not only on its suitability for the current study, but also its validity for future studies. Thus it is important to compare the two samples on basic characteristics such as demographics, WA familiarity, travel, planning, and interactive media experience and interaction rates. Table 4.7.9 presents a summary of the comparison.

Demographically, the samples are similar except that the Lab sample is slightly younger (54% of participants between 18 and 30 years) and have higher household incomes (39% having between £45,000 and £65,000). Both groups have little familiarity with Western Australia (previously visited WA: Main 83%, Lab 77%; family/friends in WA: Main 63%, Lab 62%) but are largely in favour of overseas holidays (I prefer overseas destinations: Main Strongly/Agree: 81%, Lab Strongly/Agree: 77%). They are also similar in their travel experience (trips in last 10 years: Main >7 trips: 68%; Lab >7 trips: 69%) and information source usage (most common source: Main: Personal Experience 98%; Lab: Personal Experience 100%). However, the main sample perceives themselves as slightly more proficient

travellers (Main \bar{x} 5.45; Lab \bar{x} 5.00) and planners (Main \bar{x} 5.27; Lab \bar{x} 5.00). It is suggested that this difference may be largely due to the sheer size of the main sample.

		Main Sample (n164)		Lab Sample (n12)	
Most Common Demographic					
Gender		Males	63%	Males	54%
Age Group		31-44	51%	18-30	54%
Occupation		Professional	32%	Professional	46%
Income Level		£25-45k	35%	£45-65k	39%
Household Make-Up		Partner	43%	Partner	39%
Familiarity with Western Australia					
Previously Visited WA		No	83%	No	77%
Family/Friends in WA		No	63%	No	62%
Attitude to Travel					
Travel is important		S/Agree	88%	S/Agree	92%
I prefer overseas destinations		S/Agree	81%	S/Agree	77%
I am not afraid of terrorism		S/Agree	65%	S/Agree	69%
Will holiday overseas in 5yrs		S/Agree	95%	S/Agree	100%
Travel Experience					
Perceived Experience		(\bar{x})	5.45	(\bar{x})	5.00
Trips in last 10 years		>7 trips	68%	>7 trips	69%
Number of regions visited		(\bar{x})	5.30	(\bar{x})	5.00
Form of travel		Independent	79%	Independent	77%
Planning Experience					
Perceived Experience		(\bar{x})	5.27	(\bar{x})	5.00
Number of sources used		(\bar{x})	8.87	(\bar{x})	7.15
Most common source		Personal Exp	98%	Personal Exp	100%
Most useful source (mean)		Personal Exp.	5.67	Personal Exp.	5.54
Overall typical temporal use		Early		Before Dest.	
Interactive Media Experience					
Access to Media (% of sample)	HomeChoice		100%		100%
	Other iTV		50%		69%
	Teletext		70%		100%
	Internet		100%		100%
Main Use of Media (\bar{x})	HomeChoice	Programmes	4.51	Programmes	4.38
	Other iTV	Programmes	5.52	Programmes	5.40
	Teletext	Information	3.88	Information	5.00
	Internet	Communication	6.37	Communication	6.42
Perceived Experience (\bar{x})	HomeChoice		4.88		4.38
	Other iTV		4.82		3.20
	Teletext		5.02		4.92
	Internet		6.29		5.92
Future Intended Use of Media for Holiday Planning (mode)					
Teletext		Would Not Use	42%	Would Not Use	39%
Internet		Info + booking	76%	Info + booking	92%
Interactive Television		Information	37%	Information	54%

Table 4.7.9: Comparison of the main study sample and the small group of The Lab Session participants along some important factors.

In terms of interactive media, more Lab Session participants have access to all of the four media than the main sample – 100% have access to all but another iTV provider, which only 69% of the Lab participants have – but both groups concur in the best use of the media. The most popular uses of both HomeChoice and other iTV providers is to watch programmes (HomeChoice Programmes: Main \bar{x} 4.51; Lab \bar{x} 4.38; Other iTV Programmes: Main \bar{x} 5.52; Lab \bar{x} 5.40).

Both groups use the Internet mostly for communicating (Main \bar{x} 6.37; Lab \bar{x} 6.42) and teletext for information that is of interest to them (Main \bar{x} 3.88; Lab \bar{x} 5.00). Note that the main sample's lower access to teletext (70%) is echoed in the information usage score (\bar{x} 3.88) even though it is the most popular use. Lastly, the main sample feel that they are more experienced across all four media, in particular in the case of the other iTV providers (Main \bar{x} 4.82; Lab \bar{x} 3.20).

Lastly, while the main and The Lab Session participants agree on the most popular future use of teletext, the Internet and interactive television, they do have varying percentages for these modes. Both are similar in their intended abstinence of teletext, but are significantly different in their usage of the Internet as an information gathering *and* booking tool. The data suggests that this is symptomatic of the main sample's greater number of participants and inturn their greater variety of answers. This seems also the case for the considerable difference in the interactive television mode. In the main sample, participants' second focus is to use iTV for both

information and booking (34%), while the Lab participants split their remaining numbers between would not use (23%) and use for both (23%).

From these measures, it seems that the two samples are similar along a number of characteristics. In terms of question completion The Lab Session participants were generally more conscientious with no participant having to be approached to complete answers. In the main sample, approximately 3% of participants had missed one item in a question, while about 1% missed one or more complete questions. These participants were then phoned to correct this oversight. Given the similarity in answers and negligible non-completion status of the main sample to The Lab Session participants, the latter's questionnaires can be reasonably used to benchmark the quality of those of the main sample. Furthermore, this allows extra information gleaned from The Lab Session participants to be used to extend the interpretation of the main sample. However, extra caution would be required when interpreting questions in part two of the questionnaire relating to future use of media, given the marked differences of the part one answers outlined above.

4.8 Critical Analysis of the Method

The use of the HomeChoice platform in the method was due in part to experimental design, good fortune, budget constraints and a desire to test out a new method for interactive television research. By taking this approach the potential disadvantages of this quasi-experimental natural method were acknowledged and in some cases factored for, while its advantages were exploited. However, due to the unique

combination of this method with a significantly extended questionnaire, the questionable stability of the tourism industry (especially long-haul) at the time and the added strain of the platform's restructure, there were many lessons learnt for future research in this area.

4.8.1 Positive Aspects of the Method

In review, the platform method using HomeChoice had a number of positive aspects. From a research point of view, it minimized the artificiality of the testing environment allowing results to be more confidently compared to the wider context of video-on-demand viewers, interactive television viewers and international travellers. The technology permitted treatment cells to be constructed and serviced, thus allowing experimental manipulation unlike most field studies. The technology also improved the administration of the research. Firstly, it enabled participants to register via their television remotes, which proved valuable since the majority (61%) registered outside of business hours. This convenience factor was even more valuable in that participants could watch their treatment at home at their own convenience, thus avoiding the issue of appointment making and keeping session times. Lastly, by using an already established platform like HomeChoice, the study had ready access to a population that was relatively homogenous on their interactivity experience in the testing technology. Thus the novelty factor often encountered in new technology research was minimized - as reflected in the reasons why participants chose to or not to interact (Section 4.7.5).

4.8.2 Problems with the Method

Aside from the advantages of the method, a number of disadvantages or complications were also present. Some of these were predicted due to the nature of the method, while others became apparent in the execution of the study. While steps were taken to accommodate the pre-existing issues, those that arose during implementation are areas in which future studies can improve.

4.8.2.1 Controlling for Pre-Existing Issues

The pre-existing issues of control over variables and the participants were not entirely compensated for. Constructing treatment cells by postal codes and streaming only one treatment to each controlled the interaction opportunity variable. However, the issue of controlling the experience for the participants was foregone for the more natural viewing experience of the household lounge room and participants' convenience. This meant that any interference to the experience was typical of every day life and thus behaviours would be representative rather than artificial. The issue of control also extended to not being able to randomize subjects to treatment cells, however, it was expected that each geographical segmentation had a sufficient variety of people so that not only one type would be exposed in a treatment. Similarly, the fact that participants chose to opt in to the study by themselves rather than being chosen at random is also a defunct issue as most research allow participants choice in that matter, whether it be from the beginning or not returning the questionnaire. These issues are parameters of the research and must be considered when the results are interpreted.

Another factor of running the research via participants' lounge rooms was that participants could not be observed or directly interviewed as to their behaviour. However, the study attempted to minimize this issue by conducting laboratory scenarios with a small convenience sample and by conducting short call back interviews. Through this process it became apparent that participants were watching the treatments as they would other programming. Some mentioned they missed the ad because they went to make a cup of tea, zoned out, or even fast-forwarded the commercial break (possible through the VOD technology). While the first two activities could only be gauged from participant report whether in a laboratory or in the field, the third was also observed on a number of occasions in the Lab Session sample. Furthermore, these additional measures also achieved insight into why people did or did not interact with the treatment and potential influencing factors. For example, a couple of participants did not interact because their partners who also took part already had interacted, while another participant commented that they would watch a video for the entertainment but would only request a brochure if they were really interested in travelling to the destination in question. Thus, while some issues were used as parameters for the research others were compensated for by using additional measure such as call backs and in-person participants.

An anticipated problem with the sample was that participants may be too different across treatments due to the postcode segmentation. However, the 2001 census data indicated that the postcode areas were similar in age, gender and financial distribution (Appendix 4F), meaning that participants would be from a similar community. While the advantage of using the HomeChoice subscribers was that the

novelty of the technology would not impact upon participants' experiences, it also meant that participants were more likely to be early adopters of technologies who are typically younger, male and often earn more. It is acknowledged that this skew will not be wholly representative of the UK and London population, but may be a good reflection of interactive television users. This 'specialised' participant is an important consideration when applying the results to wider populations.

4.8.2.2 Issues on Implementation

The main issue during implementation was the low participation rate. While 164 participants from a population of about 3,500 is a respectable 4.7% participation rate this was not sufficient to cover the intended parametric statistic objectives of the experimental cell design, which required ideally 300 participants. On inspection the problem lay not solely in the returns of the questionnaires, as this was at 44%, but in the initial registrations. Registrations were slow to take up in the first week and it should have been at this time that the direct mail out promoting the study should have been made. However, due to anticipation of an increase in registrations and the costs involved the decision was made to use it as a last resort and by the time the mail out was then organized it was almost at the end of the four weeks. However, from conducting the mail out it was discovered that there were a considerable number of HomeChoice subscribers that had signed up predominantly for the broadband Internet connection rather than the video-on-demand service and thus had not seen the promotions on the service. This was an interesting revelation not only to the study but also to HomeChoice who had recently restructured their product offerings and were not aware of this effect.

Aside from earlier promotion of the study via direct mail, this two tier subscriber base could have been better exploited by allowing registration and questionnaire completion via more media. That is, in addition to being able to register via their televisions and a freecall number, participants could have also been able to register via the Internet or email. In turn, if revised to purely multiple choice answers and a shorter form, the questionnaire could have been completed through the television and the Internet. However, the treatment stimuli would still be viewed by all through the HomeChoice service.

Furthermore, on implementation of the questionnaire, it became apparent that fewer participants were interacting than previously thought would. Of the 114 participants that had the opportunity to interact, only 49 did. Thus while the call-backs were useful to gain insight into this behaviour, measures for this purpose in the questionnaire would have been valuable. Another factor may have been the relative shortness of the ad used (20seconds instead of a standard 30second ad) which may not have allowed participants enough time to register and action the button. Recent industry research has indicated that on average it takes 17 seconds for the red button to be pressed in response to an interactive ad and the longer the ad the more likely the button will be pressed (IDS, 2003). In future studies this could be overcome by using a longer running ad or once more ask in the questionnaire why participants did not interact. Similarly to compensate for the lack of observation, it would also have been useful to have questions relating to how participants watched the treatment so as to gauge behaviours such as ad avoidance and the like. However, future

improvements in system monitoring and reporting may assist in this as participants' individual viewing times and actions become attainable.

4.9 In Hindsight and Towards the Future

In hindsight, this research's method innovation proved largely successful. It verified the suitability of current video-on-demand technology for a natural quasi-experimental method. It allowed variable manipulation and the creation of treatment cells, as well as participant convenience. Furthermore, it provided support for the natural quasi-experimental method as a valid approach for conceptual research into interactive television, as its participants were comparable to those from the small laboratory sessions.

While the study's sample was not large enough for parametric statistical analysis of the six treatment cells, the experiment design was also a significant innovation. By testing a cross-section of promotional options for destination marketers, it enables a discussion of options rather than a penultimate answer. Furthermore, its investigation of current industry practices, rather than future possibilities, gives a sound basis for future innovations to build upon, not only in the interactive television design field but also the tourism industry communication arena.

Future investigations into these areas may consider first verifying the current research's results with a substantially larger sample, before innovating on the promotional vehicles tested. The utilisation of multiple media for registration and

questionnaire completion would also be commendable developments, if the questionnaire were appropriately amended. Furthermore, to improve knowledge on viewing behaviours, future studies could take advantage of improved individual monitoring capabilities and system reporting procedures of video-on-demand platforms to gauge behaviours such as ad avoidance and the correct viewing of stimuli. These are merely suggestions for future methodological improvements. Further improvements are discussed in Chapter 9.

4.10 Chapter Summary and Preview

From the research questions, the method selection through the experiment design and its implementation, this chapter has presented in detail how the research was carried out. The unusual approach used was also critically analysed and recommendations made as to its application for future studies. This is then the end of methodological discussion and Part#1. Part#2 concerns the research investigations and will begin with Investigation#1 in exploring the landscape of how international travellers use various information sources available to them.

Part #2

The Analysis - Holiday Information Sources, Interactive Television, Pre-Dispositions and Interaction -

Part #2 Overview

These three chapters address the three lines of investigation. The first looks at the use of information sources including interactive television in the holiday planning process (Investigation#1A-C). The second chapter explores factors that may pre-disposition individuals to using interactive television as a holiday information source (Investigation#2A-C). The third chapter seeks to understand why individuals interact (Investigation#3A) and what effects this interaction may have upon the promotional effort (Investigation#3B-F).

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Chapter #5

Investigation#1: Understanding the Use of Information Sources in Planning International Travel – Where Does Interactive Television Belong in the Information Mix?

Chapter Overview

This chapter deals with the first investigation. Information sources typically used by the WA-bound UK traveller, sets the background for the three part analysis. Use of traditional information sources including common interactive media such as the Internet and teletext are explored first (#1A). To this current use of interactive television sources are included (#1B) before analysing experiment treatment evaluations (#1C).

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5.1 Introduction

The literature discussed in Chapter Two showed how the long-haul nature of travel from the United Kingdom to Western Australia would prompt considerable information search using numerous information sources. While the travel agent is still important, the experience of traveller and their friends and relatives and the Internet are providing alternative sources of knowledge for independent travellers. The revision also highlighted two important aspects of understanding information use: the source's utility (how useful or influential it is) and its temporal use (when in the planning process it is used). Evaluations of information sources on these two dimensions will translate into a two-dimensional grid. One axis will feature the utility of the source via contributory and decisive continuum and the other axis will represent the temporal dimension via an on-going and pre-purchase continuum. It is anticipated that this two-dimensional grid will aid in gaining a better understanding of how information sources contribute to the holiday decision making process.

In understanding the use of information sources by UK travellers three analysis phases have been created to establish and then explore the information mix landscape. The first addresses Investigation#1A and looks at the current use of common sources such as travel agents, guidebooks, mass media and the Internet to name a few. The second incorporates current use of interactive television sources into the mix to complete the current information mix landscape, dealing with Investigation#1B. Investigation#1C explores how the experiment treatments are used, thus exploring the potentials of interactive television. This way a clear picture

can steadily emerge of what does happen and what could happen with interactive television in planning holidays.

When looking at the use of the information sources, it is also important to keep in mind the unique nature of the UK outbound market. Due to the UK's enviable geographic proximity to many attractive travel destinations in continental Europe and northern Africa, there are many international holiday options on offer to them relatively close to home. Holidays to such short-haul destinations are bound to require a different information search than more long-haul destinations such as Canada, South Africa and Australia, to name a few. Not only would this search be longer and more intense for a long-haul destination, but it would also focus on sources providing more official and detailed information (Gitleson and Crompton, 1983; Schul and Crompton, 1983; Fesenmaier and Johnson, 1989; Duke and Persia, 1993; Hsiesh and O'Leary, 1993; Zalatan, 1996; Hyde, 2000). Another factor to consider is that the information sources used may also depend upon how a destination is developed for the UK holiday market. For example, the Caribbean is more heavily developed and targeted to package holidays and thus can be sufficiently researched via brochures (Hsiesh and O'Leary, 1993). Thus in the analysis it is important to see whether there are any differences between short-haul and long-haul usage. Finally, it must be kept in mind that the UK is in a unique position of having had a successful experience with teletext. This is expected to have a particular influence upon the information sources mix when compared to a market like the USA or Australia that have not had the same experience.

5.1.1 Common Measures

While there are three stages to the analysis, all three have used common measures.

The pre-determined list of information sources (as detailed in Chapter 4, Section 4.5.3.2) were created to reflect current information sources used in the UK, traditional sources and newer sources such as the Internet and interactive television.

These lists were featured twice in part one of the questionnaire; once to measure utility and once to measure temporal use.

	Of Little Use	Extremely Useful	Did Not Use
Personal Experience	1.....2.....3.....4.....5.....6.....7.....		0
Travel Agent.....	1.....2.....3.....4.....5.....6.....7.....		0
Friends/Relatives who <i>live</i> there...	1.....2.....3.....4.....5.....6.....7.....		0
Internet/Websites.....	1.....2.....3.....4.....5.....6.....7.....		0
Guidebook	1.....2.....3.....4.....5.....6.....7.....		0

Figure 5.1.1: Extract from the questionnaire, part#1 -measuring the typical utility of information sources in planning an overseas holiday.

	Before I decided on destination	Early in my planning	Late in my planning	Just before going on holiday	Through-out my planning	Did Not Use
Personal Experience	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Travel Agent.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friends/Relatives <i>live</i> there .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internet/Websites.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Guidebook.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 5.1.2: Extract from the questionnaire, part#1 – measuring the typical temporal use of information sources in planning an overseas holiday.

Figure 5.1.1 shows an extract of the source list with 1 representing that the source was ‘of little use’ and 7 that it was ‘extremely useful’. Figure 5.1.2 shows the temporal use measurement with five categories. The first four categories are progressive through the planning process from ‘before deciding on the destination’ through to ‘just before going on holiday’. The fifth category covers all four previous

categories. This was deemed as a more serviceable option for transference onto a grid than allowing participants to tick more than one category. Participants were asked to evaluate each information source on its utility using the 1 to 7 scale and when in the 5 category planning process they use the source.

After appropriate conversion these explicit measures of the utility and temporal use of individual information sources could then be plotted on a two-dimensional grid (Figure 5.1.3). To achieve such a grid, the data was converted into negative and positive values around a neutral point, at which the x and y axes would intersect. By plotting the means of each source the location in the information mix could be ascertained. To convert the 7-point utility scale, the utility continuum was simply plotted from -3 to +3 (with a 0-mid point). However the temporal scale required more detailed conversion.

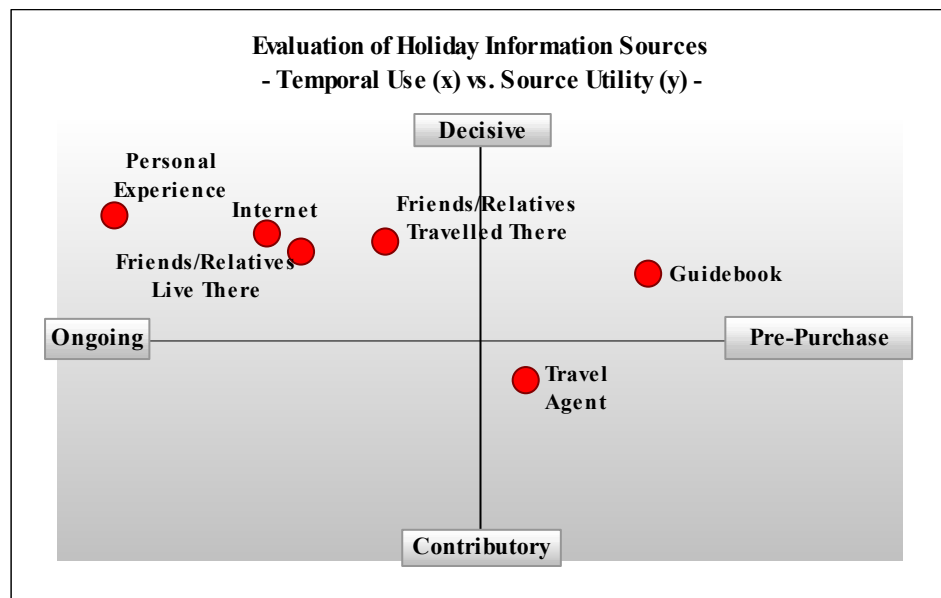


Figure 5.1.3: Example of sources plotted on the temporal use (ongoing – pre-purchase) and source utility (contributory-decisive) continuums.

For readability and clarity purposes, the ‘through out my planning’ option was the last option in the questionnaire. For the purposes of the two-dimensional plot it needed to be in a more contextually appropriate position. It was decided that, as it represented extensive temporal use of an information source (see explanation in Section 5.2.1), it would be placed at the start of the categories. In association with the utility score it would then accurately indicate how the source is used in relation to those around it. Thus, the temporal use continuum consisted of -2 to $+2$ (with a 0-mid point) for the 5 categories.

The utility continuum was labelled with the extremes of ‘decisive’ and ‘contributory’. While these terms reflect the more basic terms of ‘major’ and ‘minor’ as used in Coase’s (2001) study, they are more telling as to the source’s role. Essentially, if a source is to play a major role in the decision process it will have more impact and thus be in itself a decisive force. However, a minor source will have less impact upon the decision in itself and thus will be used in conjunction with (thus, being contributory to) other sources in influencing the decision process.

While the measurement categories created for the temporal use of sources reflected upon the holiday planning process, the terms ‘ongoing’ and ‘pre-purchase’ were kept, because of their recognized connotations even outside of tourism (eg. Perdue, 1993) but also marketing literature (eg. Bloch, Sherrell et al., 1986). It is acknowledged that there is a chance that participants may interpret the categories as going beyond the purchase of their holiday and prior to departure, given the oft-lengthy gap between booking and going on a holiday. However, the nature of pre-

purchase information search as held by a number of sources is that it is purposeful compared to the seemingly indirect and non-purposeful search characterized by ongoing search. Thus despite the seeming mismatch between measurement and continuum labels, the essence is held to be the same.

While the two long lists of information sources fulfil analysis phase one and two requirements, the third phase required similar but separate measures. These measures were in the second part of the questionnaire and consisted of two questions. The first set related to the temporal use and utility of the promotional vehicle of the treatment (ad or travel show segment). If the participant interacted, a second set of questions referred to the temporal use and utility of the interactive opportunity of the treatment (Impulse: brochure request or Telescopic: destination video).

<p>6a. At what point in planning a holiday to WA would you consult the ad <i>most</i>? Please tick one box only.</p>					
<p>Before I Decide On My Holiday Destination</p>	<p>Early In My Planning</p>	<p>Late In My Planning</p>	<p>Just Before Going On My Holiday</p>	<p>Throughout Planning My Holiday</p>	<p>Would Not Use Ad</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>6b. How <i>useful</i> would the ad be to you in planning your holiday to WA? Please circle the number most appropriate for you.</p>					
<p>Not Useful</p>	<p>1</p>	<p>2</p>	<p>3</p>	<p>4</p>	<p>5</p>
			<p>Extremely Useful</p>	<p>6</p>	<p>7</p>
					<p>Would Not Use Ad</p>
					<p>0</p>

Figure 5.1.4: An example of how the temporal use (6a) and the utility (6b) of the promotional vehicle (ad) was measured in part#2 of the questionnaire.

An example of the measure for the utility and temporal use of the treatment promotional vehicle is in Figure 5.1.4 and the measure for the utility and the temporal use of the interactive opportunity is in Figure 5.1.5. Again, each answer

was converted to a number so as to be statistically analysed and plot-able on the grid. By combining a numerical and graphical representation of the use of each source the data could be explored statistically as well as interpreted from the graph for any differences or relationships between the information sources and the roles that they may fulfil in the holiday planning process.

7a. At what point in planning a holiday to WA would you click through to request the brochure *most*? Please tick one box only.

Before I Decide On My Holiday Destination	Early In My Planning	Late In My Planning	Just Before Going On My Holiday	Throughout Planning My Holiday	Would Not Use Request
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7b. How *useful* would the opportunity to request a brochure be to you in planning your holiday to WA? Please circle the number most appropriate for you.

Not Useful	Extremely Useful	Would Not Use Request
1	2	3
4	5	6
7	0	

Figure 5.1.5: An example of how the temporal use (7a) and the utility (7b) of the interactive opportunity (brochure request) was measured in part#2 of the questionnaire.

5.2 Investigation#1A: International UK Travellers’ Current Use of Common Information Sources

The first investigation considered only the basic information sources ranging from traditional intra- and inter-personal sources, guidebooks, mass media and the tourist bureau, to more interactive media such as the Internet and teletext. These sources would set the information search landscape and give the nascent interactive television sources a context to exist within. This would also allow exploration of previous theories on how different sources are used by travellers, in particular international travellers.

5.2.1 Method, Measures, Preliminary Analysis

The information sources included in this analysis are listed in Table 5.2.1. Participants were required to evaluate each source on its utility and temporal use in terms of their past international holiday planning experiences. The utility and temporal use evaluations were analysed first into basic means and frequencies, before being converted into plot-able scores (means). For the purposes of Investigation#1A, analysis was kept to a graphical interpretive level, as the differences or relationships of these basic sources were not of core interest to the study. Statistical analyses of sources were carried out in subsequent investigations.

Source	Utility Score		Temporal Score		
	n	Mean	n	Mode	%
Personal Experience	163	5.67	161	1	45
Travel Agent	143	3.43	133	2	50
Friends/Relative who live there	137	5.19	128	2	46
Friends/Relative who had travelled there	152	5.33	147	2	48
Guidebook	151	4.89	145	2,3,4	26, 25, 26
Internet/Websites	157	5.44	156	2	37
Tourist Board/Authority	132	3.91	110	2	36
Newspaper or Magazine Articles	144	3.74	120	1	50
Ads in Newspapers, Magazines or TV	135	2.74	96	1	53
TV Travel Shows	135	3.65	105	1	57
Teletext services	101	2.73	72	2	47

Table 5.2.1: Summary scores for the individual concepts of utility and temporal use of selected information sources; part#1 of questionnaire. Utility scale 1-7, temporal categories 1-5.

From the results in Table 5.2.1, those sources most commonly used are also those with the highest utility scores. Personal experience is used by 98% of the participants to plan overseas holidays and is seen to be the most useful with an average score of 5.67. The Internet or websites were deemed to be the next most useful (\bar{x} 5.44) and were correspondingly used by the next largest amount of participant (96%). Similarly, friends and relatives who had travelled to the

destination were held to be the third most useful (\bar{x} 5.33) and were used by 93% of the participants. Even though friends who lived at the destination were only used by 84% of participants it was evaluated as the fourth most useful source (\bar{x} 5.19). Rounding out the top five was the guidebook with a 4.89 utility score and 92% of participants typically using it.

The temporal scores concentrate around the early stages of the planning process. Personal experience and mass media sources are used to determine where to go on holiday ('Before I decided on the destination', 1). After a destination is decided upon, most of the other sources are used in the 'early in my planning' stage (2) essentially to explore the chosen destination. The only source that participants indicated to be used later in the process was the guidebook with essentially three modes of 'early in my planning'(2), 'late in my planning' (3) and 'just before going on holiday' (4). While these figures are informative, conversion to plot-able points will show how the two concepts work together.

The utility scores were converted directly from 1 through 7 to -3 through +3. The temporal categories provided a bigger challenge because of the non-continuous nature of the 'throughout the planning process' option. This option was initially included in the questionnaire to account for situations where a source would be used at more than one point in the planning process. As Table 5.2.2 shows, the sources most often used throughout the planning process are also those most useful and the most commonly used overall. For example, 23.6% of those using personal

experience use it throughout the process and 14.1% of participants using friends and relatives that live at the destination use them throughout the process.

Source	n	Percentage	Option Rank
Personal Experience	38	24%	3
Travel Agent	4	3%	=4
Friends/Relative who live there	18	14%	3
Friends/Relative who had travelled there	9	6%	4
Guidebook	23	16%	4
Internet/Websites	34	22%	3
Tourist Board/Authority	7	6%	5
Newspaper or Magazine Articles	7	6%	4
Ads in Newspapers, Magazines or TV	3	3%	4
TV Travel Shows	4	4%	4
Teletext services	3	4%	=4

Table 5.2.2: Frequencies of use of the ‘throughout my planning process’ option for the temporal use of information sources. Note: ‘rank’ refers to the proportion of responses compared to the other four categories, thus out of 5.

Thus, due to the considerable use of this option for a number of sources, removing it from the analysis would remove important insight into how the sources are used. However, for the purposes of the two-dimensional grid the cases involved would have to be converted or reassigned. As previously noted, the ‘throughout’ category was assigned to the ‘ongoing’ end of the continuum so as to represent the early yet enduring role a source takes in the planning process. Thus the rearranged categories were converted to the integers -2 through +2 for plotting purposes. Even though the original information is in mode form, using these on the plot would not have allowed for any shift in emphasis of temporal use between sources, giving the plot a more bar chart-like appearance. The plotting data points for the two-dimensional grid can be found in Appendix 5A.

5.2.2 Findings

The two-dimensional plot of the utility and temporal use scores is illustrated in Figure 5.2.1. Of note are the three distinct groups formed by the sources. The first group contains sources that can be classified as intrapersonal, interpersonal and the Internet. The second group contains destination specific sources and the remaining interpersonal source. Meanwhile the third group is made up of the mass media, iTV and teletext sources.

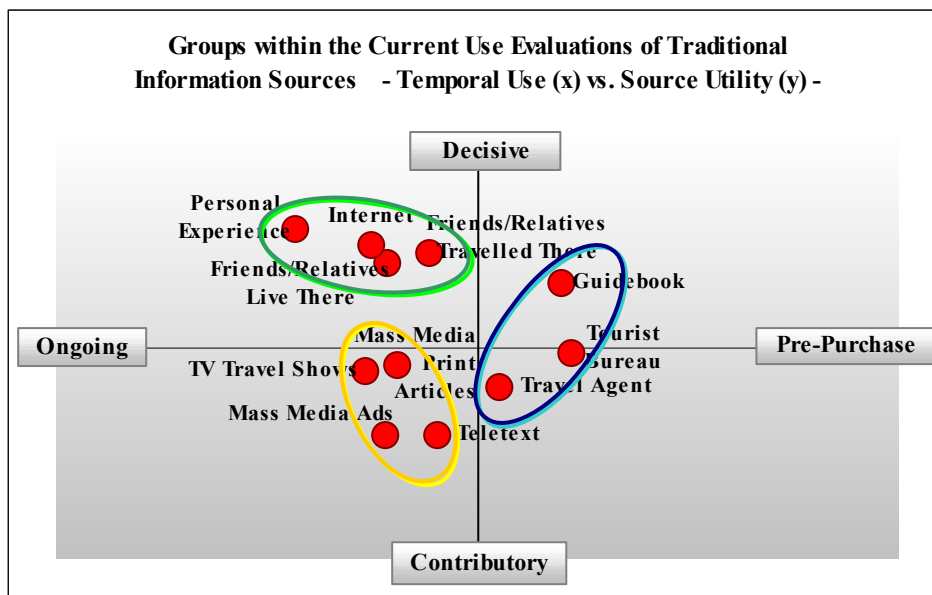


Figure 5.2.1: Groupings of holiday information sources from Part#1 of the survey along temporal and utility dimensions. Note: Some points may not be wholly visible due to overlapping.

Most of the sources contained in each group are representative of the literature's expectations regarding roles and classifications, however, there are a few surprises. In the **first group**, the membership of intrapersonal and interpersonal sources is expected as they have similar utility and temporal use reputations. They are accredited with being reliable, trusted and often highly knowledgeable sources hence their location in the 'decisive' area of the plot. The 'ongoing' classification is also

understandable as such sources are often consulted early in the process for inspiration and broad information. However, of note is the substantial proportion of participants that said they used personal experience throughout the planning process (24%). This must be included in the interpretation of the plot location and thus personal experience is important throughout the planning process.

Unexpected in this first group is the inclusion of the Internet. The location of the Internet suggests that it is held in the same esteem not only as friends and family, but also personal experience. A number of the Internet's attributes may help explain this. Firstly, the Internet gives the potential traveller access to a wide range of information types and formats. Information can range from official destination sites, personal travel journals, to feature collations of critiques and reviews, while formats vary from text and pictures to audio-video. Furthermore, the information tends to be up-to-date and conveniently available. In addition, the online travel industry has grown into a highly competitive marketplace, meaning that the 'best' prices and packages can be researched and purchased from home, even up to the last minute. Thus, the detail and breadth of information available on the Internet elevates its utility to that of personal sources. Temporally, the Internet also shares the personal sources' planning period and once more this may be linked to the variety of information available. While this 'ongoing' location may imply that it is only used very early on in the planning process, it is more accurate to interpret its location in view of the 22% of participants that also use it 'throughout' the planning process.

Thus, this first group of sources is highly decisive in the holiday planning process. While their location in the ‘ongoing’ area of the plot suggests that they are mainly used for non-purposeful information gathering, personal experience (24%) and the Internet (22%) are also used by a substantial amount of participants ‘throughout’ the planning process, indicating that they have more purposeful roles as well.

The **second group** contains two destination-specific sources, guidebook and tourist bureau, but also a third interpersonal source, travel agent. From review of the literature it was expected that these three sources would be closer to the pre-purchase end of the temporal continuum, however, the relative positions within the group are curious. The travel agent as an interpersonal source is decidedly removed from the friends and relatives on the plot, especially in source utility terms. This contradicts the dominant role attributed to it by the literature and identifies it rather as a contributory source of information. These participants seem to forego travel agents’ advice and verification functions for the more functional and destination-specific information purposes.

This is reinforced by its proximity to the pre-purchase extreme. Typically it would be expected that the travel agent is the closest to the pre-purchase stage of the planning process as they would be the last stop before booking. However, in this case it is the guidebook and the tourist bureau, respectively, that are considered to be stronger pre-purchase type sources. This may be due to the type of information they contain. Guidebooks typically contain information on the destination ranging from history and cultural notes to recommended places to stay and things to do –

providing the traveller with substantial knowledge. Meanwhile, literature from tourist bureaus tend to focus on accommodation, sight-seeing and activities on a even more detailed and often more up-to-date basis, hence their slightly more pre-purchase orientation. In both cases these sources are typically consulted after the destination has been chosen and this is confirmed by only negligible participants reporting use ‘before deciding on the destination’ (Guidebook: 8%; Tourist Bureau: 10%).

Out of the three, the guidebook is deemed to be the most useful being clearly in the decisive realm of the plot, with the tourist bureau just on the contributory side and the travel agent the least useful. Again this is reflective of the information that each is able to communicate, with the guidebook being the most rounded of the three.

The **third group** amalgamates mass media and teletext sources. Of interest here is that while the mass media content sources (print articles and TV travel shows) are closely aligned, mass media advertising is quite separate on the utility dimension, even though a similar amount of participants evaluated it (Content: n104, Advertising: n96). Thus, content such as articles and travel shows have more weight in international holiday planning than advertising. A part of this may be reflective of the personal value of an international holiday, which is bolstered by the inspiration and seeming unbiased views given by travel journalists, compared to the commercialism of advertising. Furthermore, travel shows and articles offer more information than ads do and thus may be seen to be more useful. Temporally, there is little difference, although travel shows seem to be used slightly earlier than print

articles. It is suggested that this may be because of the greater effort involved in consulting a print article and the potential to access it on a need-basis, whereas travel shows on television are a more passive media and can generally not be accessed according to the viewers schedule, but rather that of the broadcaster.

True to its roots, teletext has aligned itself more with the advertising sources than with the content sources. Given its location in the contributory half of the grid it is clearly an information gathering tool, however, as it is close to the mid-point and thus the pre-purchase half of the grid, one may infer that it is used considerably for comparison shopping before approaching a travel agent or the like. Such a role is reinforced by the fact that the majority of participants (47%) use it early in their planning process. This is somewhat different to its reputation as a distribution and booking medium spouted by the industry literature. However, in this case this may be related to the type of holidays and travel products sold on the various teletext services. On investigation of Teletext Ltd. overseas holidays and flights are limited by last-minute deals and to well-developed, often short-haul, destinations. Thus, travel to more independent or out-of-the-way locations may not be possible with the products on offer by the advertisers involved. Thus for independent holidays a travel agent (high street or virtual) may be more useful.

Considering the make-up of these three groups there seems to be an overall pattern in how the sources within them may be used in the holiday planning process. The mass media and teletext sources in the bottom left quadrant are contributory, ongoing sources providing destination awareness and some comparison information. The

information gleaned from these sources are then verified and expanded upon on an ongoing basis with decisive sources such as personal experience, friends and relatives and the Internet, before evaluating the destinations available. Finally, the travel agent, guidebook and tourist bureau sources are then used to flesh out the holiday plans.

5.2.3 Investigation#1A Conclusion

The temporal use and source utility dimensions allow an easily interpretable representation of how international tourists use selected information sources. The plot identifies three main groups whose member sources share characteristics to service similar information needs. Mass media sources establish the awareness set of destinations, personal sources and the Internet expand destination knowledge and thus assist in destination selection, while the destination specific sources and the travel agent are engaged last to flesh out the holiday plans. These sources were plotted to provide a landscape of typical information sources used for planning international holidays. The only comparisons of interest concern the experiment sources and hence there was no need for statistical analysis of the positions of the data points.

5.3 Investigation#1B: International Travellers' Current Use of Interactive Television – Previous Holiday Planning Use

Investigation#1A established how common information sources would fit into the utility and temporal dimension grid and related to each other. This is the landscape

into which participants' current (or past) use of interactive television in holiday planning can be plotted, giving an understanding of its place in the information mix for the international traveller (Investigation#1B). Interactive television has already been available for over 5 years in the United Kingdom and has been used on numerous occasions by the travel and tourism industry. However, there is no real understanding about how travellers utilise interactive television for holiday planning purposes. By using participants' utility and temporal evaluations of interactive television ads, shows and shopping areas currently available and comparing these to the other information sources, this study attempts to begin to fill this gap. From this and the next investigation, it is anticipated that the tourism and travel industry can gauge how interactive television can be best employed for promotion purposes.

5.3.1 Interactive Television in the Tourism and Travel Industry

There is limited literature regarding interactive television use in the travel and tourism industry. The few articles exploring this suggest that travel would be one of the more appropriate topics for interactive television and successful products for t-commerce (Barnes, 2001; Middleton, 2001; TTG, 2001; John, 2002) and that potential travellers have begun to slowly adopt these offerings (Morgan, Pritchard et al., 2001; Brodin, Barwise et al., 2002; IDS, 2003). However, no figures are given as to how these offerings are actually used. To help address this gap in the literature, four travel agents and two tourism marketing organisations that have used interactive television applications for their product were approached to answer a set of questions relating to their use and opinions on interactive television's role in the travel industry with one wishing to remain anonymous (see Appendix 5B for questions). This group

included *Thomas Cook*, the *Travel Channel*, *SKY Travel*, the *Canadian Tourism Commission* and the *Wales Tourist Board*.

Respondents' objectives behind using interactive television varied somewhat but most agreed that it offered convenience to the consumer. The travel agents generally aimed to build brand loyalty, drive sales and 'generate a better conversion of calls' through the increased information provided and increased involvement that interactivity fosters. The destination marketers' main goal was to obtain qualified responses as efficiently as possible. Both the Canadian and Wales tourist bodies were mindful of the ease for the consumer, but would prefer a halving of the cost per response. The Welsh's control ad adapted for interactivity gave a 0.2% response rate (5,298 responses). In terms of future use of interactive television, both travel agents and tourist bodies agreed that consumers will use it mainly for researching their destinations and requesting information packs. For industry purposes it will most probably remain a complementary media channel to support the more traditional channels and the Internet.

Respondents also identified a number of problems existing for travel and tourism in the interactive television industry. The most prevailing issue was that even in 2003 taking part in interactive television space and applications remain a very expensive media option. Almost all respondents commented that if costs associated with media and interactivity production and placement were reduced, their participation would increase. The high costs have led to at least two travel agents withdrawing from interactive television. One commented that interactive television account for only 2-

5% of their net bookings which did not justify the associated costs. Those remaining in interactive television are doing so mainly because of their strong analogue-television based businesses. The current technology also stands to improve, in terms of speed and Internet-type functions such as search capabilities. However, respondents also acknowledged that consumers would require continued education on interactive television and in turn, increase adoption before the niche for interactive television in travel and tourism could be determined.

Such feedback reiterates how nascent interactive television still is, the need to build towards critical mass and also the need for better knowledge on how it is being used by viewers and travellers. While case studies of individual campaigns are helpful, they are also circumstantial and do not allow any depth into the viewing experience. This study attempts to address this issue in more detail.

5.3.2 Interactive Television Promotional Sources for Travel and Tourism

Traditional television offers the travel and tourism industry two direct avenues for promotion: paid advertising and content. While advertising is in the form of a paid commercial, content can be either via a travel show or a home shopping programme. This is no different for interactive television, except that these formats become interactive.

Currently, interactive television commercials are used by tourism and travel providers to generate qualified leads by including a visual or audio prompt in the ad to press the button for an information pack to be mailed out. Upon pressing the

button, the viewer may be taken to a screen requesting additional information for the information pack before processing it. Alternatively, a panel may be superimposed upon the broadcasted ad prompting for additional information and communicating the progression of the request. In other product categories, interaction with the button may also take the viewer to a dedicated advertiser site that contains more information on the product, however, this is rare in the travel industry. It would also be possible for brochure requests to function from travel programmes, but as yet this has not occurred in the UK, most probably due to the separation of content and advertising practices.

The interactive travel show on regular broadcasters has as yet not eventuated in the UK market despite the success of enhanced BBC documentaries such as *Walking with Beasts*. However, a trial was held in Orange (NSW), Australia in August 2000. In this small test market, a travel show called *Destinations* was enhanced with interactive opportunities that gave viewers information on history, practical tips and trivia (Purins, 2001; Vitale and Oldfield, 2001). There was also the option to enter a competition and join a chat session via an infra-red keyboard after the broadcast. Of the test audience 24% watched the programme and 65% of those accessed the interactive area. Of those interacting 33% took part in the live chat session (Purins, 2001). These response figures seem encouraging, however, more information is needed to determine whether the interactive opportunities added value to the show and if viewers would utilise these opportunities again in the future. General findings from the BBC experience are that the information must be of high value to the viewer, relevant to the programme, easy to comprehend and that only certain types of

programmes lend themselves to applications such as multiple video streams (BBC, 2004).

Dedicated travel channels, on the other hand, are very popular in the UK with the likes of *SKY Travel*, *Travel Channel*, *Travel Deals Direct*, *Going Places* and the *TV Travel Shop* appearing on numerous analogue and now digital providers. These channels are on 24-hours a day and allow viewers to research information and offers available via their remote control. Mostly the information is searched for via menus and presented as short text and a photo, but in some cases there is an edited video of the resort or destination fronted by a presenter. Unlike the Internet where there are many sites for information on a destination, the content and offers on these channels or programmes is determined by the products that are currently being supplied by participating tour operators. Booking is largely done via a call centre and previous on-screen booking services have been viewed as not justifying their transaction costs due to system costs as well as low consumer participation.

Given this limited working knowledge of how interactive television is currently used in the promotion of travel and tourism from the point of the consumer and the limited options utilised by the industry, a basic survey of travellers' current (ie. past) uses would provide a foundation to compare experimental stimuli against.

5.3.3 Method, Measures, Preliminary Statistics

The utility and temporal measures of interactive television sources given in part one of the questionnaire, were used to identify the positions of current interactive

television sources amongst the more traditional sources. The interactive television sources included in the questionnaire reflect those possible from the basis of regular television and are distinguished along the lines of content (travel show), paid advertising (commercials) and home shopping (see Chapter 4, Section 4.5.3.2 and this chapter, Section 5.1.1, for more information). Each source was examined individually and then an aggregate score and a position were created for interactive television as a whole. This was taken as the average of the scores of the ads, programmes and shopping areas. The resulting utility and temporal scores are detailed in Table 5.3.1.

Source	Utility Score		Temporal Score		
	n	Mean	n	Mode	%
Overall Interactive Television Sources	211	2.39	100	1	53%
Shopping areas on idTV services	69	2.33	33	1	52%
Ads on idTV services	68	2.25	30	1	57%
Shows on idTV services	74	2.58	37	1	49%

Table 5.3.1: Summary scores for the concepts of source utility and temporal use of selected interactive television sources. Utility: 1-7scale, Temporal 1-5categories.

From this table it is evident that despite the low sample sizes all three interactive television sources would be used *before deciding upon a holiday destination* (mode 1) as an awareness and exploratory tool. Furthermore, on a utility scale of 1 through to 7, all three sources are considered to be of low to moderate usefulness with means around the 2.4 mark. Thus, from these three sources, interactive television as a whole would be considered as a cursory source to survey potential holiday destinations.

However, how would interactive television as a whole and the individual sources compare to the information sources explored in Phase One? Once more the utility measure was converted into a -3 to +3 scale, while the temporal categories were

converted to -2 to +2 with the ‘throughout’ option holding to the ‘ongoing’ end of the continuum.

5.3.4 Findings

The two-dimensional plot of the utility and temporal use scores is illustrated in Figures 5.3.1 and 5.3.2. Figure 5.3.1 shows the overall location for interactive television from the sources surveyed, while Figure 5.3.2 illustrates the individual location of the interactive television shopping areas, ads and travel shows. From these plots it is apparent that interactive television, overall and in its individual sources, is a contributory, ongoing source. It is located amongst the mass media advertising, mass media content and teletext sources. This implies that it fulfils similar roles such as awareness, browsing and entertainment.

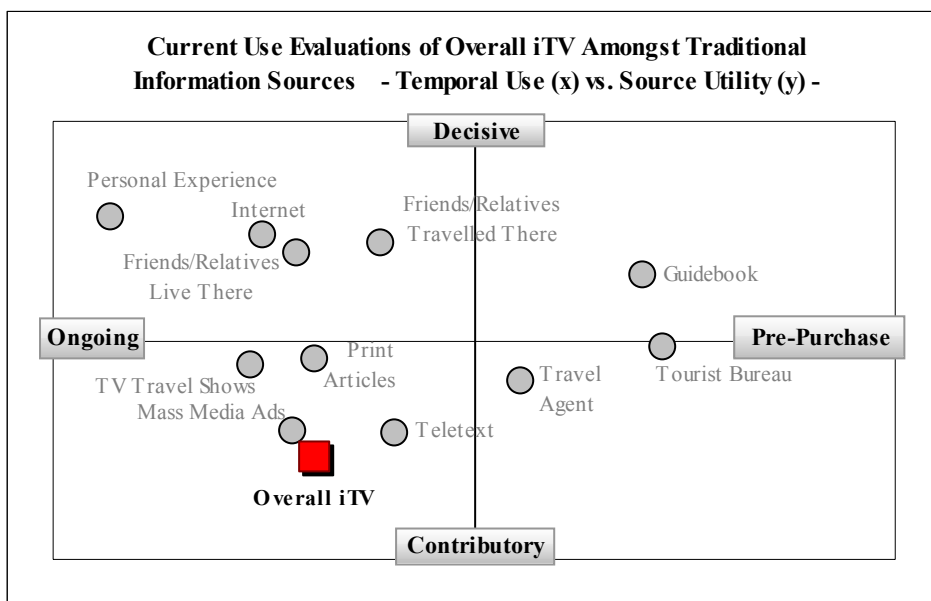


Figure 5.3.1: Overall interactive television location amongst traditional information sources, along the temporal use and source utility dimensions. Note: Some points may not be wholly visible due to overlapping.

Even though there is little difference between the three sources, it is still interesting to note that temporally there is a slight flow to the sources that corresponds with the

traditional sources. Like the regular travel shows on television, those on interactive television are consulted slightly earlier than the ads. These, in turn are used before going to the shopping area to look for holiday deals, in a similar way as teletext is used. Similarly, the utility of the three interactive television sources mimic the regular sources with the travel shows being the most useful, followed by the shopping area and lastly the ads. However, unlike the regular sources, there is little difference between the three interactive television sources in either temporal use or source utility.

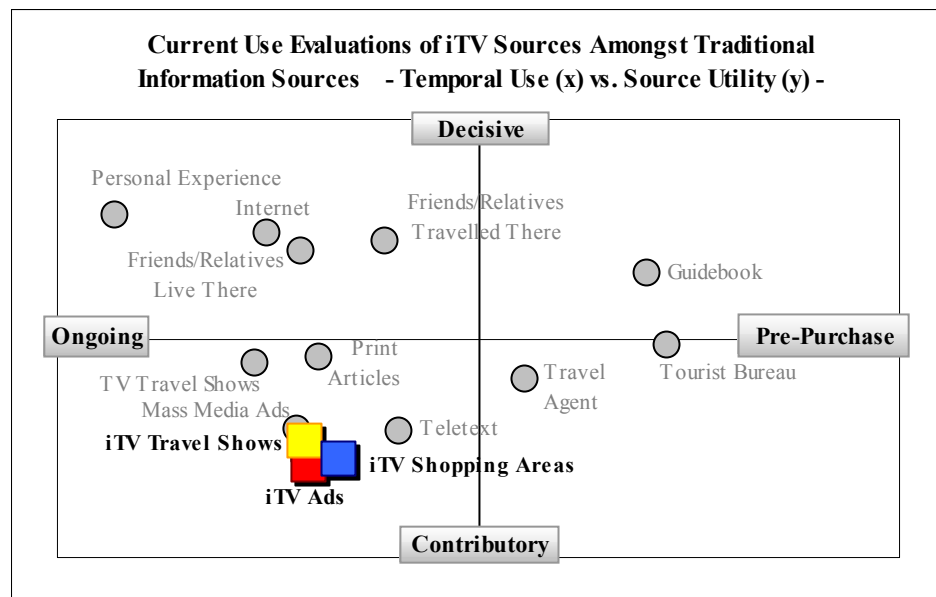


Figure 5.3.2: Individual interactive television source locations amongst traditional Information sources, along the temporal use and source utility dimensions. Note: Some points may not be wholly visible due to overlapping.

5.3.4.1 Reasons for the Clustering of iTV Sources Location

It is suggested that this lack of differentiation between the three sources may be due to a number of reasons. Firstly, there were significantly fewer evaluations of these sources (around 30 responses each) compared to the more traditional sources (ranging from 70 for teletext to 161 for personal experience). The small number of

data points means that there is less possibility for variation. Furthermore, interactive television is still a relatively new medium and thus users have not had as much time to use, gather experience and explore all of its possibilities. This means that a limited experience allows only a limited evaluation, again decreasing variation in data points.

Lastly, considering that the majority of the participants travelled independently (70%) and that most go on long-haul overseas holidays (89% have been on at least one and 51% have been on more long-haul than short-haul holidays), it may be possible that the low utility of the interactive television sources is in part due to the lack of appropriate content for independent, long-haul preferences and information needs. A perusal of the current travel content on interactive television reveals that much of the travel programmes, destination profiles and holiday deals cater for destinations that are well developed for the United Kingdom market, often in the form of package holidays or relatively close in travel distance. Information available for long-haul and more out-of-the-way destinations that independent travellers are inclined towards are less common. Thus, a lack of information that experienced independent travellers would find useful may affect the temporal use and the utility of the interactive television sources.

This possible explanation was explored by comparing typical long-haul and short-haul participants. Participants were allocated to the long-haul group if they had visited as many or more long-haul destinations than short-haul destinations. Short-haul participants were those that had mainly travelled to short-haul destinations.

This information was gauged from the part#1 question regarding the overseas destination regions that they had visited. Long-haul destinations included the Americas, New Zealand, Australia, India/Nepal/Pakistan, the South Pacific, Maldives and Mauritius, Far East Asia, South East Asia and Middle and Lower Africa. Fifty-one percent of participants qualified as long-haul travellers.

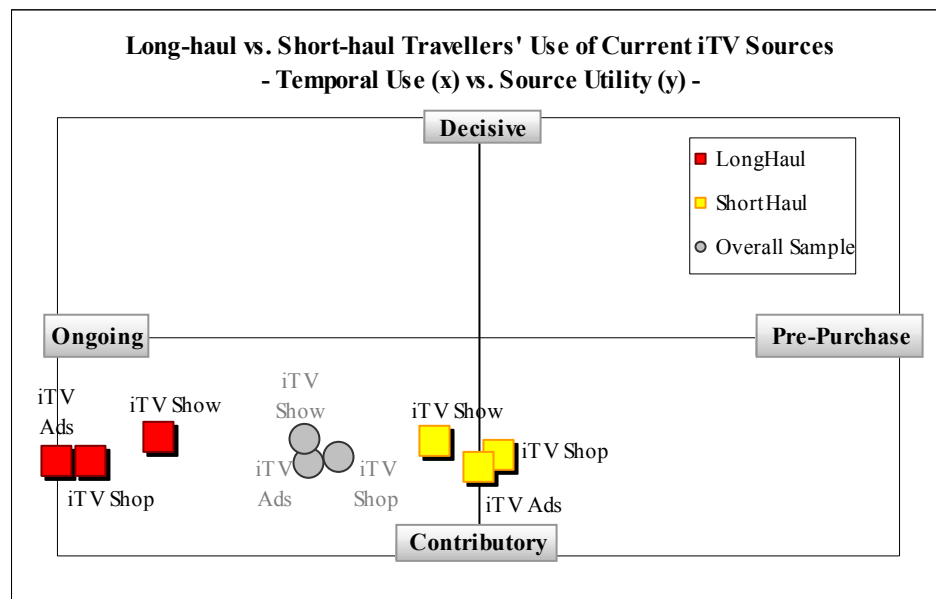


Figure 5.3.3: Long-haul versus Short-haul participants' evaluations of current iTV sources. Note: Participants were allocated as 'Long-Haul' if their long-haul experience was equal to or greater than their short-haul experience.

As Figure 5.3.3 shows, there is considerable difference between the long-haul and short haul participants in the temporal use of the interactive television sources. In all cases, short-haul travellers consulted these sources closer to the pre-purchase stage of the planning process, while the long-haul travellers clearly use interactive television as an awareness and exploratory tool. The plot also implies that the content and offers available in the current shopping areas cater to short-haul holidays, as the 'iTV Shopping Area' location for short-haul travellers is the closest of all interactive television sources to the pre-purchase extreme.

Source	Mann Whitney U test					Interpretation
	Groups	Mean Ranks	U	Z	SIG.	
iTV Shopping Area	Long-Haul	11.38	57.0	-2.943	.003	LH ≠ SH
	Short-Haul	20.65				
iTV Ads	Long-Haul	10.29	45.0	-2.960	.003	LH ≠ SH
	Short-Haul	18.97				
iTV Travel Shows	Long-Haul	15.18	105.0	-2.148	.032	LH ≠ SH
	Short-Haul	22.25				

Table 5.3.2: Mann Whitney U test results for the current temporal use of iTV sources by long-haul and short-haul participants. Note: Participants were allocated as ‘Long-Haul’ if their long-haul experience was equal to or greater than their short-haul experience.

This difference is also statistically significant as the Mann Whitney U tests for each source proved (Table 5.3.2). The tests show that the short-haul participants evaluated the sources to the higher end of the temporal scale, thus the pre-purchase extreme, while the long-haul participants evaluated them at the low or ongoing end of the dimension and that the difference is significant at the $p < .01$ level. As the plot shows that participants consider the interactive television sources to be similar in their utility value, no statistical tests were done on the utility scale scores. Thus, travellers who travel more long-haul than they do short-haul use the interactive television sources at different times in the planning process than typical short-haul travellers, but both groups consider the sources to be correspondingly useful in the roles they fulfil.

Relating Figure 5.3.3 back to the original Figure 5.3.2 (see repeated in Figure 5.3.4), the differences between long-haul and short-haul travellers’ evaluations of the interactive television sources reinforce the proposition that there is a lack of content suitable for the information needs of the majority of the sample (long-haul travellers). Hence, the location that interactive television could attain if appropriate

information was available to viewers (eg. short-haul destinations for those looking for short-haul holidays) is decidedly different to that location attributed to it by the majority of the participants which prefer long-haul travel. However, in summary, the majority of the participants considered the three interactive sources to be temporally similar and of little to moderate utility.

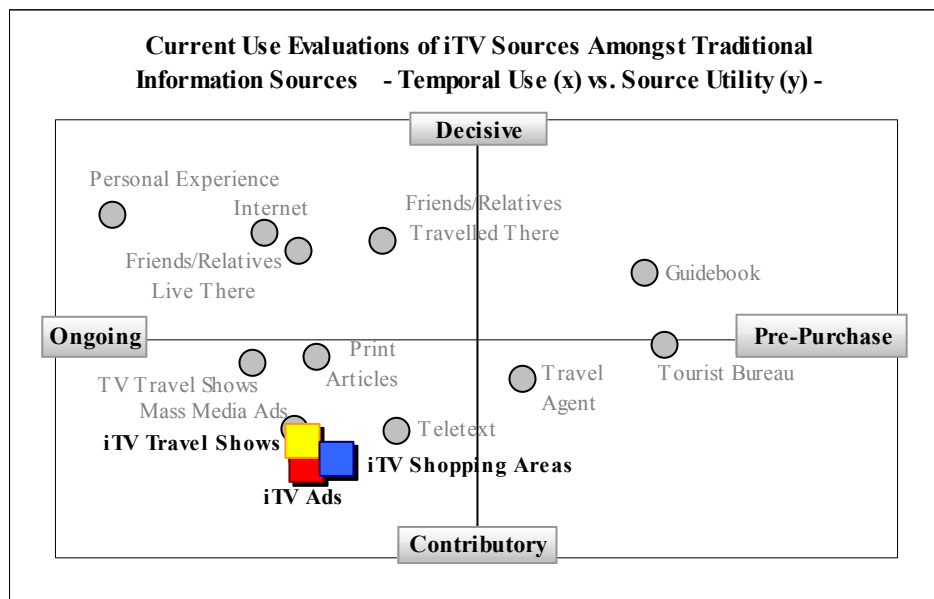


Figure 5.3.4: Individual interactive television source locations amongst traditional information sources, along the temporal use and source utility dimensions. Note: Repeat of Figure 5.3.2.

5.3.4.2 iTV and its TV and Internet Roots

The second issue arising from the graph in Figure 5.3.2 or 5.3.4 is that interactive television utility-wise is more in line with its television roots than it is with its Internet roots. Although interactive television's evolution has been influenced by both television and Internet technologies, it seems to be still largely defined by the television viewing experience: the lounge room, relaxation, entertainment and socialising. It is close to its regular television and teletext roots, but is almost at the other end of the utility scale when compared to the Internet. Again, this may be

explained by the limited current content available for independent international travellers on interactive television compared to the vast content provided by the travel industry and other travellers on the Internet. If this is so, it is expected that the short-haul travellers would find interactive television to be similarly useful as the Internet in gathering holiday information, while the long-haul travellers would find a large discrepancy between interactive television and the Internet.

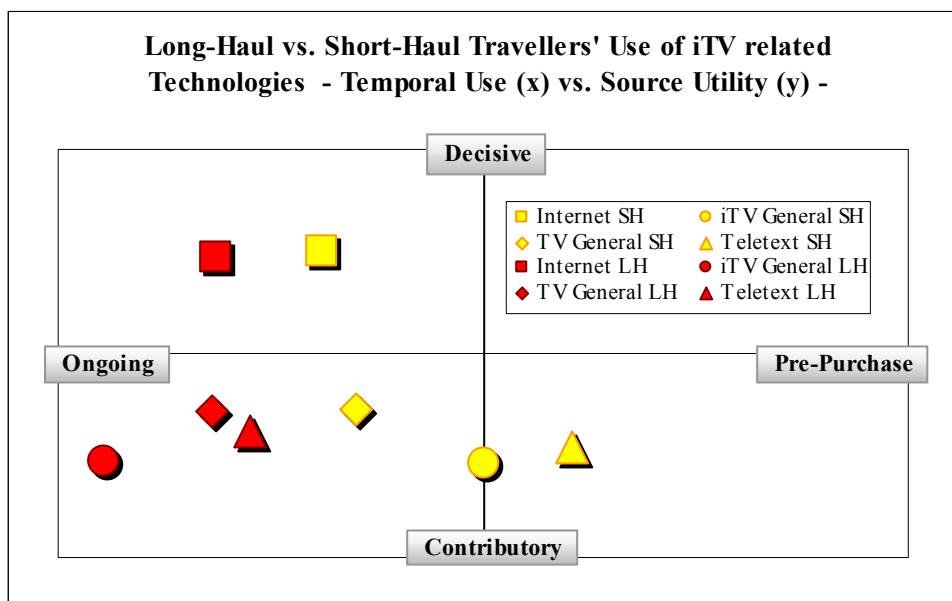


Figure 5.3.5: Long-haul versus Short-haul participants' evaluations of current Internet, Television, Teletext and iTV sources. Note: Participants were allocated as 'Long-Haul' if their long-haul experience was equal to or greater than their short-haul experience.

Interpreting the plot (Figure 5.3.5), it is obvious that long-haul and short-haul travellers use the information sources in different ways. The long-haul travellers find interactive television to be the most ongoing and the least useful of the four source types, while the short-haul travellers find it similar in temporal use to teletext, but slightly less useful. The long-haul travellers see television and teletext in a similar light and the Internet aligns with them temporally. Short-haul travellers also see temporal equality between the Internet and television, but regard teletext

considerably different along both dimensions. However, of all the sources in both groups the Internet is considered to be the most useful.

The flows of the sources for each type of traveller, also implies their process of information gathering. For example, it seems that short-haul travellers embark on a goal-directed search via the Internet at the same time as a passive search through the television content. Since teletext and certain areas of interactive television cater to selling holiday deals these sources are consulted in the later part of the process. In contrast, long-haul travellers seem to scan interactive television before moving on to television and the more useful Internet just before consulting teletext. However, it must be acknowledged that there may be other factors outside of the two represented dimensions that help explain these usage patterns.

Source	Mann Whitney U test					Interpretation
	Groups	Mean Ranks	U	Z	SIG.	
iTV General	Long-Haul	8.15	26.5	-3.191	.001	LH ≠ SH
	Short-Haul	18.03				
Television General	Long-Haul	38.64	720.0	-1.880	.060	LH = SH
	Short-Haul	48.14				
Internet	Long-Haul	74.38	2710.5	-1.218	.223	LH = SH
	Short-Haul	82.84				
Teletext	Long-Haul	28.61	346.0	-3.649	.000	LH ≠ SH
	Short-Haul	45.32				

Table 5.3.3: Mann Whitney U test results for the current temporal use of iTV sources by long-haul and short-haul participants. Note: Participants were allocated as ‘Long-Haul’ if their long-haul experience was equal to or greater than their short-haul experience.

Despite the appearance of the plot, the statistical tests (Table 5.3.3) show that only the interactive television sources (U 26.5, z -3.191, p<.01) and the teletext source (U 346.0, z -3.649, p<.001) are used temporally differently by the long-haul travellers in the planning process compared to the short-haul travellers. This may be interpreted as teletext and interactive television providing more relevant information for short-

haul travellers, while regular television (ads and travel shows) and the Internet cater equally well to both types of travellers (given their non-significant results). An overview of the content from interactive television and teletext providers supports this view (see Appendix 2A for review). Again, as before, the differences in source utility between the traveller groups are negligible (thus no tests were run), meaning that for the role assigned to the source by the traveller, the source is similarly useful in the minds of long-haul and short-haul participants.

By exploring the differences between the long-haul and short-haul traveller's typical use of interactive television temporal differences were found, but the two traveller groups were found to see the three sources to be similarly useful. Thus the notion that it was the content currently available on interactive television that explained interactive television's proximity to television rather than the Internet does not hold up in relation to utility. An alternative explanation may be related to the level of control that each medium offers. Interactive television, due to technological, design and market parameters, allows the user only limited control and choice over the information accessed, while the Internet is almost limitless in choice and generous in control. Alternatively, interactive television may not be as useful currently because it has not achieved as high a critical mass on the information provider side as the Internet has. However, it is not possible to determine the actuality of these factors as there were no measurements relating to them – highlighting a possible opportunity for future studies.

5.3.5 Investigation#1B Conclusion

The objective of Investigation#1B was to determine how current interactive television sources fit into the overall information source mix used by international travellers. That is, how participants already use interactive television in planning their holidays. The two-dimensional plot in Figure 5.3.2 (repeated in Figure 5.3.4) indicated that the current interactive television shopping areas, ads and travel shows are considered to be highly contributory, ongoing information sources by the participants. Clustering tightly together they are overall similar, however, there are substantial differences in evaluation when comparing long-haul and short-haul travel information needs and uses (as shown in Figures 5.3.3 and 5.3.5). It was suggested that these differences were mainly due to the content of the shopping areas, ads and travel shows catering more for the short-haul travellers than the long-haul travellers. Given the experienced, long-haul, independent traveller status of the majority of the participants, the overall location of the interactive television sources is clearly in the light of these travellers' information needs and subsequent uses.

The plots also showed that interactive television sources are used in a similar manner to their mass media and teletext source roots but different to their Internet roots. As there were no measures to explore the reasons behind this difference, it was proposed that the differences in interactivity, the nascency of the technology, the limited nature of the content and the television-based viewing environment may all contribute to interactive television's dissociation from its Internet roots. Overall this exploration provides a context against which to measure the experiment stimuli in Investigation#1C.

5.4 Investigation#1C: Travellers’ Use of Interactive Television for Long-Haul Travel – The Experiment Treatments

Having established participants’ current typical use of information sources in part one of the questionnaire, participants were exposed to one of six experiment stimuli. The six treatments were designed to compare two promotional vehicles along three levels of interactivity (Table 5.4.1).

Interactivity Option	Promotional Vehicle	
	TV Ad	Travel Show Segment
Control (Linear)	Control Ad	Control Show
Impulse (Brochure)	Impulse Ad	Impulse Show
Telescopic (Video)	Telescopic Ad	Telescopic Show

Table 5.4.1: Experiment design and the treatment cells.

Thus, the six treatments compared a travel ad with a segment in a travel show on the same long-haul destination in a non-interactive version (control groups), one version where the participant could request a brochure via the remote (Impulse approach) and the last version where the participant could watch a destination video via the remote (Telescopic approach) (see Chapter 4, Section 4.5 for more information).

5.4.1 Method, Measures, Preliminary Statistics

After watching the treatment stimuli, participants evaluated the specified ‘source’ in terms of when they would use it and how useful they would find it for planning a holiday to Western Australia (WA). The question was phrased so as to gain an

answer from everyone, regardless of the likelihood of visiting WA, thus for some it may have been more hypothetical than for others. However, it was deemed better to present it in a destination-specific, albeit somewhat hypothetical form than in an abstract form so that the question would have a context.

The scales for temporal use and source utility were the same as in Part#1 of the questionnaire. However, aside from the control treatments, two sets of measures for each dimension were taken. The first measure related to the promotional vehicle (ad or travel show) while the second measure related to the interactive opportunity (impulse: brochure request or telescopic: destination video). By having two measures, both the promotional vehicle and the interactive opportunity could be separately evaluated, and provided the opportunity to create a composite score. The source utility means and temporal use modes are summarised in Table 5.4.2.

Source	Ad or Show Evaluation					Impulse or Telescopic Evaluation				
	Utility Score		Temporal Score			Utility Score		Temporal Score		
	n	Mean	n	Mode	%	n	Mean	n	Mode	%
Overall	155	3.82	150	1	47	49	5.67	49	2	59
Ctrl Ad	15	3.00	14	1	86	N/A				
Ctrl Show	30	4.73	29	1	45	N/A				
Participants who chose to interact										
Imp Ad	9	3.67	9	1	67	10	6.00	10	1	60
Imp Show	10	5.00	10	2	60	10	5.80	10	1,2	50,50
Tscp Ad	16	5.00	16	1	44	16	5.50	16	2	50
Tscp Show	13	4.23	13	2	54	13	5.54	13	2	92
Participants who chose NOT to interact										
Imp Ad	19	2.74	17	1	53	N/A				
Imp Show	18	3.83	17	1	41	N/A				
Tscp Ad	9	3.22	9	1	44	N/A				
Tscp Show	16	4.44	16	1,3	31,31	N/A				

Table 5.4.2: Summary scores for the individual concepts of utility and temporal use of interactive treatments. Ctrl = Control; Imp = Impulse; Tscp = Telescopic. Utility Score: 1-7scale, Temporal Mode: 1-5.

Aside from indicating the plot positions of the treatments, the evaluations indicate that there may be overlaps in judgement of the elements in both the utility and temporal measures. That is, participants may not have clearly distinguished between the promotional vehicle and the interactive opportunity in their evaluations. The measures for the utility and temporal evaluations of the elements clearly ask for the evaluation only of the promotional vehicle or the interactive opportunity, respectively. Thus the vehicle utility (ad or show) should be similar between those that chose to interact and those that chose not to interact.

However, the utility scores in Table 5.4.2 for the Impulse Ad treatment suggest that a carry-over effect has occurred as the utility score for the vehicle with interaction (\bar{x} 3.67) is considerably more than the score given by those that chose not to interact (\bar{x} 2.74). Similar differences exist for the Telescopic Ad and Impulse Show, while the interacted-with Telescopic Show treatment reports a lower vehicle utility score than the non-interacted with version. It is important to keep this seeming effect in mind as it will also impact upon the combined evaluation scores and is indicative of the power of the interactive opportunities upon the viewing experience.

Interactivity Option	Promotional Vehicle		Overall
	TV Ad	Travel Show	
Control	Control Ad n.19	Control Show n.31	n.50
Impulse	Impulse Ad n.29 interacted: 10 (34%)	Impulse Show n.29 interacted: 10 (34%)	n.58 interacted: 20 (34%)
Telescopic	Telescopic Ad n.27 interacted: 16 (59%)	Telescopic Show n.29 interacted: 13 (45%)	n.56 interacted: 29 (52%)
Overall	n.75 interacted: 26 (35%)	n.89 interacted: 23 (26%)	n.164 interacted: 49 (30%)

Table 5.4.3: Treatment cell participation sizes.

Also at this point it is opportune to look at the actual numbers of those participating in each treatment cell. Overall there were 164 valid questionnaires returned. Fifty of these took part in the control treatments and 114 in the interactive treatments. Table 5.4.3 shows the individual cell sizes and also the number and percentage of the participants that interacted if given the opportunity.

Of the 114 participants that were able to interact with their treatment, 49 (30%) chose to do so (Table 5.4.3). More participants interacted with the telescopic opportunity (52%) than with the impulse opportunity (34%) and more interacted with the ad (35%) than the travel show segment (26%). These results seem to imply that the telescopic approach is the more desirable of the two. However, an examination of the individual cells and referring to answers from other parts of the survey, a better explanation of the interaction behaviour can be gained. This will be discussed later.

5.4.2 Findings

As in Investigation#1A and #1B, the utility and temporal use evaluations were recoded into the plot-able scales and plots generated. For clarity, each dimension will be explored individually (temporal then utility) before investigating the overall location of each treatment stimuli in the information source mix.

5.4.2.1 Temporal Use Analysis

The plot in Figure 5.4.1 presents the temporal evaluations of each of the treatment stimuli in statistical form while Figure 5.4.2 interprets them conceptually. In both cases, the individual elements of each stimulus (promotional vehicle and the interactive opportunity) are represented as well as a combination of the scores to give

an overall score for the treatment. For purposes of clarity, the axis of the statistical plot was constricted to a minimum of -1 and a maximum of 0 to better identify the locations of the various elements, while the conceptual plot extends to the complete temporal scale.

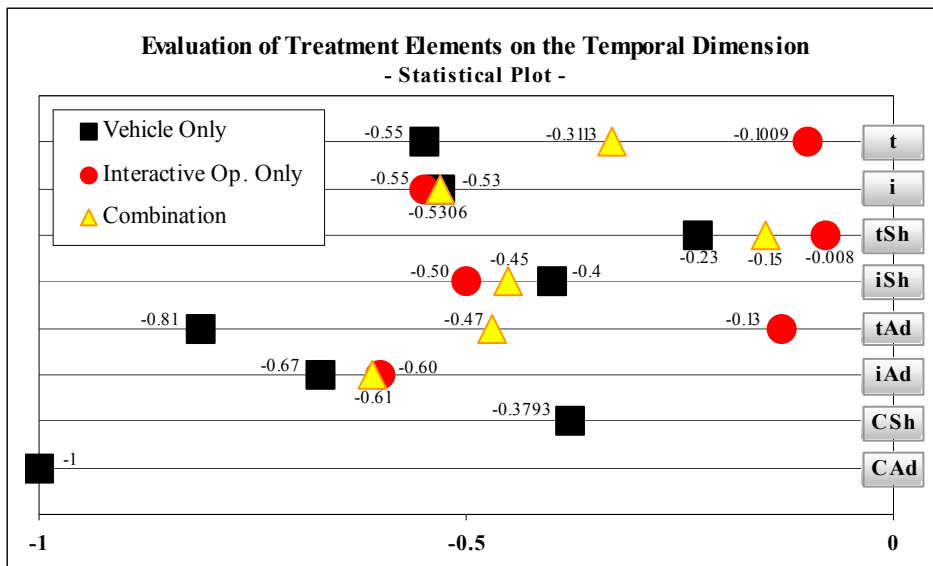


Figure 5.4.1: Statistical representation of temporal evaluations of the promotional vehicle, interactive opportunity and combination scores for each experimental treatment stimuli.

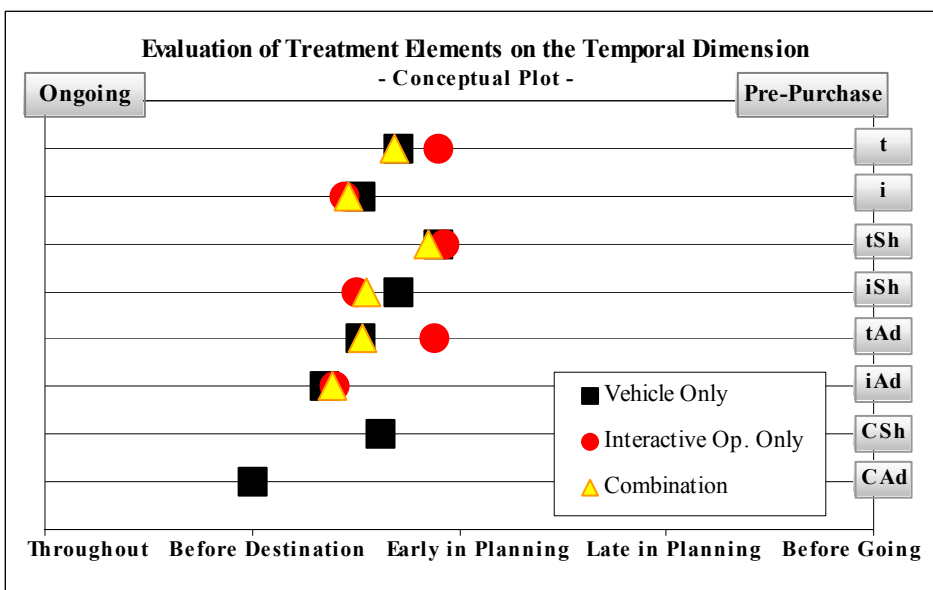


Figure 5.4.2: Conceptual representation of temporal evaluations of the promotional vehicle, interactive opportunity and a combination scores for each experimental treatment stimuli.

The plots indicate that all of the treatments’ stimuli would be used during the time of having to decide on a holiday destination (-1) and the early stage in the planning process (0). There is also a pattern that indicates that the promotional vehicle tends to be consulted before the interactive opportunity would be, except in the case of the Impulse Show treatments. In this case, participants see the brochure request as something they would use slightly before they were ready to watch the travel show. Otherwise, there is also a tight clustering of elements and treatments overall, which implies negligible differences between the treatments. However, Mann-Whitney U tests indicate that there are three significant differences. These significant findings are displayed in Table 5.4.4 while the complete results can be found in Appendix 5C.

The first significant difference was found when the interactive treatments were compared along interactive opportunity (Impulse or Telescopic) evaluations. The interactive opportunity scores (circles in plots) were found to be significantly different between the impulse and telescopic groups (U 184.0, z -2.220, p<.05), indicating that the telescopic opportunity would be used at a later stage in the planning process than the impulse opportunity.

Stimuli Element	Mann-Whitney U tests					Interpretation
	Groups	Mean Ranks	U	Z	1SIG.	
Impulse vs. Telescopic						
Interactive Op.	Imp.	19.68	184.0	-2.220	.013	Imp. < Tscp.
	Tscp.	27.66				
Impulse Show vs. Telescopic Show						
Interactive Op.	iShow	9.25	37.5	-2.240	.013	iShow < tShow
	tShow.	14.12				
Telescopic Ad vs. Telescopic Show						
Vehicle	tAd	12.50	64.0	-1.884	.030	tAd < tShow
	tShow	18.08				

Table 5.4.4: Significant results from Mann-Whitney U tests for differences.

A look at the plotted means of the two groups (Imp. -0.55, Tscp. -0.10) indicates that this difference is small, however, they are further apart than the vehicle or combination points. Since they both lie between -1 and 0, the significance of this finding may be more statistical than conceptual, however, this is in line with expectations.

The second significant finding echoes the first, however, this time when the two interactive travel show treatments are compared (U 37.5, $z = -2.240$, $p < .05$). Again, it is the telescopic treatment that is used later than the impulse opportunity in the planning process. Similarly, both plotted means for these two groups are near the same end of the -1 to 0 area (iShow -0.50, tShow -0.08), thus the significance of this finding may be more statistical than conceptual. As per the previous finding this may be explained by the fact that the impulse opportunity takes little time to participate in, while the telescopic opportunity requires the viewer's time and relevant involvement. Thus, the telescopic opportunity may only be taken up by viewers that are clear on their holiday destination and wish to gain deeper insight or indulge themselves in anticipation. The impulse response opportunity involving less of the viewer's time may be used by those even just considering the destination featured.

The third significant difference was found between the promotional vehicles of the Telescopic Ad and Telescopic Show treatments. As this difference was significant on the 1-tailed test (U 64.0, $z = -1.884$, $p < .05$), it implies that the Show would be watched at a later point in the holiday planning process than the Ad would be and the

distinctly opposite extremes of the plotted means (between 0 and -1; $t_{Ad} -0.81$, $t_{Show} -0.23$) support this. As addressed in Section 5.1.1, the evaluations of these vehicles may be a case of judgement overlap since what is being evaluated is the vehicle and yet it was only on this comparison and not between Impulse Ad and Impulse Show that such a significant difference occurred. Nonetheless, it is still possible to infer that the Telescopic Ad situation would be consulted before deciding on the actual destination to visit, while the Telescopic Show situation would be used after a destination has been chosen but still in the early stages of the planning process for more detail and immersion.

These three findings indicate that temporally, telescopic interactivity caters for a later stage of the planning process while impulse interactive opportunities would assist in choosing a destination. Furthermore, participants differentiated between a travel show with telescopic interactivity and an ad with telescopic interactivity, the former being used at a later stage. Thus, the impulse and telescopic approaches seem to be suitable for different roles in the planning process.

5.4.2.2 Source Utility Analysis

A similar tack was taken with the utility evaluations of the experiment treatments. Figure 5.4.3 presents the evaluations statistically, while Figure 5.4.4 illustrates the evaluations conceptually along the source utility dimension, with each separate element of the stimuli represented plus a combination score. For clarity of detail the utility scale on the statistical plot is confined from -1 to +2.5. Again, Mann-Whitney

U tests were carried out and the significant results are given in Table 5.4.5 (see Appendix 5C for complete test results).

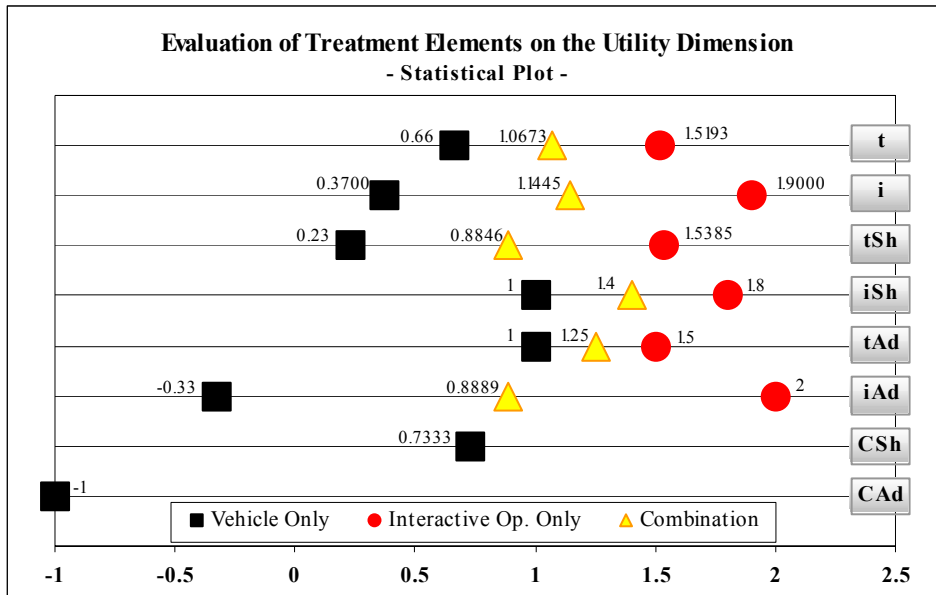


Figure 5.4.3 Statistical representation of utility evaluations of the promotional vehicle, interactive opportunity and a combination scores for each experimental treatment stimuli.

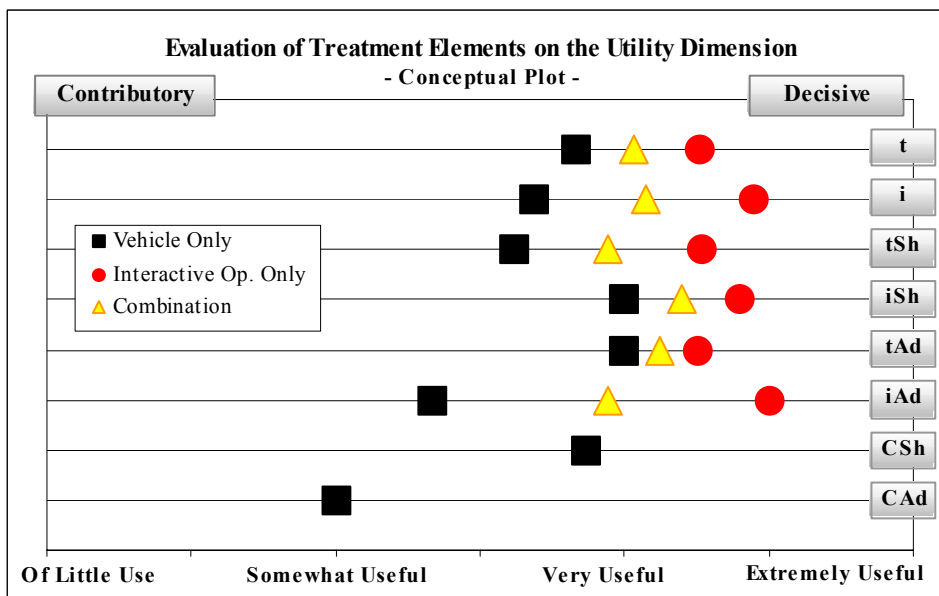


Figure 5.4.4 Statistical representation of utility evaluations of the promotional vehicle, interactive opportunity and a combination scores for each experimental treatment stimuli.

Figure 5.4.3 suggests that there are considerable differences between the usefulness of the treatment stimuli. The interactive opportunities (impulse or telescopic; circle) are generally seen as more useful than the promotional vehicles (ad or show; square) and the combination of such scores (triangle) are subsequently between the two. However, when comparing each element across treatment groups, little difference seems apparent as they are all positioned within a few decimal places of each other.

The Mann-Whitney U tests revealed only one significant difference (Table 5.4.5). This was between the promotional vehicle evaluations of the Telescopic Ad and Telescopic Show treatments at the one-tailed level (U 66.5, z -1.694, p<.05). The ranked means imply that the telescopic Ad was seen to be more useful than the same opportunity coming off from the travel show segment (tAd>tShow). This is supported by the large difference in the plotted means for the two groups: tAd +1.00, tShow +0.23.

Stimuli Element	Mann-Whitney U test					Interpretation
	Groups	Mean Ranks	U	Z	1SIG.	
Telescopic Ad vs. Telescopic Show						
Vehicle	tAd	17.34	66.5	-1.694	.045	tAd > tShow
	tShow	12.12				

Table 5.4.5: Significant Mann-Whitney U test results along the source utility dimension for the experimental treatments.

This outcome seems unusual, as one would expect that the travel Show segment would be more useful than the Ad given that it provides more information over a greater time. While this notion is corroborated by comments made by participants about the Ad and the travel Show segment (Question 1 in Part#2), further analysis of these comments supports the significant finding (see Appendix 4C for short list of

thought categories). Participants that viewed the Telescopic Ad often referred to the content of destination video, while those viewing the travel Show made no mention of the destination video content. It is suggested that this may be because the information-rich destination video had a greater impact upon the information-poor Ad than it did upon the already information-rich travel Show segment. Thus, in this case it seems that the evaluation of the Ad is enhanced by the experience with the telescopic content (destination video) more so than for the Show.

5.4.2.3 Overall Analysis

When the temporal and utility dimension analyses are brought together, the function or purpose of each experiment treatment can be gauged. Essentially, a source is said to have a unique purpose if a significant difference was found between both the temporal use and source utility means on the same element. If neither or only one dimensional evaluation was found to be significantly different, the treatments are conceded to be similar. Figure 5.4.5 represents the statistical plot and Figure 5.4.6 the conceptual plot. The Mann-Whitney U test results have been summarised in Table 5.4.6 (complete table available in Appendix 5C).

The statistical plot clearly shows elements clustering together. For example, the interactive opportunity only scores (red circles) concentrate on the upper most part of the plot and cluster into the impulse and telescopic treatment groupings. The promotional vehicle scores seem not to have any particular pattern but are of the least utility and temporally most dispersed, while the combination scores sit in between the vehicle and interactive opportunity ones, as would be expected.

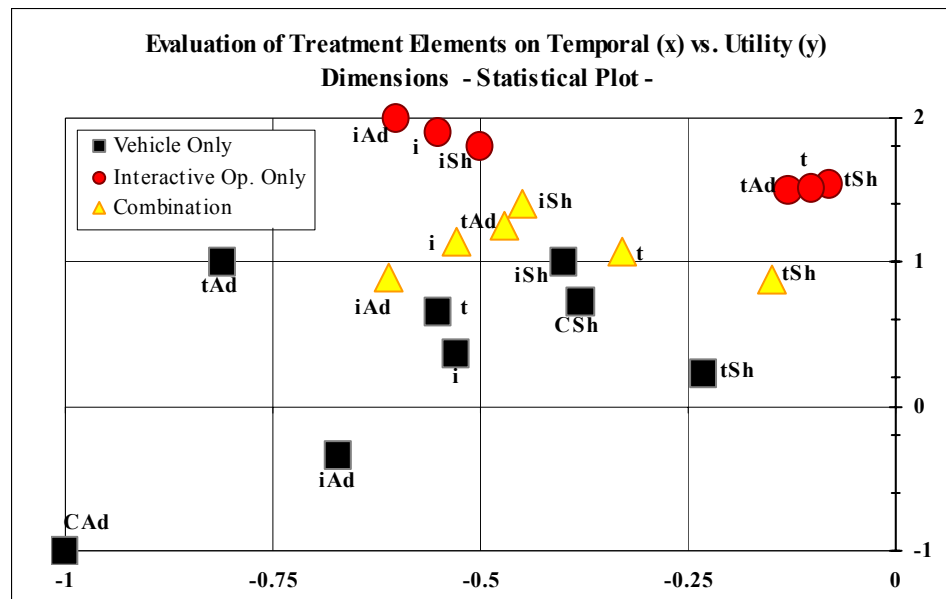


Figure 5.4.5: Statistical plot of experimental treatment stimuli along the temporal use and source utility dimensions – by promotional vehicle only (ad or show), interactive opportunity only (brochure or video) and as a composite source location. Note: Axes scales have been constrained for clear presentation of details.

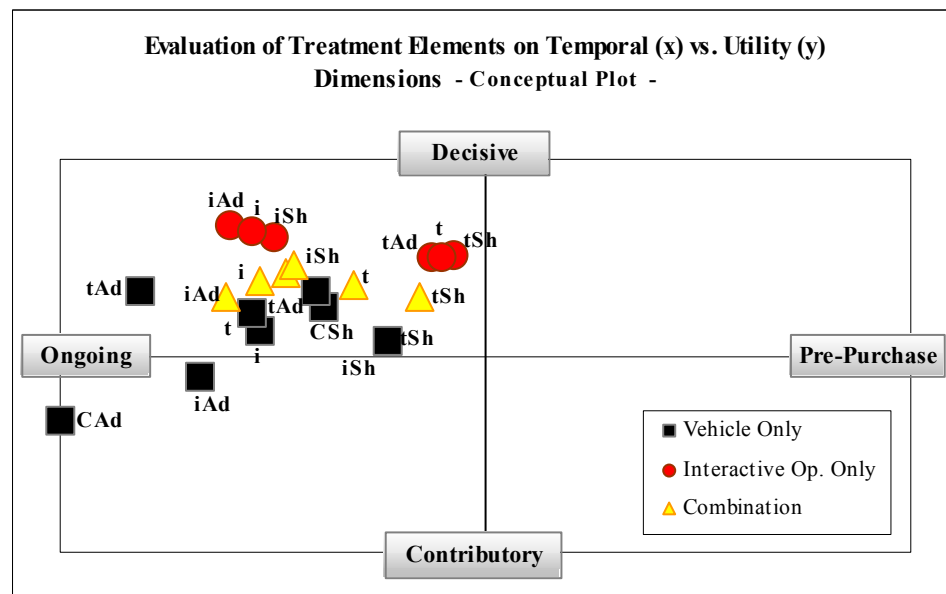


Figure 5.4.6: Conceptual plot of experimental treatment stimuli along the temporal use and source utility dimensions – by promotional vehicle only (ad or show), interactive opportunity only (brochure or video) and as a composite source location.

The conceptual representation in Figure 5.4.6 shows even clearer that the interactive treatments, when scored either separately as promotional vehicles or interactive opportunities, or in combination, tend to be utilised in the early planning stages and mostly perform a decisive role in the holiday planning process. Looking at the individual treatments' combination locations (yellow triangles), the Impulse Ad combination seems to be the first source to be consulted early in the process and the Telescopic Show combination, the last. Interestingly the Telescopic Ad and Impulse Show combinations were evaluated by participants to be very similar in both temporal use and source utility as they are practically sharing the same location on the plot.

As the previous discussion on the source utility dimension suggested, the similarity of these two promotional vehicle/interactive opportunity combinations may be explained by the evening out of the level of information that occurs. That is, the low-information Ad is optimally enhanced by the telescopic opportunity (destination video) to be of equal usefulness and function as the high-information travel Show that is enhanced by the impulse response opportunity to request a brochure. This enhancement process is also evident when the control treatments are considered. The Control Ad treatment scored rather low on the utility aspect and would be one of the preliminary sources consulted. However, the Control Show, being a high-information source is already relatively useful in the decisive half of the plot and would be consulted further along the process. The Ad has been significantly enhanced by the interactive opportunities, whether it be the impulse or telescopic approach (though more so by the telescopic), while the enhancement to the travel

Show segment has been less dramatic. Interestingly, while the interactivity has pushed the Ad as a source further along the temporal dimension, the impulse response option has actually located the travel Show in a slightly more ongoing role than if no interactive opportunity was given.

While the plots provide interesting visual information only statistical tests will provide answers to whether any of the treatments have successfully distinguished themselves to have a unique purpose in the holiday planning process. The summary in Table 5.4.6 shows that four separate significant differences were found. Two comparisons make a clear distinction between the impulse response and the telescopic opportunities, with both cases showing the telescopic opportunity is used at a later stage of the planning process. The other two significant findings concern the promotional vehicle evaluations for both temporal use and source utility dimensions. This implies that a significant difference exists between the vehicles of the Telescopic Ad and Telescopic Show treatment groups.

Treatment Stimuli Comparisons					
	Impulse vs. Telescopic	iAd vs. tAd	iShow vs. tShow	iAd vs. iShow	tAd vs. tShow
Temporal Use					
Vehicle	N	N	N	N	Y
Interactive Op.	Y	N	Y	N	N
Source Utility					
Vehicle	N	N	N	N	Y
Unique Location?	N	N	N	N	Y

Table 5.4.6: Summary of Mann-Whitney U significant test results for temporal use and source utility evaluations, plus subsequent overall differentiation status.

Temporally, the Ad treatment is considered more around the time of deciding upon a destination while the Show treatment is consulted after this stage but still in the early

parts of the planning process. This result corresponds to the purposes of the Ad (create awareness) and the travel Show segment (showcase experiences available, create further desire, provide more information). Utility wise, the Mann-Whitney U tests indicated that the Telescopic Ad vehicle was more useful than the Telescopic Show vehicle. This was unexpected since the control treatments rate the travel Show more useful than the Ad, however, it may be explained by a halo-effect. That is, even though participants were asked to evaluate the promotional vehicle only, their experience of using the telescopic function (watching the destination video) coloured their evaluation of the promotional vehicle. For instance, the short, information-poor Ad is substantially enhanced when an information-rich destination video is viewed in conjunction with it and in turn the evaluation of the Ad itself is increased. However, the travel Show segment has already considerable information and thus the impact of a destination video is not as dramatic. Thus, since the enhancement upon the Ad is more sizable it means that it is seen as more useful than the Show. However, this usefulness must be considered in the overall purpose or function that each source would have. Given an Ad's primary objective of creating awareness and enticing travellers the Telescopic Ad combination can be said to be useful to decide on the destination, where as the Telescopic Show is of more use to plan the holiday at the early stages of the process by providing more concrete ideas and information than the Ad. Nonetheless, the Telescopic Ad and Telescopic Show are said to be significantly different and fulfil unique purposes in the holiday planning process.

5.4.3 iTV's Location in the Information Mix

Having explored how each experimental treatment relates to one another in the grid, these can now be compared to the rest of the information sources used for holiday planning as per participants' previous experiences. Again, the two-dimensional plots were created for all of the information sources concerned.

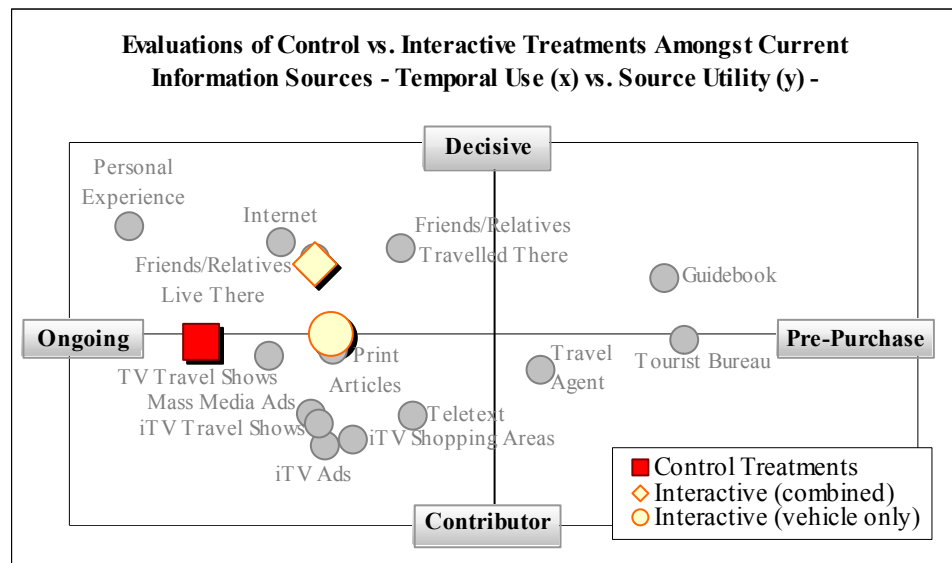


Figure 5.4.7: Conceptual plot of Part#1 holiday information sources and experiment treatments - control groups versus interactive groups.

Figure 5.4.7 gives the most basic representation of the interactive and non-interactive experimental sources amongst the current sources used by participants. The control treatment groups (dark square) consist of the promotional vehicle evaluation, while the interactive treatment groups are divided into promotional vehicle (ad or show; light circle) and a combination of the vehicle and interactive opportunity evaluations (light diamond).

As expected, the control treatments are essentially nothing more than television media and thus nestle amongst the mass media on the edge of the contributory

ongoing quadrant. The interactive treatments’ promotional vehicle evaluations alone should differ little from the control treatments, however, participants who had the opportunity to interact found that the Ad or the travel Show was a slightly more helpful source than the control treatment groups did and also saw them as being used at a slightly later time. However, when this is subjected to statistical analysis (Table 5.4.7), no significant difference is found between the control and interactive evaluations of the promotional vehicles (Temporal Use: U 942.0, z -.783, p>.05; Source Utility: U 954.0, z -.983, p>.05).

When participants were asked to evaluate the interactive opportunity (impulse or telescopic) and this was combined with the vehicle evaluation, the result was considered to be quite an influential source – very close to the Internet and personal advice. This combined evaluation of the interactive treatments was statistically examined in two parts.

		Mean Ranks		U	Z	1SIG	Inter-pretation
Mann-Whitney U tests from Figure 5.4.7							
Control (Vehicle) vs. Interactive (Vehicle)	T	43.91	47.88	942.0	-.783	.217	C(v) = I(v)
	U	44.20	49.63	954.0	-.983	.163	
Control (Vehicle) vs. Interactive (Combination)	T	41.28	51.08	829.0	-1.859	.032	C(v) < I(c)
	U	40.08	54.32	768.5	-2.551	.006	
2 related samples, Wilcoxon Test, (n)							
Interactive (Vehicle) vs. Interactive (Combination)		Neg.	Pos.	Ties	z	2SIG	I(v) < I(c)
	T	6.50 (4)	9.17 (12)	32	-2.285	.011	
	U	14.75 (4)	19.52 (33)	11	-4.522	.000	

Table 5.4.7: Temporal (T) and utility (U) statistical test results for potential relationships amongst treatment groups in Figure 5.4.7. All evaluations for control treatment groups are vehicle only; all interactive group evaluations are based on combination of vehicle and interactive opportunity, unless otherwise stated.

A clear difference was found between the control treatments' and the interactive treatments' overall scores (Temporal Use: $U = 829.0$, $z = -1.859$, $p < .05$; Source Utility: $U = 768.5$, $z = -2.551$, $p < .01$), suggesting that the interactive opportunity is responsible for this difference. The second test confirms this as it finds a significant difference between the vehicle only and combination evaluations of the interactive treatments (Wilcoxon Test; Temporal Use: $z = -2.285$, $p < .05$; Source Utility: $z = -4.522$, $p < .001$). Thus, the interactive opportunity does increase the temporal and the utility evaluations for the interactive experience, making it a more decisive and less ongoing source than the linear (control) experience.

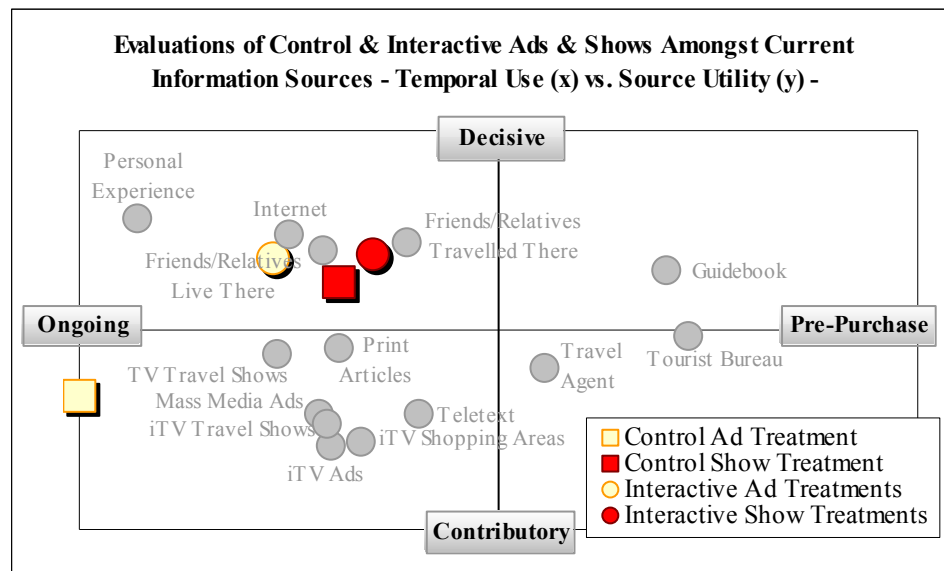


Figure 5.4.8: Conceptual plot of Part#1 holiday information sources and experiment treatments based on promotional vehicle type – ad or travel show segment. Note: Axes constrained for detail clarity

Since Ads and travel Shows have unique purposes in the marketing mix, treatments were separated into promotional vehicles (Figure 5.4.8). The plot insinuates such a difference, however, not to the extent one may expect for the interactive groups. Although both the interactive Ad and Show treatments (combined scores, circles) are

in the decisive ongoing quadrant (as was the overall interactive score), the Show treatment is seen to be a slightly more pre-purchase source than the Ad.

			Mean Ranks	U	Z	1SIG	Inter-pretation	
Mann-Whitney U tests from Figure 5.4.8								
i)	Control Ad vs. Control Show	T	16.25	24.78	122.5	-2.347	.001	CA < CS
		U	15.27	26.87	109.0	-2.832	.002	
ii)	Interactive Ad vs. Interactive Show	T	22.04	28.35	222.0	-1.612	.054	IA = IS
		U	25.54	24.39	285.0	-.284	.389	
iii)	Control Ad vs. Interactive Ad	T	14.61	23.67	99.5	-2.547	.005	CA < IA
		U	13.00	25.62	75.0	-3.274	.000	
iv)	Control Ad vs. Interactive Show	T	10.75	24.02	45.5	-3.885	.000	CA < IS
		U	12.40	24.13	66.0	-3.210	.000	
v)	Control Show vs. Interactive Show	T	24.90	28.52	287.0	-.903	.184	CS = IS
		U	25.43	29.04	298.0	-.855	.197	
vi)	Control Show vs. Interactive Ad	T	28.69	27.23	357.0	-.354	.362	CS = IA
		U	26.48	30.83	329.5	-1.005	.158	

Table 5.4.8: Temporal (T) and utility (U) statistical test results for potential relationships between treatment groups in Figure 5.4.8. All evaluations for control treatment groups are vehicle only; all interactive group evaluations are based on combination of vehicle and extension, unless otherwise stated.

This concurs with literature’s propositions that Ads are to entice and make aware, while travel Show segments are there to nurture this initial interest by providing inspiration through a virtual tour. However, this observation was not supported by the statistical test detailed in Table 5.4.8, which found the interactive Ad and interactive Show to be similar both in temporal use and source utility (part ii; Temporal Use: U 222.0, z -1.612, p>.05; Source Utility: U 285.0, z -.284, p>.05).

The control treatment groups on the other hand are located rather differently in Figure 5.4.8 than their overall marker in Figure 5.4.7 suggested. While the Control Ad sits well in the contributory ongoing corner (light square), the Control Show occupies the same area as both of the interactive treatments in the decisive ongoing

quadrant (dark square). This implies that the Control Show is somewhat removed from previous mass media use and has a more substantial impact upon holiday plans, while the Control Ad is typical of previous mass media use and is of little weight to the decision making process. It is suggested that methodological issues may be influencing this great divide and amplifying the evaluations (see Section 5.4.4 Phase Three Conclusion for comment). However, the distance between the control treatments was tested and found to be significant, thus validating the observation that they are different in their temporal use and source utility (part iv, Temporal Use: $U\ 122.5, z\ -2.347, p<.05$; Source Utility: $U\ 109.0, z\ -2.832, p<.01$).

There were two other significant differences found between the treatments in Figure 5.4.8. The first identifies the distances between the Control Ad and the interactive Ad as significant (part vi, Temporal Use: $U\ 99.5, z\ -2.457, p<.05$; Source Utility: $U\ 75.0, z\ -3.274, p<.001$). The second acknowledges the separation of the Control Ad and the interactive Show to be significant (part vii, Temporal Use: $U\ 45.5, z\ -3.885, p<.001$; Source Utility: $U\ 66.0, z\ -3.210, p<.001$). Both support the visual differences apparent in the grid, meaning that both the interactive Ad and interactive Show treatments would be more useful than the Control Ad and would be used at a later stage in the planning process.

When treatments are further dissected into the interactive opportunities alone (impulse and telescopic; Figure 5.4.9) participants who chose to view the destination video (telescopic, square) from either the Ad or the Show evaluated it to be potentially useful to them at a slightly later stage than those who requested the

brochure (impulse, light square). However, since this slight difference is not statistically different (Table 5.4.9, part i, Temporal Use: U 214.5, z -1.344, p>.05; Source Utility: U 252.5, z -.491, p>.05), the brochure request and destination video treatments can be considered to fulfil similar roles.

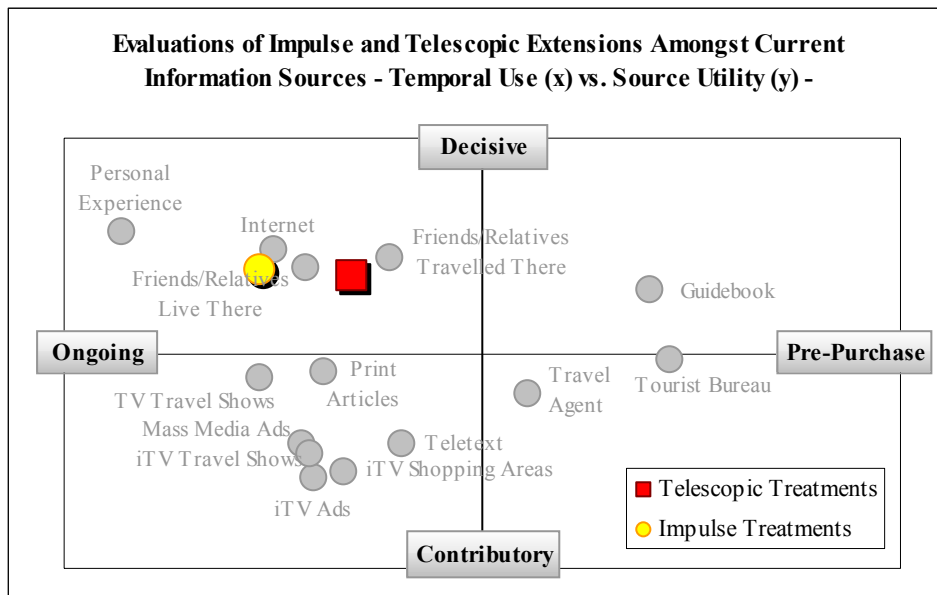


Figure 5.4.9: Conceptual plot of Part#1 holiday information sources and experiment treatments based on interactive opportunity type – impulse request or video.

			Mean Ranks	U	Z	1SIG	Inter-pretation
Comparisons from Figure 5.4.9							
i)	Impulse vs. Telescopic	T	21.29	26.60	214.5	-1.344	.089
		U	25.71	23.71	252.5	-.491	.312
Significant Comparisons from Figure 5.4.10							
v)	Imp. Ad vs. Tscp. Show	T	8.65	15.58	31.5	-2.222	.013
		U	12.60	11.54	59.0	-.378	.352

Table 5.4.9: Temporal (T) and utility (U) statistical test results for potential relationships between treatment groups in Figures 5.4.9 and 5.4.10. Note: only significant results are shown for Figure 5.4.10 tests, see Appendix 5C for full results. Interactive group evaluations are based on combination of vehicle and interactive opportunity, unless otherwise stated.

Both the vehicle and interactive opportunity positions can be broken down further into the individual interactive treatments (Figure 5.4.10). Again, they are located in the decisive ongoing quadrant of the plot, very close to the Internet and personal sources. In this plot circles represent the Ad treatments and squares represent the

Show treatments, while dark grey identifies the telescopic and light grey the impulse opportunities.

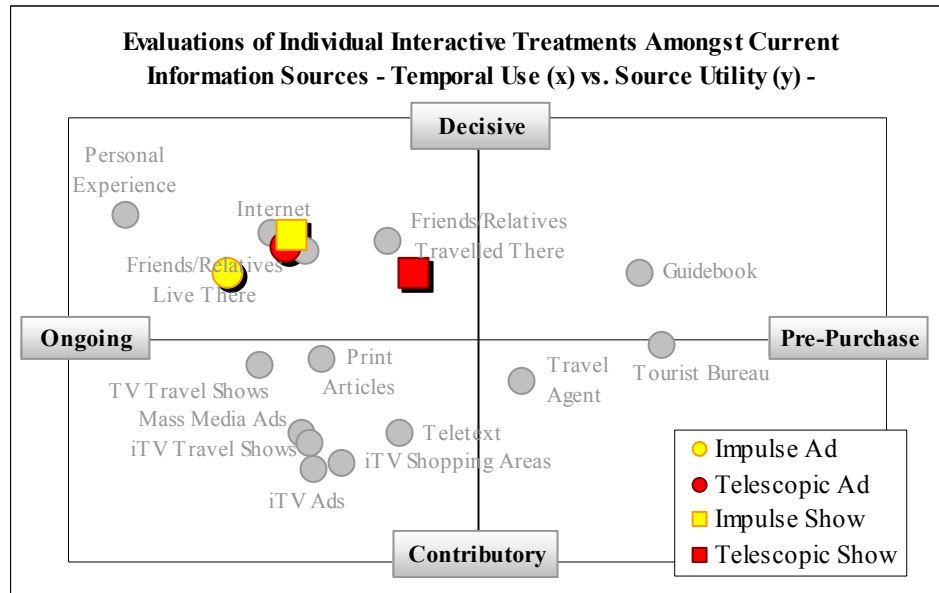


Figure 5.4.10: Conceptual plot of Part#1 holiday information sources and individual interactive treatments. Interactive groups shown as combination evaluations (vehicle + interactive opportunity).

This plot implies that both the Show treatments are slightly closer to the pre-purchase end of the scale than the Ad treatments. Interestingly, the Impulse Show combination and the Telescopic Ad combination share almost the same location, while the Impulse Ad and the Telescopic Show occupy the extremities of the group of four.

Thus, out of all four interactive treatments, the Impulse Show combination and the Telescopic Ad combination appear to serve similar purposes, while the Impulse Ad combination caters to the very early stages of the holiday planning and the Telescopic Show a slightly later stage. The similarity between the Impulse Show and Telescopic Ad may be explained that they both satisfy the desire for more

information through interactivity and that the resulting information is considered to be of similar quantity and thus could almost be a substitute for one another. The lack of information supplied by the Impulse Ad combination and the extra information supplied by the Telescopic Show combination put them on the outside of these two.

From the statistical tests there was only one significant difference between the four interactive treatments (Table 5.4.9). This was along the temporal dimension between the Impulse Ad and Telescopic Show interactive combinations (part v, Temporal Use: U 31.5, z -2.222, p<.05). The observation that the Impulse Show and Telescopic Ad groups seemed to share the same position was reinforced by the non-significant test result (part vi, Temporal Use: U 79.0, z -.055, p>.05; Source Utility: U 74.0, z -.319, p>.05). Thus, the outer two groups are used at different stages of the planning process, while the Impulse Show and Telescopic Ad combinations are considered to have similar purposes.

Comparison			Mean Ranks					n	Chi ²	df	SIG.	Inter-pretation
			Trmt	PExp	FRI	FRt	Web					
i	iAd vs. P#1	T	2.44	3.75	2.94	3.19	2.69	8	4.602	4	.331	iAd = P#1
		U	2.67	2.94	3.17	3.22	3.00	9	.805	4	.938	
ii	tAd vs. P#1	T	2.80	2.15	3.20	3.20	3.65	10	6.487	4	.166	tAd = P#1
		U	2.54	3.71	3.13	2.58	3.04	12	4.976	4	.290	
iii	iShow vs. P#1	T	3.17	2.50	2.92	2.92	3.50	6	2.026	4	.731	iShow = P#1
		U	2.33	3.00	2.83	3.28	3.56	9	3.497	4	.478	
iv	tShow vs. P#1	T	3.68	1.91	3.00	3.50	2.91	11	12.34	4	.015	tShow ≠ PExp
		U	1.96	4.21	3.17	2.75	2.92	12	15.22	4	.004	

Table 5.4.10: Temporal (T) and utility (U) Friedman test results for potential relationships identified in Figure 5.4.10 between treatment groups and selected Part#1 sources. (Part#1 sources: Personal experience, friends/relatives who live there, friends and relative who travelled there and the Internet.)

Given the thorough analysis amongst the treatments, it is also important to gauge how they compare to common information sources that surround them in the decisive ongoing quadrant as gauged in Part#1 of the questionnaire. Table 5.4.10 details the

results of the Friedman tests carried out between each interactive treatment and the four different Part#1 sources (personal experience, friends/relative who live there, friends/relatives who travelled there and the Internet).

Given that the eight markers shared a very small space, it is no surprise to find that only one treatment is different from a Part#1 source (part iii, Temporal Use: χ^2 12.34, $p < .05$; Source Utility: χ^2 15.22, $p < .005$). From the mean ranks (tShow \bar{x} 3.68, PExp \bar{x} 1.91) it seems that in the temporal dimension the Telescopic Show combination is used at a later stage in the planning process than personal experience; it is less of an ongoing source and closer to the pre-purchase end of the process. However, on the operational dimension, it is personal experience that seems to be more decisive than the Telescopic Show combination (tShow \bar{x} 1.96, PExp \bar{x} 4.21). Thus, while the Telescopic Show treatment scored similarly to both friend/relative sources and the Internet sources, it is the only treatment that is different from the personal experience source.

5.4.4 Investigation#1C Conclusion

From this examination of the iTV treatments and the participants' previous information source use, some interesting observations have been made. It was established that while the control and interactive vehicles seemed to be evaluated differently, they were in fact similar. Rather the distinction lay in the interaction with an interactive opportunity. By interacting with the ad or show for a brochure request (impulse) or destination video (telescopic), the media came to hold more

weight in the planning process and began to shift slightly away from the ongoing role held by the control media and towards a more pre-purchase role.

Furthermore, neither the vehicle nor interactive opportunity with which a participant interacted made a difference in itself to the temporal or utility plot location. Thus, Ad and Show interactive treatments were considered to be similar, as were the impulse and telescopic grouped treatments. However, control treatments did find differentiation based on the vehicle, with the control Show being similar to the interactive Ad and Show, but significantly different to the control Ad.

When interactive treatments were considered separately, the Telescopic Ad and Impulse Show treatments were found to be similar, while the Impulse Ad and Telescopic Show treatments were found to be statistically different, as was suggested visually by the plot. In comparison to the four Part#1 sources located in the same quadrant, only the interactive Telescopic Show treatment was found to be significantly different from the personal experience source. Thus, except for the one instance, the experiment's interactive treatments (when interacted with) were considered to be essentially in the same league and meet similar purposes to the three types of personal sources and the Internet that participants had used in the past.

As promising as this result is for interactive television, it must be taken with caution. The distance between the participants' previous use of interactive television sources and those of the experiment is noteworthy. There are a number of reasons why this may be so. Although it may be a true reflection of how participants would use the

given media in the case of planning a holiday to Western Australia, it may be influenced by methodological factors. One possibility is that participants may have had trouble applying realistic judgements on the hypothetical situation given in the question. Or perhaps they assigned a higher utility score to the interactive media they were exposed to in order to please the researcher. Another possibility is that since they had just recently experienced the media they may have not been able to hold it in true comparison to other sources potentially available to them. In conjunction to this, the difference would then be further exasperated by the lower scores they attributed to previous interactive television source use which may have been influenced by incorrect recall due to the passing of time.

Despite these possible amplifiers of the utility scores of the interactive treatments, the attitudes of participants towards the interactive opportunities (impulse and telescopic) from either the Ad or the Show were very positive (Impulse \bar{x} 6.09, Telescopic \bar{x} 5.53, on a 1-7 scale). Furthermore, when asked whether they would interact for the respective extensions again, 100% said they would. Thus, it is not a question of whether participants would request a brochure or watch a destination video in the future, rather it is a question of how realistic the location of such sources is to the overall information source mix. Since such further investigation is beyond the scope of this research, one can only suggest that since the control treatments are relatively close to participants' previous use of mass media sources, a more realistic estimation by participants on the interactive sources may not change their location too drastically.

5.5 Concluding Discussion

The above discussion into the temporal and operational positions of the participants' past and experimental sources has been thorough and the following paragraphs will attempt to put the learnings into something of a nutshell. The three phase analysis approach built up the understanding of the information source use landscape of independent international travellers from their current (ie. past) use of information sources to the potential use of interactive television sources, in long-haul holidays in particular.

Investigation#1A not only established the landscape of information source use but also put into question previous literature's categorisation of information sources. Three main groups appeared in the plot, with the first 'decisive' group containing most personal sources and, surprisingly, the Internet. The travel agent was displaced from its literature attributed 'personal' source group, as it appeared instead with the tourist bureau and the guidebook in the 'pre-purchase' (second) group. It is suggested that the Internet's ability to provide factual as well as far-ranging personal-style information has located it with the authoritative personal sources, while the travel agent's location may be due to a change of focus in its role for international travellers towards official information and product distributor. The third and final grouping included interactive television sources, mass media and teletext and thus maybe tagged as the 'mass media' group. However, within this group, both mass media content sources were at one end, while the interactive television and advertising sources were concentrated at the other, with teletext near by. This

grouping highlights the television background of most sources and how, despite the various levels of interactivity required to attend to them, they are considered in a similar light for international holiday planning purposes.

This initial plot also emphasized how different the Internet and interactive television actually are in their current forms. Discussions with some participants indicated that if the same range of information and booking ability offered by the Internet was available through interactive television, they would use it (see Appendix 4E for The Lab Session notes). However, current interactive television offerings in the international – especially independent – travel market are limited to package holidays, selected flights and short destination descriptions which may not satisfy the information and shopping requirements of the current sample as well as it could. Given this and in conjunction with its relatively short existence in people's consciousness, interactive television is not considered as often as it could be as a valuable holiday information source, as highlighted by the less than 40 participants who were able to rate it for past temporal use and source utility purposes.

The detailed analysis of the experiment treatment stimuli on separate and overall dimensions concluded in a few significant findings. Temporally, the telescopic opportunity was found to be used at a later stage than the impulse response opportunity overall and in particular when the two interactive travel show treatments were compared. Analysis of the promotional vehicle evaluations found the Telescopic Show treatment was found to be used at a later stage than the Telescopic Ad treatment. Of these three findings it is only the latter that would hold to be

conceptually as well as statistically significant. In terms of source utility, only the Telescopic Ad treatment was found to be significantly more useful than the Telescopic Show treatment when vehicle evaluations were considered. Thus, as the criteria for a treatment to have a unique purpose was to be significantly different on the same evaluation for both temporal use and source utility dimensions, there was only one significant overall finding. The only treatment with a distinct purpose was the interactive Telescopic Show treatment on the promotional vehicle evaluation when compared to the interactive Telescopic Ad treatment. The evaluations of past source use (light grey markers) and experimental treatment source use along the temporal and utility dimensions are summarised in Figure 5.5.1.

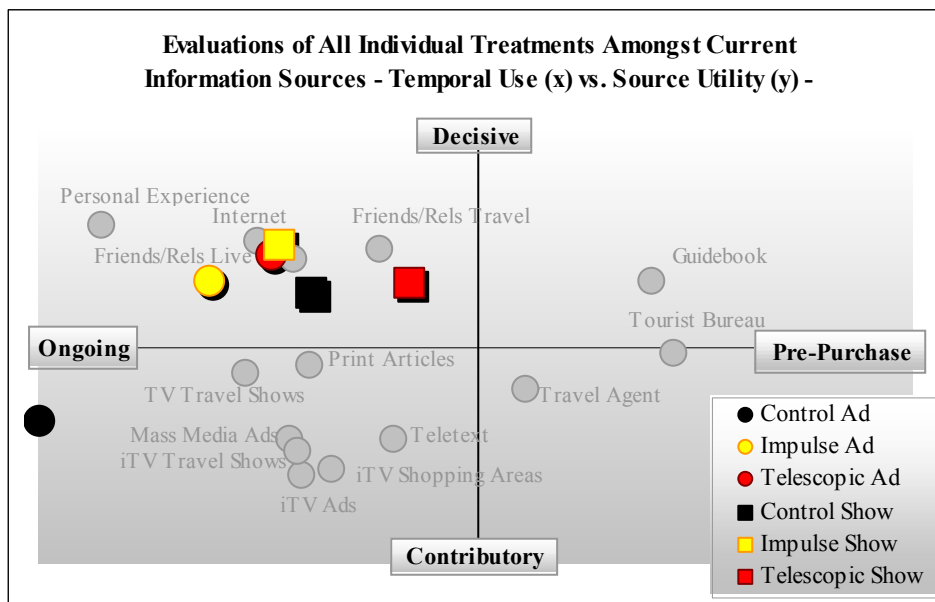


Figure 5.5.1: Temporal use and source utility plot of the experiment treatments over the information sources used in the past by participants (measured in Part#1 of the questionnaire).

The analysis located the four interactive treatments in close proximity to each other in the decisive ongoing quadrant of the plot and thus they were quite similar to each other. However, while analysis of the overall evaluations found that the Telescopic

Ad and Impulse Show treatments were of similar purpose, the Impulse Ad and Telescopic Show treatments were significantly different in their use, especially temporally. Meanwhile, the control treatments were significantly distinct from each other. The control ad was located in the ongoing contributory quadrant, left of the mass media sources, meaning that participants would see it as a valuable source as early as deciding on which destination to holiday at. The control show, near the interactive treatments, would be used at a later stage to fill in the details of where to go and what to do at that destination.

In addition, the control ad was significantly different from the interactive treatments while the control show was seen to be similar. When compared to the information sources typically used by the participants in the decisive ongoing quadrant, the interactive sources were considered to be statistically similar to the personal experience source, both friends and relatives sources and the Internet source. The exception was the Telescopic Show source, which was deemed to be significantly different to the personal experience source in both source utility and temporal use.

The proximity of the interactive treatments to the personal and Internet sources was very surprising considering the distance of previous interactive television use. While it may be an accurate reflection of how participants gauge themselves to use such media in organising a trip to Western Australia, it is suggested that such highly decisive roles are unrealistic for what is still an evolving media firmly based in the mass media culture. It is proposed that participants may have been over-enthusiastic in their evaluation of the interactive treatments due to the experimental situation and

did not evaluate them realistically in relation to other sources. However, since control treatments averaged near the mass media sources, the realistic positions of the interactive treatments may not be that drastically different. This is supported by the very positive attitudes to the media and extensions as well as *all* participants who interacted (100% of 49) saying they would do so again in the future (question 5b in part#2 of the questionnaire). Thus it is not whether individuals would interact, but rather how accurately their actual use of interactive television media would match their proposed roles.

5.6 Chapter Summary and Preview

Thus, while interaction with media has been shown to increase the source's decisive ability and decrease its ongoing role, the results of the study must be taken in the context of the experiment and any influences this may have upon realistic use of interactive television. However, there are other factors that may stand to explain in part participants' evaluations of the interactive television treatments. These include an individual's experience with other interactive media, their travel and planning experiences and their familiarity with the destination in question. These are explored in Chapter 6.

Chapter #6

Investigation#2: Understanding Possible Pre-Dispositions Towards Interactive Television

Chapter Overview

This chapter explores how an individual's particular pre-dispositions may influence their attitudes towards and the attractiveness of interactive television. The pre-dispositions investigated are a participant's familiarity with the destination (Western Australia), their previous travel experience and holiday planning experience, and their experiences with interactive media such as teletext, the Internet and previous interactive television. The chapter closes with concluding remarks and a preview of the ensuing chapter.

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6.1 Pre-Dispositions to Interactive Television

Pre-dispositions refer to “a previous inclination or favourable state of mind” to or to do something (Friedrichsen, 1992, p1652). In exploring a new technology such as interactive television it is also interesting to explore the possible pre-dispositions that may contribute to a person’s understanding of, tendency to use, or inclination towards that technology. The three areas of pre-disposition to be explored were familiarity with the destination, previous travel and planning experience and experience with interactive media. Each is addressed individually.

To establish participants’ attitudes towards interactive television a number of factors were taken into consideration. Firstly, it was noted whether participants interacted with their treatments or not. Secondly, participants were asked to evaluate interactive television as to its use as a holiday planning source for a holiday to Western Australia (Figure 6.1.1; for more details see Chapter 4, Section 4.5.3.4).

5c. Please compare the experience you just had (requesting a brochure directly via the television) with more traditional ways for getting destination information?
Please circle one number to indicate how attractive each item is.

	Unattractive			Very Attractive			Would Not Use	
Interactive digital television (as in this case)	1	2	3	4	5	6	7	0
Freecall phone number (featured in the ad)	1	2	3	4	5	6	7	0
A website address (featured in the ad)	1	2	3	4	5	6	7	0
Teletext service	1	2	3	4	5	6	7	0
A travel agent	1	2	3	4	5	6	7	0

Figure 6.1.1: An example of the attractiveness of interactive television measures in part two of the questionnaire.

On average interactive television scored a mean of 4.49 on the 1 to 7 scale (Table 6.1.1). This places it as the second most attractive source to get further destination

information from, behind the Internet and ahead of a freecall, a travel agent and teletext. To see whether these sources were significantly different in their attractiveness as destination information sources a series of Friedman and Wilcoxon-Signed-Rank tests were conducted (Table 6.1.2). The first Friedman test found a significant difference between the five sources (Round 1: χ^2 227.582, $p < .05$).

Information Source	iTV Attractiveness Mean	Rank
Website / Interent	5.93	1
Interactive television	4.49	2
Freecall	3.99	3
Travel Agent	3.14	4
Teletext	2.63	5

Table 6.1.1: Average scores for sources' attractiveness as an information sources for travel to Western Australia (1-7scale).

Round	Test	Information Source					
		iTV	Freecall	Internet	Teletext	Travel Agent	
1	Friedman Mean Ranks	3.34	2.94	4.27	2.10	2.35	
	χ^2	227.582		df	4	SIG.	.000
	Wilcoxon	Ranks	n	Mean Rank	z	1SIG.	
	Internet-iTV	Negative	30	40.55	-6.680	.000	
		Positive	94	69.51			
	Ties	40	-				
Round	Test	Information Source					
		iTV	Freecall	Internet	Teletext	Travel Agent	
2	Friedman Mean Ranks	3.03	2.73	-	2.02	2.23	
	χ^2	75.90		df	3	SIG.	.000
	Wilcoxon	Ranks	n	Mean Rank	z	1SIG.	
	Freecall-iTV	Negative	78	64.12	-2.267	.012	
		Positive	49	63.82			
	Ties	37	-				
Round	Test	Information Source					
		iTV	Freecall	Internet	Teletext	Travel Agent	
3	Friedman Mean Ranks	-	2.31	-	1.77	1.92	
	χ^2	31.751		df	2	SIG.	.000
	Wilcoxon	Ranks	n	Mean Rank	z	1SIG.	
	Freecall-TravelAgent	Negative	56	55.75	-2.158	.016	
		Positive	70	69.70			
	Ties	38	-				

Table 6.1.2: Comparison of means tests for the five information source attractiveness evaluations (1-7scale) across all participants.

To see where this difference lay, the top two mean ranks (Internet and iTV) were compared and were found to be significantly different ($z = -6.680, p < .05$). Subsequent tests then removed the highest mean source to compare the remaining ones (Round 2 and 3). The final outcome confirmed what the means indicated: that the Internet was the most attractive (5.93), followed by interactive television (4.49), freecall number (3.99), travel agent (3.14) and finally teletext (2.63).

Groupings	Promotional Vehicle		Overall Sample
	Ad Treatments	Show Treatments	
Overall (n164)	4.47	4.51	4.49
Interacted (n49)	6.27	5.87	6.07
Chose Not to Interact (n65)	3.67	3.54	3.61
Interaction Not Available (n50)*	3.26	4.58	3.92
Impulse (n58)	4.55	4.69	4.62
Interacted (n20)	6.60	6.10	6.35
Chose Not to Interact (n38)	3.47	3.95	3.71
Telescopic (n56)	5.22	4.24	4.73
Interacted (n29)	6.06	5.69	5.88
Chose Not to Interact (n27)	4.00	3.06	3.53

Table 6.1.3: Attractiveness of interactive television as a holiday planning source (1-7scale) across experimental design factors. *Interaction Not Available refers to the control treatments.

The interactive television attractiveness scores were also compared across the various treatments (Table 6.1.3). A preliminary perusal of these scores suggests that there are potentially a number of differences between treatment cells. While there is little difference between the ad and show overall, this changes as participants are grouped by actual interactivity level. It seems that participants that interacted with the ad (6.27) regard interactive television as more attractive than those who interacted with the show (5.87) and those that were not able to interact with the show (4.58) found interactive television a more attractive source than those viewing the linear ad (3.26). When broken down by the interactive opportunities, Impulse

participants in both cases (Ad: 6.60, Show: 6.10) find interactive television more attractive than Telescopic participants (Ad: 6.06, Show: 5.69). This is reiterated by the high attractiveness scores in the overall interaction (6.07) and interacted opportunity (Impulse: 6.35, Telescopic: 5.88) scores. Further analysis along these lines will be carried out in Chapter 7.

6.2 Investigation#2A: Destination Pre-Dispositions

The familiarity participants had with Western Australia (WA) was considered to be an important pre-disposition as it was expected that, if a participant was familiar with, inclined towards or had a connection to WA they may be more inclined to interact during the treatment or be more open to interactive television for planning their holiday there. This notion is supported by comments from Call-Back and Lab Session participants who said that they did not interact for the brochure (impulse) or the destination video (telescopic) because they had no interest in the destination (WA), however, if the featured destination was of interest, they would interact (see The Lab Session notes in Appendix 4E). It is also important to establish whether the prize influenced participants' responses. If a participant joined the study because they were interested in winning a trip to Australia, they may also have provided answers that seem more favourable (higher attractiveness scores) so as to assist them in winning – even though this did not have an influence on the outcome of the draw.

6.2.1 Methods and Measures

To establish participants’ attitudes towards WA prior to the study a set of 5 items on an agree/disagree scale were developed and featured in part one of the questionnaire (Figure 6.2.1). These items enquired about participants’ knowledge, feelings and desire to visit WA, as well as whether they had travelled there before or had friends and relatives there (see Chapter 4, Section 4.5.3.3 for more measure information).

	Strongly			Strongly	
Western Australia (Australia)	Disagree	Disagree	Neutral	Agree	Agree
I know a lot about this place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I find this place appealing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would like to visit this place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have visited Western Australia	Yes		<input type="checkbox"/>	No	
I have friends/relatives in Western Australia	Yes		<input type="checkbox"/>	No	

Figure 6.2.1: Example of Western Australia familiarity measure used in part one of the questionnaire.

From the figures in Table 6.2.1, the overall sample has a fair knowledge of WA (neutral and agree at 26% each), almost 80% of participants find it appealing (agree 42% and strongly agree 35%) and over 80% would like to visit WA (agree 40% and strongly agree 43%). The majority of participants have not visited WA before (83%) nor have any family or friends in WA (63%). Thus the overall sample seems to be in favour of WA without having any direct or indirect experience of it. However, previous experience with a destination and having friends and family there have been acknowledged as being critical factors in the image of and desires for a destination (Mazursky, 1989; Soenmez and Graefe, 1998). Thus it is important to see whether there are differences in knowledge, appeal and desire to visit levels along such segmentations.

Overall (n164)	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I know a lot about WA	16%	26%	26%	26%	6%
I find WA appealing	2%	2%	18%	42%	36%
I would like to visit WA	2%	2%	13%	40%	43%
	Yes			No	
I have visited WA	17%			83%	
I have friends/family there	37%			63%	

Table 6.2.1: Percentages of participants answering Western Australia familiarity items from part one of the questionnaire.

	Group 1	Group 2	Group 3	Group 4
Knowledge	79%	49%	41%	27%
Appeal	96%	73%	90%	70%
Visit	93%	82%	90%	80%
Been	YES	NO	28%	11%
Fri./Family	61%	32%	YES	NO

Table 6.2.2: Summary of participants in each segmentation group (defined by YES or NO) that answered agree or strongly agree to each WA familiarity item.

Table 6.2.2 is a summary of the percentage of participants that answered either agree or strongly agree for the first three items. The four groups have been defined by whether or not participants had been to WA before (group 1), had not been (group2), have family or friends in WA (group 3) or do not have family or friends in WA (group 4). It seems that across all four groups (Table 6.2.2), WA is a highly appealing destination (70% - 96%) and most would like to visit it (80% - 93%) despite their varying knowledge levels (27% - 79%). There also seems to be a clear distinction between those that have visited WA or have friends/family in WA and those that have not visited nor have family in WA. The former are the more knowledgeable and eager to visit WA, while the latter have distinctly less knowledge and lower appeal and visitation levels. This is reflective of the high percentage of UK visitors to WA (43%) that visit friends and family (WATC, 2003). Furthermore

it indicates that actually experiencing a destination adds to the knowledge base of a traveller.

6.2.2 Findings: Knowledge, Appeal and Desire to Visit

To test the actuality of these propositions, the four groups were refined so that membership was exclusive and then were compared against each other for each item.

Table 6.2.3 shows the cross-tabulation results for the knowledge item. It is clear that participants that had visited WA (#1 and #2) had higher knowledge levels than those that had not visited WA before (#3 and #4) (χ^2 35.151, $p < .05$, V .463, $p < .05$). There was no significant difference between previous travellers to WA and whether they had family and friends in WA or not (χ^2 .113, $p > .05$, V -.064, $p > .05$). Thus, actual experience with the destination is associated with more knowledgeable of it.

Knowledge of WA (n164)	1 (n17)	2 (n11)	3 (n44)	4 (n92)
	+ Visited + Fri./Family	+ Visited - Fri./Family	- Visited + Fri./Family	- Visited - Fri./Family
Know a lot (SA/A)	77%	82%	27%	20%
Know a little (SD/D/N)	23%	18%	73%	80%
Df:3 1 (12.5%) cell<5. Min. 3.49.	Chi² 35.151		2SIG. .000	
	Cramer's V .463		SIG. .000	
Compare Group 1&2	Chi² .113		2SIG. .736	
	Cramer's V -.064		SIG. .736	

Table 6.2.3: Crosstab results for participants' knowledge of WA across four experience and visitation groups.

When compared across the appeal item (Table 6.2.4), the four groups were held to be significantly different (χ^2 13.417, $p < .05$, V .286, $p < .05$). Further comparisons found that groups 1, 2 and 3 were similar (χ^2 2.604, $p > .05$, V .190, $p > .05$), but group 4 (those who had not been to WA before and had no contacts there) were significantly different (χ^2 5.505, $p < .05$, V .201, $p < .05$). Thus, WA was equally

appealing to those that had travelled there previously or had family there and less appealing to those with no prior experience or contacts there.

Appeal of WA (n164)	1 (n17)	2 (n11)	3 (n44)	4 (n92)
	+ Visited + Fri./Family	+ Visited - Fri./Family	- Visited + Fri./Family	- Visited - Fri./Family
Appeal a lot (SA/A)	100%	91%	86%	67%
Appeal a little (SD/D/N)	-	9%	14%	33%
Df:3. 2 (25%) cell<5. Min. 2.48.	Chi ² 13.417		2SIG. .004	
	Cramer's V .286		SIG. .004	
Compare Group 1,2&3	Chi ² 2.604		2SIG. .272	
	Cramer's V .190		SIG. .272	
Compare Group 3&4	Chi ² 5.505		2SIG. .019	
	Cramer's V .201		SIG. .019	

Table 6.2.4: Crosstab results for how appealing participants see WA across four experience and visitation groups.

Desire to Visit WA (n164)	1 (n17)	2 (n11)	3 (n44)	
	+ Visited + Fri./Family	- Visited - Fri./Family	- Visited + Fri./Family	- Visited - Fri./Family
Desire a lot (SA/A)	94%	91%	89%	78%
Desire a little (SD/D/N)	6%	9%	11%	22%
Df:3. 2 (25%) cell<5. Min. 1.81.	Chi ² 4.513		2SIG. .211	
	Cramer's V .166		SIG. .211	
Compare Group 1&4	Chi ² 2.136		2SIG. .128	
	Cramer's V .146		SIG. .128	

Table 6.2.5: Crosstab results for participants' desire to visit WA across four experience and visitation groups.

When participants were compared on the desire to visit WA item (Table 6.2.5), no significant differences were found. All four groups wanted to visit WA as much as each other, ranging between 78% and 94%. This indicates that the majority of people that joined the study were already quite partial to WA in some way. Thus, this bias may impact upon how participants interacted with the treatments or even other answers given in the questionnaire.

To be able to effectively investigate this, the first three items were converted into an ordinal scale and combined to give an attitudinal score (Table 6.2.6). The scale ranged from 5, representing the strongly agree position or a highly positive feeling towards WA, to 1 being a strongly disagree or negative feeling towards WA and 3 signifying a neutral position.

Groupings	Promotional Vehicle		Overall Sample
	Ad Treatments	Show Treatments	
Overall (n164)	3.60	3.76	3.68
Interacted (n49)	3.73	4.06	3.90
Chose Not to Interact (n65)	3.44	3.58	3.51
Interaction Not Available (n50)*	3.68	3.75	3.72
Impulse (n58)	3.52	3.67	3.60
Interacted (n20)	3.73	3.97	3.85
Chose Not to Interact (n38)	3.40	3.51	3.46
Video (n56)	3.64	3.87	3.76
Interacted (n29)	3.73	4.13	3.91
Chose Not to Interact (n27)	3.51	3.67	3.60

Table 6.2.6: Attitude to Western Australia (1-5scale) means from Part#1 of the questionnaire. *Interaction Not Available is equal to the control treatments.

The combination of the three items is justified in that a single item by itself is not enough to establish whether a participant is pre-disposed towards holidaying in WA; a much better indication is a combination of the three. This is because the three items reflect different steps in the destination choice process (see Chapter 2, Section 2.5.1 for a review of this process). The participant’s knowledge or familiarity with WA parallels WA in their awareness set, how appealing they see WA to be reflects the probable inclusion in the consideration set and their desire to visit WA moves WA closer to actual selection as it incorporates motivations and constraints.

These scores were then subjected to Kruskal-Wallis and Mann-Whitney U tests to compare different treatment cells within the promotional vehicles and across them.

There were only two significant findings (Table 6.2.7; see complete results in Appendix 6A). The first was between the actual interaction levels of the show treatments with those who interacted with the show treatment (\bar{x} 4.06) reporting more positive feelings towards WA than those who chose not to interact (\bar{x} 3.58) or could not interact (\bar{x} 3.75) (χ^2 6.226, $p < .05$). This suggests that participants only chose to interact with the travel show segment if they were already pre-disposed to WA.

Attitude towards Western Australia						
Kruskal-Wallis: Within Show Treatments: I vs. NI vs. NA (89)	Groups	Mean Ranks		Chi²		SIG.
	I (23)	55.22		6.226		.044
	NI (35)	38.17				
	NA (31)	45.13				
Mann-Whitney U: Within Show Treatments: I vs. NI vs. NA (89)	Groups	Mean Ranks		U	Z	1SIG.
	I vs. NI	36.04	25.02	252.0	-2.423	.008
	I vs. NA	31.17	24.77	272.0	-1.502	.067
	NI vs. NA	30.97	36.35	454.0	-1.160	.123
Mann-Whitney U: Interacted Tscp. vs. Chose not to interact Tscp. (56)	Groups	Mean Ranks		U	Z	
	iTscp. (29)	32.66		271.0	-2.002	.023
	niTscp. (27)	24.04				

Table 6.2.7: Significant results for differences in attitudes towards Western Australia (1-5scale) from part#1 of the questionnaire.

The second significant finding was between participants that chose to interact with the telescopic treatment and those that chose not to interact with the telescopic treatment (from either promotional vehicle). Those that interacted with the telescopic treatment (\bar{x} 3.91) had more positive attitudes towards WA than those that chose not to interact with the telescopic treatment (\bar{x} 3.60) (U 271.0, z -2.002, $p < .05$). This suggests that participants would only interact with the video if they had reasonable interest in WA before the treatment. Calculations on the show or ad treatments alone failed to turn up a significant result at the .05 level. There was a mirroring difference for the show treatments but only at the .1 level (U 60.5, z -1.933, $p < .1$) suggesting that the difference stems more from the show treatments

rather than the ad treatments (see complete Table 6.2.7 in Appendix 6A). Both of these significant findings are reflective of the comments offered in the Call-Backs. The majority (88%) of the participants that chose to interact did so out of genuine interest in the destination, with a minority (12%) doing so out of curiosity (see Table 4.6.5 in Chapter 4). Thus, these comments support the notion that a more positive attitude towards WA will increase the likelihood of interaction.

The same items were repeated in the second half of the questionnaire. This endeavoured to pick up any change in knowledge or attitudes towards WA due to the experiment. A Wilcoxon-Signed-Rank test was carried out between the before (\bar{x} 3.69) and after (\bar{x} 3.72) combined means and indicated no significant change (-rank: 47.35, +rank: 55.03, z -.225, $p > .05$). Thus, there was no need to involve the second measure in any investigations. A similar outcome was found when the means were compared for the interacted, chose not to interact and not able to interact groupings. None proved to be significant (complete results in Appendix 6A). Thus, as no difference was found between the before and after evaluations of WA, further analysis was only carried out on those evaluations given before participants received their treatment.

6.2.3 Findings: Attitude towards WA and Interactive Television Evaluations

The previous investigation of the Western Australia (WA) attitude scores revealed that there was little difference between treatment cells, although WA admirers were more likely to interact for a destination video. Furthermore it was shown that previous experience with WA or having family living there is linked to more positive attitudes towards WA. But do these inclinations toward WA influence how

participants evaluate interactive television as a holiday planning source? When WA attitude was correlated against the interactive television attractiveness scores, a weak positive relationship was found ($r .173, p<.05$). The attitude towards WA scores were then segmented into low or negative (1 – 3.49) and high or positive (3.50 - 5) groups. These were then compared along interactive television attractiveness scores on the overall sample scale, within ad, within show and across the actual interaction levels. Both high and low WA attitude groups proffered significant differences in the actual interaction levels (Table 6.2.8; complete results in Appendix 6A).

iTV attractiveness across Attitude towards Western Australia						
Kruskal-Wallis: Low WA attitude: I vs. NI vs. NA (55)	Groups	Mean Ranks		Chi		SIG.
	I (14)	41.71		14.735		.001
	NI (26)	24.75				
	NA (15)	20.83				
Mann-Whitney U: Low WA attitude: I vs. NI vs. NA (55)	Groups	Mean Ranks		U	Z	SIG.
	I vs. NI	28.39	16.25	71.5	-3.189	.001
	NI vs. NA	22.00	19.27	169.0	-.715	.475
	I vs. NA	20.82	9.57	23.5	-3.613	.000
Kruskal-Wallis: High WA attitude:	Groups	Mean Ranks		Chi²		SIG.
	I (35)	75.81		25.617		.000
	NI (39)	39.72				
	NA (35)	51.21				
Mann-Whitney U: High WA attitude: I vs. NI vs. NA (109)	Groups	Mean Ranks		U	Z	SIG.
	I vs. NI	49.97	26.31	246.0	-4.813	.000
	NI vs. NA	33.41	42.06	523.0	-1.748	.081
	I vs. NA	43.84	27.16	320.5	-3.524	.000
Mann-Whitney U: Not able to interact: Low vs. High attitude to WA	Groups	Mean Ranks		157.5	-2.247	.025
	Low (15)	18.50				
	High (35)	28.50				

Table 6.2.8: Significant results for differences in interactive television attractiveness (1-7scale) evaluations across attitudes towards Western Australia (low or high), by actual interaction level (I, NI, NA).

Participants reporting low or negative feeling towards WA only had significantly higher interactive television attractiveness scores if they had interacted with their treatment ($\chi^2 14.735, p<.05$). This was also the case for those that had more positive views of WA ($\chi^2 25.617, p<.05$). However, at the .1 significance level,

participants that had positive feelings towards WA seemed to have lower attractiveness scores for interactive television if they chose not to interact as opposed to not having the opportunity ($U = 523.0$, $z = -1.748$, $p < .1$). This suggests that participants chose not to interact, not because they were not interested in WA, but because they were not interested in interactive television.

When attitude levels were compared for each actual interactivity level only the not able to interact group differed on their interactive television attractiveness scores ($U = 157.5$, $z = -2.247$, $p < .05$). Thus, participants with a higher opinion of WA saw interactive television as an attractive holiday information source when compared to those with a lower opinion of WA. This is an interesting finding. As neither of the interacted or chose not to interact analyses showed significant differences between attitude groups, one may hypothesize that the opportunity to interact may have moderated the relationship and that the participants that were not able to interact were optimistic about interactive television as they had not experienced it in the way the other participants had.

6.2.4 Investigation#2A Conclusions

In the first set of analysis, it was found that overall the sample was fairly informed and positive towards WA. However, while participants who had visited WA before had greater knowledge than those that had not and those with family or friends in WA found it to be more appealing than those who did not have connections; the sample differed little in their considerable desire to visit WA. This would seem to

indicate that there may have been some sample bias perhaps due to the prize draw. This needs to be kept in mind when applying the findings beyond the study's sample.

When the items were merged, attitude towards WA were the most positive for those that had interacted with the travel show and those that had interacted for the video (from either promotional vehicle) than if they had chosen not to interact or were not able to. Given that the attitudes were held prior to the exposure to the treatments, this would suggest that a participant's inclination towards WA drove them to find more information upon seeing the travel show segment and that this also contributed to committing to view the video on WA. This reinforces the reason that Call-Back and Lab Session participants gave for interacting: genuine interest in the destination.

The second analysis investigated relationships between participants' attitudes to WA and their evaluations of interactive television as a holiday information source. The results suggested that participants would find interactive television attractive if they interacted with the treatment, regardless of their attitude towards WA. Interestingly, WA inclined participants that chose not to interact gave less favourable evaluations of interactive television than those that had no opportunity to interact. A possible explanation for this may be that they do not find interactive television to be a suitable holiday information source. In addition, those that watched the linear treatments and had a more positive attitude towards WA found interactive television more attractive than those who had less positive attitudes towards WA.

Thus the above analysis indicates that the attitude towards the destination in question, Western Australia (WA), seems to have an impact on the preparedness of individuals to use interactive television in their planning process. The more positive one feels about WA, the more likely they are to evaluate interactive television as an attractive information source for the future, whether they had the linear experience or chose to interact. However, it seems that the interaction itself is enough to make interactive television an attractive source in some cases. The next section explores the impact of participants' travel and planning experiences upon their treatment experience and evaluation of interactive television.

6.3 Investigation#2B: Travel and Planning Experience Pre-Dispositions

Previous travel and planning experiences are potential influencers of how participants may see new holiday information sources such as interactive television. It has already be shown that the majority of the sample were experienced, independent international travellers (Chapter 4, Section 4.7.3) and that as such would have information needs different to less experienced or package travellers (see Chapter 2, Section 2.5.2.1). It is generally accepted that travellers will acquire knowledge and skills not only about particular trips and destinations but also of the mechanics of travelling on holiday through their experiences. These experiences and skills are then transferable to the planning of and travelling on the next holiday.

Thus the more travel experience one has, the more aware one would be of where to get information about holidays (Etzel and Wahlers, 1985).

With this greater awareness of information needs, possible information sources and the new levels of information sought, it is proposed that such travellers may be more open to a new media such as interactive television that offers functional as well as non-functional benefits. As discussed in Chapter 2 (Section 2.5.2.1) the importance of non-functional information and search increases as the experience of travellers increase. Thus experienced international travellers should be able to benefit considerably from the combination of practical holiday information and the high quality audio-visual presentations of international destinations and experiences.

6.3.1 Method and Measures

It was anticipated that participants' previous travel and planning experience would somehow influence their attitudes towards interactive television in the holiday planning context. These two concepts were considered separately as they focused on the very different experiential and preparation aspects of holidays. Thus each was investigated in a separate analysis.

6.3.1.1 Travel Experience

For travel experience three measures from Part#1 of the questionnaire were used (Figure 6.3.1). The first was the categorical measure of the number of overseas holidays taken in the last 10 years which should be indicative of the amount of experience an individual has had the opportunity to collect. The next measure was the number of destinations visited indicating variety and the type of destinations

(short or long-haul) that they have experienced. Here the experience is gathered and diversified by each new destination which requires different skills to be developed. Lastly, participants were asked how experienced they perceived themselves to be. This measure was used to compare and contrast to the two more objective measures of travel experience not only to gauge how effective such a subjective measure would be but also to gauge a self-image of the participants. More information on these questions can be found in Chapter 4, Section 4.5.3.2.

5a. How many overseas holidays of a week or longer have you been on in the last 10 years? Please tick one box.

1 – 3 trips More than 7 trips
 4 – 7 trips None (Go to Qu. 7.)

5b. Which regions have you visited on your past overseas holidays?
 Please tick all boxes which apply.

North America (eg. Canada, USA) Central America (incl. Caribbean).....
 South America (eg. Argentina, Chile).... South Pacific (eg. Fiji, Tahiti)
 New Zealand Australia
 Far East (eg. China, Japan) South East Asia (eg. Indonesia,).....
 India/Pakistan/Nepal Middle East (eg. Saudi Arabia, Turkey)
 Northern Africa (eg. Egypt, Morocco)... Middle/Lower Africa (eg. South Africa)
 Western Europe (eg. France, Germany). Central Europe (eg. Hungary, Poland)...
 Mediterranean (eg. Greece, Italy) Eastern Europe (eg. Russia, Ukraine)....

8. Thinking about your past overseas travel experience and the trips you have been responsible for organising, how experienced a traveller and planner do you consider yourself to be? Please circle the number most appropriate for each role.

	Inexperienced					Very Experienced
As a Traveller I am	1	2	3	4	5	6
As a Planner I am.....	1	2	3	4	5	6

Figure 6.3.1: An example of the travel experience questions in part one of the questionnaire.

The preliminary data from these questions is shown in Tables 6.3.1 and 6.3.2. The data indicates that overall the majority (68%) of participants have been on more than 7 overseas holidays in the last 10 years – meaning that they are experienced and that on average they have visited 5.31 different destination regions - indicating variety of

experiences. Overall, participants seem to travel to short-haul (\bar{x} 2.82) destinations slightly more than long-haul (\bar{x} 2.49) destinations. This may be due to the convenience of European and North African destinations in travel time and the strength of the English Pound. However, when participants are classified as either short- or long-haul travellers, the sample is slightly more long-haul oriented with 51% of participants travelling more long-haul than short-haul. This long-haul experience is expanded when considering how many participants have had any long-haul experience (89%). Lastly, participants see themselves as reasonably experienced travellers with an overall mean of 5.45 from the 1 to 7 scale (1=Inexperienced, 7=Very Experienced).

Variables	Overall (n164)	CAd	CSh (n31)	iAd (n29)	iSh (n27)	tAd	tSh (n29)
Number of overseas trips in last 10 years - percentage of participants							
1-3 trips	11%	21%	3%	17%	7%	7%	10%
4-7 trips	21%	21%	16%	14%	31%	30%	17%
>7 trips	68%	58%	81%	69%	62%	63%	73%
Number of regions visited – mean							
Overall	5.31	4.37	6.42	4.76	5.79	4.44	5.62
Short-Haul Regions	2.82	2.53	3.26	2.86	2.93	2.22	2.93
Long-Haul Regions	2.49	1.84	3.16	1.90	2.86	2.22	2.69
Long or Short-haul travellers* – percentage							
Short-Haul	49%	53%	39%	69%	52%	37%	45%
Long-Hual	51%	47%	61%	31%	48%	63%	55%
Perceived travel experience - mean	5.45	5.16	5.84	5.31	5.41	5.30	5.52

Table 6.3.1: Descriptive statistics of travel experience overall and across the treatment groups.

*Note: a traveller is long-haul if the long-haul destinations out weigh the short-haul destinations.

Perceived travel experience measured 1=Inexperienced and 7=Very Experienced.

When these overall data are investigated across the six treatments, the Control Show (CSh) cell seems to contain slightly more experienced travellers than the others and the Control Ad comparatively less experienced travellers. Statistical tests show that there are generally no significant differences across the six treatment groups on any

of the variables tested (see Appendix 6B for results), except that the Control Show group have visited a greater range of destinations than participants in other treatment groups (Kruskal Wallis test, χ^2 13.630, $p < .05$).

Variables	Overall (n164)	Interacted (n49)	Chose Not to Interact	Not Able to Interact (n50)
Number of overseas trips in last 10 years - percentage of participants				
1-3 trips	11%	8%	12%	10%
4-7 trips	21%	27%	20%	18%
>7 trips	68%	65%	68%	72%
Number of regions visited – mean				
Overall	5.31	5.27	5.09	5.64
Short-Haul Regions	2.82	2.71	2.77	2.98
Long-Haul Regions	2.49	2.55	2.32	2.66
Long or Short-haul travellers* – percentage				
Short-Haul	49%	49%	52%	44%
Long-Hual	51%	51%	48%	56%
Perceived travel experience - mean (n164)				
	5.45	5.45	5.34	5.58

Table 6.3.2: Descriptive statistics of travel experience overall and across the levels of actual interaction. *Note: a traveller is long-haul if the long-haul destinations outweigh the short-haul destinations. Perceived travel experience measured 1=Inexperienced and 7=Very Experienced.

The sample was also examined along the actual interactivity levels (Table 6.3.2). The results for each group are very much in line with the overall sample means and proportions. Regardless of whether a participant interacted or had the chance to interact, they were experienced with more than 7 overseas trips in the last 10 years (65-72%), a variety of visited destination regions (\bar{x} 5.09 – 5.64) and perceived themselves to be reasonably experienced travellers (\bar{x} 5.34 – 5.58). Once more, participants had visited more short-haul than long-haul destinations, however, participants who interacted and those that were not able to interact were predominantly long-haul travellers, while those that chose to interact were slightly more experienced at short-haul travel (SH 52%, LH 48%).

6.3.1.2 Planning Experience

It is also important to gauge an individual’s planning experience, as an individual can travel on many trips to various places but not be responsible for the information gathering and organisation of that holiday (ie. the planning). It is expected that the more experience an individual has had with the planning of holidays, the more aware they will be of the varied information opportunities available to them. Thus more experienced planners are expected to report more positive attractiveness scores for interactive television.

6a. In planning holidays people often use various sources of information. Please indicate *how useful* each source is to you *typically* in planning for your overseas holidays. Please circle the number most appropriate for each source.

	Of Little Use	Extremely Useful	Did Not Use Source
Personal Experience	1.....2.....3.....4.....5.....6.....7.....	0	
Travel Agent	1.....2.....3.....4.....5.....6.....7.....	0	
Friends/Relatives <i>live</i> there	1.....2.....3.....4.....5.....6.....7.....	0	
Friends/Relatives had <i>travelled</i> there.	1.....2.....3.....4.....5.....6.....7.....	0	
Guidebook.....	1.....2.....3.....4.....5.....6.....7.....	0	
Internet/Websites	1.....2.....3.....4.....5.....6.....7.....	0	
Tourist Board/Authority.....	1.....2.....3.....4.....5.....6.....7.....	0	
Newspaper or Magazine Articles.....	1.....2.....3.....4.....5.....6.....7.....	0	
Ads in Newspapers, Magazines or TV1.....	2.....3.....4.....5.....6.....7.....	0	
TV Travel Shows	1.....2.....3.....4.....5.....6.....7.....	0	
Shopping areas on idTV* services.....	1.....2.....3.....4.....5.....6.....7.....	0	
Ads on idTV* services.....	1.....2.....3.....4.....5.....6.....7.....	0	
Shows on idTV* services.....	1.....2.....3.....4.....5.....6.....7.....	0	
Teletext services.....	1.....2.....3.....4.....5.....6.....7.....	0	

8. Thinking about your past overseas travel experience and the trips you have been responsible for organising, how experienced a traveller and planner do you consider yourself to be? Please circle the number most appropriate for each role.

	Inexperienced	Very Experienced
As a Traveller I am.....	1.....2.....3.....4.....5.....6.....7	
As a Planner I am.....	1.....2.....3.....4.....5.....6.....7	

Figure 6.3.2: An example of the planning experience questions in part one of the questionnaire.

The questions from Part#1 of the questionnaire used in the measurement of planning experience are shown in Figure 6.3.2. These were used to create three variables: the number of sources a participant typically uses in preparing for overseas holidays, the number of types of sources and how experienced participants see themselves as a planner. The pre-determined source lists from questions 6a/b were used to analyse individual source use and to create six information source types (intrapersonal, interpersonal, destination specific, mass media advertising, mass media content and interactive media). Since each source type consisted of a number of individual sources, each type was weighted. This was done by using the usefulness score (as given in question 6a of part#1 of the questionnaire) of each of its parts (sources included in the type) converted to a weight between 0 and 1. For example a score of 5 out of 7 would be a weighting of 0.71. Thus weights reflect how much a part a source or source type played in the holiday planning process of the participant. A weight of 0.76 would imply heavy use, while 0.12 represents light use of the source type. Tables 6.3.3 and 6.3.4 display the descriptive statistics for these measures.

Variables (means)	Overall (n164)	CAd (n19)	CSh (n31)	iAd	iSh (n27)	tAd	tSh (n29)
Number of sources used	8.87	7.84	9.71	8.72	9.41	8.41	8.66
Number of source types used	5.41	5.00	5.81	5.31	5.52	5.26	5.38
Weighted source types							
Intrapersonal	.80	.79	.83	.73	.73	.79	.91
Interpersonal	.57	.57	.54	.55	.59	.57	.60
Destination Specific	.51	.37	.59	.55	.59	.43	.45
Mass Media Advertising	.25	.23	.32	.27	.25	.21	.24
Mass Media Content	.37	.26	.43	.41	.40	.30	.37
Interactive Media	.24	.22	.28	.22	.27	.22	.23
Teletext	.20	.20	.20	.22	.24	.16	.20
Internet	.74	.67	.82	.69	.80	.72	.69
iTV	.09	.09	.13	.05	.09	.08	.08
experience (1-7scale)	5.27	5.00	5.74	4.90	5.28	5.22	5.38

Table 6.3.3: Means of planning experience measures overall and across treatments. Perceived planning experience measured 1=Inexperienced and 7=Very Experienced.

Overall, participants used a large number of different sources (\bar{x} 8.87 out of a possible 14) and almost all of the types of sources (\bar{x} 5.41 types out of a possible 7; Table 6.3.3). This high source usage was supported by participants seeing themselves as reasonably experienced planners at \bar{x} 5.27 (1 to 7 scale). In terms of how much they used each type of source, the intrapersonal (eg. Personal experience) proved to be the most referred to (0.80), with interpersonal (0.57) and destination specific (0.51) sources coming next, followed by mass media content (0.37), mass media advertising (0.25) and interactive media (0.24). Within the interactive media source type, it seems to be that the teletext (0.20) and, to a greater extent, the interactive television sources (0.09) are responsible for the low score as the Internet scores relatively highly (0.74).

Across the treatments the Control Ad (CAAd) participants were the least experienced (\bar{x} 5.00) and used the least number of sources (\bar{x} 7.84) and types of sources (\bar{x} 5.00), while the Control Show (CSh) participants used the most number of sources (\bar{x} 9.71) and types of sources (\bar{x} 5.81) and saw themselves to be the most experienced in planning (\bar{x} 5.74). However, the weightings of the source types followed no such pattern, rather mirroring the overall pattern with the intrapersonal sources being the most influential and the interactive media the least.

When the planning variables were compared along the actual interactivity level (Table 6.3.4) it seems that participants that chose not to interact considered themselves to be the least experienced planners (\bar{x} 5.17) and correspondingly used

the least number of sources (\bar{x} 8.51), the least number of source types (\bar{x} 5.29) and generally had the lowest comparative source weightings. There was little difference between those that chose to interact and those that were not able to interact in weightings and source usage, however, the latter saw themselves as slightly more experienced planners (Not Able to Interact: \bar{x} 5.46; Interacted: \bar{x} 5.22).

Variables (means)	Overall	Interacted (n49)	Chose Not to Interact (n65)	Not Able to Interact
Number of sources used	8.87	9.20	8.51	9.00
Number of source types used	5.41	5.47	5.29	5.50
Intrapersonal	.80	.82	.77	.81
Interpersonal	.57	.59	.57	.55
Destination Specific	.51	.55	.47	.51
Mass Media Advertising	.25	.24	.24	.29
Mass Media Content	.37	.39	.36	.36
Interactive Media	.24	.26	.21	.26
Teletext	.20	.24	.18	.20
Internet	.74	.75	.71	.76
iTV	.09	.11	.05	.11
Perceived planning experience (1-7scale)	5.27	5.22	5.17	5.46

Table 6.3.4: Means of planning experience measures overall and across the levels of actual interaction.

Interactive Television Attractiveness Means (1-7scale)			
Groupings	Promotional Vehicle		Overall Sample
	Ad Treatments	Show Treatments	
Overall (n164)	4.47	4.51	4.49
Interacted (n49)	6.27	5.87	6.07
Chose Not to Interact (n65)	3.67	3.54	3.61
Interaction Not Available (n50)*	3.26	4.58	3.92
Impulse (n58)	4.55	4.69	4.62
Interacted (n20)	6.60	6.10	6.35
Chose Not to Interact (n38)	3.47	3.95	3.71
Video (n56)	5.22	4.24	4.73
Interacted (n29)	6.06	5.69	5.88
Chose Not to Interact (n27)	4.00	3.06	3.53

Table 6.3.5: Attractiveness of interactive television as a holiday planning source.

*Interaction Not Available refers to the control treatments (CAd and CSh).

As the last variable in both analyses, participants' attitudes of interactive television were gauged by how attractive it would be as a way of getting more information on a destination (question 5c/10 from questionnaire part#2). Table 6.3.5 provides the means for different treatments and actual interaction levels.

Each measure of travel and planning experience was subjected to individual analysis across overall sample for the dependent variable, interactive television attractiveness. Firstly a Kendall's Tau-b correlation was carried out to see whether there was any association between the variable and interactive television attractiveness. This was followed by either a Kruskal-Wallis test or a Mann-Whitney U tests to see how the low and high ends of the variable differed. After testing the overall sample, participants were segmented into their actual interactivity levels and then also into whether they were typically long-haul or short-haul travellers. Of these analyses, only the significant results are discussed and reported, complete results are available in Appendix 6A.

6.3.2 Travel Experience Findings

The first measure of travel experience, **number of trips** in the last 10 years, was subjected to a bivariate Kendall's Tau-b correlation with the scaled data for interactive television attractiveness (Table 6.3.6). This found no significant relationship between the two variables ($r = .025$, $p > .05$). To verify this, a Kruskal-Wallis test was done and again found no difference between the categories ($\chi^2 = 1.398$, $p > .05$). Thus the notion that the experience an individual has gathered through the amount of trips they have taken will make them more open to interactive television is not supported.

iTV attractiveness across the number of overseas trips in last 10 years	Kendall's Tau-b Correlation		
	Correlation Coefficient		1SIG.
Number of trips in last 10 years (3 categories) and iTV attractiveness (1-7 scale)	.025		.335
Kruskal-Wallis		Mean Rank	SIG.
iTV attractiveness (1-7 scale) across number of trips in last 10 years (3 categories)	1-3	70.65	1.398 .497
	4-7	86.81	
	>7	82.95	

Table 6.3.6: Results for iTV attractiveness as a holiday information source across the number of overseas trips taken in the last 10 years. (n164)

iTV attractiveness across the number of destinations visited	Kendall's Tau-b Correlation				
	Correlation Coefficient		1SIG.		
Number of destinations (3 categories) and iTV attractiveness (1-7 scale)	.034		.284		
Kruskal-Wallis		Group	Mean Rank	Chi ²	SIG.
iTV attractiveness (1-7 scale) across number of destinations (3 categories)	1-4	82.56	.420	.810	
	5-10	81.59			
	11-14	93.50			

Table 6.3.7: Results for iTV attractiveness as a holiday information source across the number of destinations visited. (n164)

The second measure of travel experience, the **number of destinations** an individual has visited, was subjected to the same tests (Table 6.3.7). The raw scores were converted to categories: few destinations = 1-4, moderate destinations = 5-10, many destinations = 11 or more. Again, the three tests could find no significant correlation or differences along the scores of interactive television attractiveness and the three visited destination categories (Kendall's Tau-b correlation: $r = .034$, $p > .05$; Kruskal-Wallis: $\chi^2 = .420$, $p > .05$). Thus the more varied a travel history a participant has will not mean that they are more positive towards interactive television.

The final measure, **perceived travel experience**, was converted into two categories along the median of 6 (less experienced 1-5.9, more experienced 6-7). As with the previous two measures, there were no significant results from the tests (Table 6.3.8; Kendall's Tau-b correlation: $r = .012$, $p > .05$; Kruskal-Wallis test: $\chi^2 = .036$, $p > .05$; Median test: $\chi^2 = .069$, $p > .05$). Thus participants that perceived themselves as more

experienced in planning holidays were not more pre-disposed to interactive television as a holiday planning source.

iTV attractiveness across perceived travel experience	Kendall's Tau-b Correlation			
	Correlation Coefficient			
Perceived travel experience and iTV attractiveness (1-7 scale)	.012		.442	
Kruskal-Wallis	Group		Chi ²	SIG.
ITV attractiveness (1-7 scale) across perceived travel experience (2 groups)	Less	83.21	.036	.849
	More	81.82		

Table 6.3.8: Results for iTV attractiveness as a holiday information source across perceived travel experience. (n164)

In all three measures of travel experience, none was found to be significantly correlated with interactive television attractiveness. Thus, travel experience overall does not seem to be a pre-disposing factor to the positive attitude towards interactive television for holiday planning. Analysis along the actual interaction and typical haul segmentations also found no significant relationships (results in Appendix 6A).

6.3.3 Planning Experience Findings

The **number of sources** an individual typically uses to plan an overseas holiday should be indicative of their planning experience. In turn, the more experienced a participant is in planning, the more open they should be to utilising new media such as interactive television. The raw count of the sources were converted into categories, where 1 to 4 sources constitute a few, 5 to 10 a moderate amount of sources and 11-14 sources are a lot of sources. As with the travel experience measures, three initial non-parametric tests were run with the dependent variable interactive television attractiveness (Table 6.3.9).

iTV attractiveness across the number of sources used	Kendall's Tau-b Correlation					
	Correlation Coefficient		1SIG.			
Number of sources and iTV attractiveness (1-7 scale)	.203		.000			
Kruskal-Wallis	Group	Mean Rank	Chi ²	SIG.		
iTV attractiveness (1-7 scale) across number of sources (3 categories)	1-4	68.23	14.122	.001		
	5-10	74.84				
	11-14	104.66				
	Groups	Mean Ranks	Z	SIG.		
iTV attractiveness (1-7 scale) across number of sources (3 categories)	1-4	54.62	60.66	619.0	-.603	.547
	5-10	67.68	95.59	1503.5	-3.639	.000
	1-4	20.62	32.07	177.0	-2.224	.026

Table 6.3.9: Results for iTV attractiveness as a holiday information source across the number of sources typically used for planning overseas holidays. (n164)

The initial Kendall's Tau-b correlation test shows a significant relationship between the two variables ($r = .203$, $p < .001$). This indicates that as the number of sources increase so too do the scores on interactive television attractiveness. The Kruskal-Wallis test reinforces the significant difference between source groups ($\chi^2 = 14.122$, $p < .05$). Mann-Whitney U tests were carried out on possible pairings of the three groups and indicate that correlation between number of sources and attractiveness scores occurs more in the upper parts of the sample (those using more than 11 sources) than the lower. Thus, participants that typically consult a lot of information sources in planning their holidays are also more positive to the use of interactive television for such purposes.

The second measure of planning experience looks more to the **type of sources** an individual may use (Table 6.3.10). This is different from the previous analysis because, whereas an individual may have consulted 3 sources in the form of a travel agent, friends/relatives living at the destination and friends/relative who have visited the destination, this would account only for one *type of source*: interpersonal. Thus,

again, the more varied and diverse the types of sources consulted, the more experienced the individual would be and thus more open to utilising new media such as interactive television. For analysis purposes the source type count was converted into categories: 1 to 3: few, 4 to 5: more.

Information Source Types	Information Sources
Intrapersonal	Personal Experience
Interpersonal	Travel Agent, Friends/Relative who live there, Friends/Relative who had travelled there.
Destination Specific	Guidebook, Tourist Board/Authority.
Mass Media Advertising	Ads in Newspapers, Magazines or TV
Mass Media Content	Newspaper or Magazine Articles, TV Travel Shows.
Interactive Media	Teletext services, Internet/Websites, Shows on idTV services, Ads on idTV services, Shopping areas on idTV services.

Table 6.3.10: Information sources in source type groups. idTV: interactive digital TV / iTV.

The initial Kendall’s Tau-b correlation test (Table 6.3.11) shows a significant relationship between the two variables ($r .126, p<.05$), indicating that as the number of source types increase, so too do the scores on interactive television attractiveness. As there were only two groups of number of source types, a Mann-Whitney U test was carried out and reinforces the correlation results ($U 390.5, z -2.249, p<.05$). Thus, the more source types a participant typically uses is associated with being more open to interactive television for holiday planning.

iTV attractiveness across number of source types	Kendall’s Tau-b Correlation				
	Correlation Coefficient		1SIG.		
Number of source types and iTV attractiveness (1-7 scale)	.126		.025		
Mann-Whitney U	Groups	Mean Ranks	U	Z	
iTV attractiveness (1-7 scale) across number of source types (2 groups)	Less (1-3)	48.39	390.50	-2.249	.025
	More (4-6)	84.48			

Table 6.3.11: Results for iTV attractiveness as a holiday information source across the number of source types typically used for planning overseas holidays. (n164)

The **weighted scores** of the source types were also investigated to see whether the amount a particular type of information source will somehow reflect upon how an individual will embrace interactive television. It is proposed that this may be especially pertinent for interactive media such as teletext, the Internet and previous interactive television use in that, different levels of previous use would correlate to different perspectives of interactive television as a holiday planning source.

iTV attractiveness across weighted source types	Kendall's Tau-b Correlation	
	Correlation Coefficient	
Intrapersonal	.042	.248
Interpersonal	.038	.257
Destination Specific	.181	.001
Mass Media Advertising	.076	.110
Mass Media Content	.121	.020
Interactive Media	.214	.000
Teletext	.090	.128
Internet	.060	.149
iTV	.232	.000

Table 6.3.12: Correlation (1-tailed) results for iTV attractiveness as a holiday information source (1-7scale) across the weighted source types typically used for planning overseas holidays. (n164)

The initial Kendall's Tau-b correlation test (Table 6.3.12) shows a significant, though relatively weak, relationship between three source types and interactive television attractiveness: destination specific literature ($r .181, p < .01$), mass media content ($r .121, p < .05$) and interactive media ($r .214, p < .001$). When the interactive media group is broken into its parts, the only significant correlation is with previous interactive television use ($r .232, p < .001$). It is interesting how different the correlations are, even though each is relatively weak. The interactive media and subsequently the interactive television source type is understandably the most strongly related, followed by destination specific literature - which has been deemed to be the more experienced travellers' source of choice (Etzel and Wahlers, 1985)

and then mass media content. Thus it seems that for these four source types the attractiveness of interactive television increases as the extent of their previous use increases.

To further understand these correlations, the source type weightings were reduced to two groups (less used: 0 to 0.49 and more used: 0.50 to 1.00) and Mann-Whitney U tests were carried out (Table 6.3.13). From this analysis only three source types show that a significant difference exists between the less and more weighted groups: destination specific (U 2616.5, z -2.271, p<.05), interactive media (U 730.5, z -2.239, p<.05) and interactive television (U 264.5, z -3.171, p<.05).

compared between low and high source usage	Mann-Whitney U				
	Mean Ranks			Z	SIG.
	Less 0 – 0.49	More 0.50 – 1			
Intrapersonal	71.11	83.99	1161.0	-1.128	.259
Interpersonal	79.33	84.19	2869.0	-.632	.527
Destination Specific	72.88	89.66	2616.5	-2.271	.023
Mass Media Advertising	81.28	87.01	2099.5	-.643	.520
Mass Media Content	78.16	88.78	2828.5	-1.429	.153
Interactive Media	79.90	108.30	730.5	-2.239	.025
Teletext	50.21	53.67	835.5	-.508	.611
Internet	74.64	79.33	755.0	-.335	.738
iTV	79.71	130.61	264.5	-3.171	.002

Table 6.3.13: Results for comparison of iTV attractiveness scores (1-7scale) across information source weight groups. (n164)

Again, the difference is most pronounced between the two interactive television groups (ranked means: less 79.71, more 130.61), followed by interactive media and destination specific literature. From this analysis it seems that previous heavy use of destination specific literature, interactive media and interactive television (in particular) are associated with participants seeing interactive television as an attractive source for holiday planning.

As the final measure of planning experience, participants were asked to rate their **perceived planning experience** on a 1 to 7 scale. The bivariate Kendall’s Tau-b correlation (Table 6.3.14) found no significant relationship between perceived planning experience and interactive television attractiveness ($r = .073$, $p > .05$) and neither did the Kruskal-Wallis test ($\chi^2 = .743$, $p > .05$). This analysis showed that participants’ perceptions of their planning experience does not relate to how attractive interactive television is as a holiday planning source.

iTV attractiveness across perceived planning experience	Kendall’s Tau-b Correlation			
	Correlation Coefficient			
Perceived planning experience and iTV attractiveness (1-7 scales)	.073		.119	
Kruskal-Wallis	Group		Chi ²	SIG.
ITV attractiveness (1-7 scale) across perceived planning experience (2 groups)	Less	79.61	.743	.389
	More	85.93		

Table 6.3.14: Results for iTV attractiveness as a holiday information source across perceived planning experience (both 1-7scales). (n164)

From the analysis it seems that the breadth and variety of information sources typically used by participants (>11 sources, 4 or more source types and heavy use of destination specific or interactive media sources) is positively associated with their openness of using interactive television in holiday planning, rather than their perceived experience as holiday planners.

6.3.3.1 Additional Analysis: Long-Haul vs. Short-Haul Experience

As outlined in the methods section, additional analysis was run on the planning experience versus the interactive television attractiveness measures with participants segmented according to actual interaction and long- or short-haul travel experience.

This was done to check whether the choice to interact moderated the planning experience and interactive television attractiveness relationships. The latter was based on the notion that short-haul and long-haul travel requires different information and thus utilises different information sources (Gitleson and Crompton, 1983; Duke and Persia, 1993; Hsiesh and O'Leary, 1993; Zalatan, 1996; Hyde, 2000). Table 6.3.15 displays the significant results of the testing according to the actual interaction groups (interacted, chose not to interact and not able to interact) with the complete results available in Appendix 6A.

Kendall's Tau-b Correlation: Variable vs. iTV attractiveness	Interaction Level	Correlation Coefficient	1SIG.
Number of sources	NA	.395	.000
Number of source types	NA	.448	.000
Perceived Planning Experience	NA	.190	.047
Intrapersonal	-	-	-
Interpersonal	NA	.184	.041
Destination Specific	I	.353	.001
Mass Media Advertising	NA	.191	.044
Mass Media Content	NA	.309	.002
Interactive Media	NA	.359	.000
Teletext	NI	.238	.044
Internet	-	-	-
iTV	NA	.454	.000

Table 6.3.15: Significant correlation (1-tailed) results for iTV attractiveness as a holiday information source (1-7scale) across planning experience measures, segmented by actual interaction levels. NA = not able to interact, NI = chose not to interact, I = interacted.

Participants that were not able to interact (NA) had the most significant correlations. As the number of sources, number of source types and perceived experience in planning increased, so too did the attractiveness evaluations for interactive television. Furthermore, as use of interpersonal sources, mass media advertising, mass media content and interactive television increased, so too did interactive television attractiveness scores.

Since the interacted group’s interactive television attractiveness score is typically greater than the other two groups’ on the overall sample (see previous Table 6.3.5), this indicates that actual interaction and the opportunity to interact must moderate the planning experience – interactive television attractiveness relationship. The significant correlations involving the interacted group (destination specific literature) and the chose not to interact group (teletext) would suggest that interaction opportunity does not affect the relationship for these two source types.

Kendall’s Tau-b Correlation: Variable vs. iTV attractiveness	Haul Type	Correlation Coefficient	1SIG.
Number of sources	SH	.296	.000
Number of source types	SH	.293	.000
Perceived Planning Experience	-	-	-
Intrapersonal	-	-	-
Interpersonal	-	-	-
Destination Specific	LH	.216	.005
	SH	.140	.047
Mass Media Advertising	SH	.116	.096
Mass Media Content	SH	.216	.006
Interactive Media	SH	.216	.000
Teletext	SH	.221	.023
Internet	SH	.123	.090
iTV	LH	.133	.076
	SH	.327	.000

Table 6.3.16: Significant correlation (1-tailed) results for iTV attractiveness as a holiday information source (1-7scale) across planning experience measures, segmented by typical haul. LH = long-haul, SH = short-haul.

Segmenting along haul classifications found more significant relationships for short-haul participants than long-haul participants (Table 6.3.16). Participants with mostly short-haul travel experience differed on their interactive television attractiveness scores for most planning experience measures. This indicates that the more sources, the more source types and the more a particular source type is used by short-haul travellers, the higher their attractiveness evaluations of interactive television will be. Long-haul travellers only reported a higher interactive television attractiveness score

if they had used destination specific literature a lot ($r = .216, p < .05$) or previous interactive television ($r = .133, p < .1$). This implies that previous satisfactory use of interactive television would influence future evaluations, while destination specific literature, which is characteristic of experienced travellers, also makes interactive television more favourable.

For short-haul travellers, the appeal of interactive television is almost universal regardless of what sources are used. This might be due to the prevalence of short-haul destination information from most sources, while the detailed information required for long-haul travel is best garnered from more particular sources. Thus, while there is no difference between the overall long-haul and short-haul attractiveness evaluations ($U = 3025.0, z = -1.118, p > .05$), within the short-haul travellers interactive television attractiveness seems to depend upon the number of sources, number of source types and ultimately the extent to which a source type is used. However, long-haul travellers only differ on the extent to which they have used destination specific literature and their previous experiences with interactive television as a holiday planning source.

6.3.4 Investigation#2B Conclusions

The exploration of participants' travel and planning experiences show that actual travel does not pre-dispose individuals towards new information sources such as interactive television, but that previous information sources use does. While participants' previous use of interactive television was the most strongly related to interactive television attractiveness (understandably), interactive media as a whole

and destination specific literature were also indicative. As the latter is idiosyncratic of the more experienced traveller, this was not an unusual finding given the experienced nature of the overall sample. The analyses also suggest that interaction or the opportunity to interact moderate the planning experience and interactive television attractiveness relationship. Furthermore short-haul travellers' planning experience measures are generally associated with their attractiveness evaluations, however, long-haulers' are not.

Thus it is not travel experience but rather planning experience that would open participants to the use of interactive television for researching their future long-haul holidays. For those who travel mostly to short-haul destinations, interactive television seems like an attractive source regardless of their previous planning strategies, however, long-haul travellers are only favourable towards interactive television if they have had previous experience with it or are heavy users of destination specific sources. As previous interactive television use featured repeatedly as an indicator of interactive television attractiveness, it and the other interactive media are explored more closely in the next section.

6.4 Investigation#2C: Interactive Media Pre-Dispositions

As the discussion in Chapter 3 showed there have been numerous media and technological innovations that have contributed to the familiarisation of audiences and consumers to the notion of interacting with media. Each has helped to change the face of the media landscape. Media such as teletext, videotex and the Internet

have given greater information access opportunities, displaced mass for specialized media, altered business models and have “pushed the cultural expectations for information and interpersonal correspondence to a frenzied pace of instantaneous facsimile and next-day delivery” (Neuman, 1991). These new media have begun to fill the ‘gap’ left by more conventional media identified by Tomita in Figure 6.4.1.

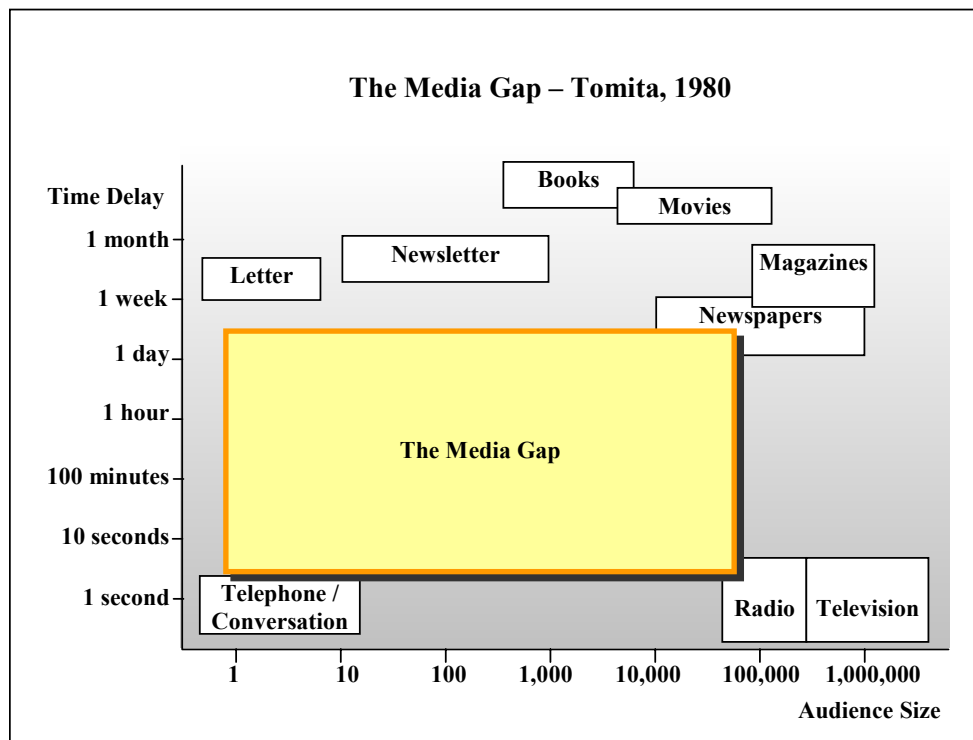


Figure 6.4.1: The media gap in traditional media as identified by Tomita (1980) that is being filled by the interactive technologies such as teletext, the Internet and interactive television. Source: Neuman, 1991.

However, as with promises and visions of new media before it, interactive television may mature into a fraction of itself due to a number of counteracting forces. One such force is economies of scale which favours mass media formats and the psychological nature of mass audience (semi-attentive, entertainment-oriented, Neuman, 1991; Hodgson, 1996). Traditional and modern media have equipped the audience with skills and expectations that will assist in the evaluation and acceptance

of new technologies (Singley and Anderson, 1989; Gregan-Paxton and Roedder John, 1997; Docampo-Rama, 2001) such as interactive television, which will in time develop its own niche in the scheme of things. It is interactive television’s convergence of television (teletext and any current interactive television services) and Internet technologies that prompted this study to look into these media’s potential influences.

6.4.1 Methods and Measures

It was anticipated that participants’ previous experiences with television and Internet media would somehow influence or be associated with their preferences for interactive television in the holiday planning context given the technological connections.

3a. For how long have you used teletext services? Please tick one box.

Less than 1 month More than 1 year
 1 – 6 months Do Not Use... (Go to Qu. 4a)
 6 – 12 months

3b. How often do you use teletext for the following?
 Please circle the number most appropriate for each service type.

	Rarely	1	2	3	4	5	6	7	Very Often	Never
News and other Of-Interest Information	1	2	3	4	5	6	7	0		
Entertainment	1	2	3	4	5	6	7	0		
Browsing for Goods/Services	1	2	3	4	5	6	7	0		
Buying Goods/Services	1	2	3	4	5	6	7	0		
Looking for Travel/Holiday Deals	1	2	3	4	5	6	7	0		
Buying Travel/Holiday Deals	1	2	3	4	5	6	7	0		
Other (please specify)	1	2	3	4	5	6	7	0		

3c. How experienced a teletext user would you say you are?
 Please circle the number most appropriate for you.

	Inexperienced	1	2	3	4	5	6	7	Very Experienced
As a teletext user I am	1	2	3	4	5	6	7		

Figure 6.4.2: An example of the three interactive media experience questions in part one of the questionnaire. Note: the ‘service types’ were tailored for each media.

Measures of participants' experiences with these technologies were featured in part one of the questionnaire (HomeChoice, other digital interactive television providers, teletext and the Internet) and while teletext and the Internet measures were used as found, the HomeChoice and other idTV provider evaluations were combined to form one interactive television measure for analysis purposes. The technologies were investigated along number of months of access, usage for selected purposes and perceived experience with the media (see Figure 6.4.2 for example). A more detailed discussion on the measures can be found in Chapter 4, Section 4.5.3.1.

Measurement	Home-Choice	idTV Providers	Teletext	
Access (percentage for each category)				
<1 month	2%	1%	1%	-
1-6 months	2%	9%	-	2%
6-12 months	9%	3%	1%	1%
>12 months	87%	37%	68%	97%
Do Not Use	-	50%	30%	-
Multiple Media Access (n, % from sample n164)				
iTV, Teletext and Internet	115		71%	
iTV and Internet Only	48		29%	
iTV and Teletext Only	-		-	
iTV Only	-		-	
Uses / Services (mean of a 1(Rarely) -7 (Very Often) scale)				
Watching News/Movies/Shows/Sport	4.51	5.52	-	-
Requesting Brochures/Information	0.64	0.70	-	-
News and other Of-Interest Information	-	-	3.88	5.83
Entertainment	-	-	1.93	-
Entertainment/Email/Chat	-	-	-	6.37
Browsing in the shopping area ^b	1.30	1.37	1.23	5.60
Buying goods/Services ^b	0.49	0.82	0.68	4.87
Looking for Travel/Holiday Deals ^a	1.30	1.51	2.47	5.06
Buying travel/Holiday Deals ^a	0.50	0.52	1.23	4.25
Perceived Experienced (\bar{x} of a 1-7 scale)	4.88	4.82	5.02	6.29

Table 6.4.1: Descriptive statistics of interactive media experience. Superscripts refer to discussion in following text.

Preliminary statistics (Table 6.4.1) show that all participants had experience with HomeChoice and the Internet, a significant proportion (70%) had teletext experience

and 50% had had experience with one or more idTV providers. Furthermore, when access data was analysed regarding multiple usage, 71% of participants had had experience with all three media, while the remaining 29% had experience with the Internet and interactive television only.

The perceived experience means indicate that participants were the most comfortable and experienced with the Internet (\bar{x} 6.29) followed by teletext (\bar{x} 5.02) and the interactive television media (\bar{x} 4.85). This seems to be supported by the substantial percentage of participants having more than 12 months of access/experience with the Internet (97%) and teletext (68%). Despite all participants having had access to HomeChoice and most of them (87%) having had more than 12 months experience, the low perceived experience score (\bar{x} 4.88) may be due to low or inconsistent usage of the service (ie. when programmes of particular interest were available). Furthermore, a number of participants indicated, via Call-Backs or the ‘Other’ HomeChoice usage option, that they mainly used the broadband Internet aspect of the subscription package over the video-on-demand aspect.

Otherwise, the way in which participants used each media was not that surprising as it fell in line with the typical content of the media. Both interactive television media were primarily used for watching programming (HomeChoice \bar{x} 4.51; Other Providers \bar{x} 5.52). Teletext was mainly used for information gathering (\bar{x} 3.88), while the Internet was firstly used for communication purposes (\bar{x} 6.37) and then information purposes (\bar{x} 5.83). The relatively high scores given to the Internet across

the use purposes is reflective of how well it has been adopted by the participants, when compared to less global teletext and the very new interactive television media.

Of particular interest to this study was how participants had used the interactive media for researching and purchasing holidays (Table 6.4.1 items marked with ^a). Across the media, participants seem to research their holidays more than they purchase their holidays directly via the media. This pattern seems to echo participant's use of the media for general search and purchase situations (Table 6.4.1 items marked with ^b). Teletext's prominence as a successful travel product distribution tool is apparent in the doubled usage score for researching holidays (\bar{x} 2.47) than ordinary products and services (\bar{x} 1.23). It is suggested that the very low scores for the two interactive television media may be due to the limited amount of relevant content available for the participants who are predominantly independent, experienced long-haul, overseas travellers. Generally the current offerings on interactive television and teletext services cater strongly towards short-haul and package holidays (Appendix 2A). The extra destination information available on such services is also limited, whereas the Internet is almost limitless in comparison.

To measure participants' preference for interactive television as a destination information source, participants were asked to score its attractiveness for such purposes in planning an international holiday (1-7scale, Figure 6.4.3). As this question was from part two of the questionnaire it could also reflect participants' experience with the experiment treatment or, if they did not interact, as participants knew it otherwise. So as to put this measure into perspective, a pre-experiment

measure was also used. This consisted of asking participants whether they would use interactive television in the future for holiday purposes (example in Figure 6.4.4).

5c. Please compare the experience you just had (requesting a brochure directly via the television) with more traditional ways for getting destination information?
Please circle one number to indicate how attractive each item is.

	Unattractive							Very	Would
	1	2	3	4	5	6	7	Attractive	Not Use
Interactive digital television (as in this case)	1	2	3	4	5	6	7		0
Freecall phone number (featured in the ad)	1	2	3	4	5	6	7		0
A website address (featured in the ad)	1	2	3	4	5	6	7		0
Teletext service	1	2	3	4	5	6	7		0
A travel agent	1	2	3	4	5	6	7		0

Figure 6.4.3: An example of the interactive television attractiveness question in part two of the questionnaire. Note: the items were written differently for non-interactive treatments, this is from the interacted-with ad with impulse response questionnaire.

7. Would you consider using the following media in planning *future overseas holidays*? Please tick one box for each source.

	Use for Information On a Destination	Use for Booking Holidays	Use for Information and Booking	Would Not Use
Teletext Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interactive Digital TV	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 6.4.4: An example of the future use intentions question in part one of the questionnaire.

The basic statistics in Table 6.4.2 show that interactive television was reasonably attractive to the participants as a whole (\bar{x} 4.49 out of 7), with higher scores associated with participants that interacted with the experiment (\bar{x} 6.08). For example, participants who actually interacted with their Impulse Show treatment scored interactive television at 6.10 while those that chose not to interact with the Impulse Show treatment found it less attractive at \bar{x} 3.95. The reasons for this are still to be investigated, however, initially it seems that by interacting one’s preference for interactive television in holiday planning is more positive than if one had not interacted.

Grouping	iTV Attractiveness means		
	General (n164)	Interacted (n49)	Chose Not to Interact (n65)
Overall (n164)	4.49	6.08	3.60
Control Ad (n19)	3.26	-	-
Control Show (n31)	4.58	-	-
Impulse Ad (n29)	4.55	6.60	3.43
Impulse Show (n29)	4.69	6.10	3.95
Telescopic Ad (n27)	5.22	6.06	4.00
Telescopic Show (n29)	4.24	5.69	3.06

Table 6.4.2: Interactive television attractiveness scores from part two of the questionnaire overall the sample, across treatment cells and by actual interaction level.

To see whether this would be a statistical issue, a Kruskal-Wallis test was conducted on the interactive television attractiveness score across the levels of actual interactivity. The test found that there was a significant difference between the three groups (χ^2 38.693, $p < .05$) and the mean ranks indicated that this was between the interacted group and the other two groups (\bar{x} ranks: interacted: 116.98; chose not to interact: 64.42; not able to interact: 72.22). A Mann-Whitney U test between the non-interacting groups confirmed this (U 1444.0, z -1.032, $p < .05$). Thus, the notion that interaction during the experiment may be a moderating factor on attractiveness evaluations seems to be an issue. To account for this, a secondary analysis will be carried out on actual interaction levels for pre-disposition variables in each media.

Media	Would Use for...				Would Not Use
	Information Only	Booking Only	Information and Booking	Total	
Teletext	27%	10%	21%	59%	41%
Internet	14%	9%	76%	99%	1%
iTV	37%	4%	35%	75%	25%

Table 6.4.3: Participant percentages for intended future use of interactive media for holiday planning purposes.

As for future intended use, the basic statistics in Table 6.4.3 show that almost all participants (99%) would use the Internet in the future for planning an overseas

holiday, 75% would use interactive television and more than half (59%) would use teletext in some way.

6.4.1.1 Analysis Procedures

These separate measures were then combined in a number of analysis procedures. The first test for all interactive media was the correlation (Kendall's Tau-b, 1 tailed) of number of months of access with interactive television attractiveness. It was decided to take this avenue because conducting a mean comparison between access and no access would be fruitless in both the cases of the Internet and interactive television since all participants had had experience with these. This was followed by a correlation between the perceived experience measure and interactive television experience.

Participants' past use of the interactive media for holiday purposes was also used to analyse interactive television attractiveness. The first phase converted the usage scores into a dichotomous variable (have used or have not used) and compared these two groups via a Mann-Whitney U test. If this was found to be significant, then the 'have used' cases would be examined in a Kendall's Tau-b correlation (1 tailed). Mann Whitney U tests were also carried out on participants' intentions to use the media in the future for holiday planning purposes.

Finally, the past use of the interactive media and the future use intention were dichotomously coded and combined to give four possible scenarios to see whether positive or negative experiences of each in combination make a difference to the

attractiveness of interactive television. Table 6.4.4 shows the creation of these groups. A participant that had both past use and future intentions to use a media would be named as ‘In Favour’ because it seems that their initial experience has inclined them favourably towards the media. Participants with no past use but future intentions to use would be coded as ‘Optimistic Naïve’ as they feel positively towards the media without having used it. The ‘Once Burned’ group are those participants that had use the media but were not intending to use it in the future, probably because of a negative or non-satisfying experience. Finally, those that had not used the media and did not intend to use the media are classified as ‘Not Interested’.

Past Use Status	Intention Status	Group Name	
Yes	Yes	In Favour	IFavour
No	Yes	Optimistic Naïve	ONaïve
Yes	No	Once Burned	OBurn
No	No	Not Interested	NInterest

Table 6.4.4: Creation of use combination variable for interactive media.

These various analyses were first conducted on the sample as a whole and then as per the actual interaction levels if appropriate. For ease of understanding each interactive media will be dealt with individually before a summary of the analysis.

6.4.2 Teletext as a Pre-Disposition to iTV

As an early interactive media, teletext will have allowed individuals to come to terms with goal-directed information-seeking behaviour through their television and to develop the skills and a ‘language’ for navigating such an environment. Thus, the hypothesis is that more experience an individual has had with teletext, the more

favourable they will be towards interactive television. From this rationale a number of tests were carried out, the overall results of which are displayed in Table 6.4.5.

6.4.2.1 General Analysis

Two Kendall's Tau-b correlations were run between number of months of access to teletext and the perceived experience with teletext with interactive television attractiveness. In both cases, tests indicate that there is a significant, weak, positive relationship with participants' attractiveness evaluations of interactive television (Access: $r = .173$, $p < .01$; Perceived Experience: $r = .172$, $p < .01$). Hence, a longer access to teletext and a greater perceived teletext experience is associated with considering interactive television to be a more attractive destination information source.

Teletext vs. iTV attractiveness		Kendall's Tau-b			
		Correlation Coefficient	1SIG.		
Access (4 categories)		.173	.005		
Perceived Experience (1-7scale)		.172	.002		
Measure	Mann-Whitney U test				
	Groups	Rank	U	Z	1SIG.
Past Holiday Use	None (26)	50.83	970.5	-1.271	.102
	Some (89)	60.10			
Future Use Intentions	No (68)	75.57	2793.0	-1.595	.055
	Yes (96)	87.41			
Measure	Kendall's Tau-b				
	Groups	Mean Rank	Chi ²	1SIG.	
Combination - past use and future use	IFavour (65)	58.79	4.888	.090	
	ONaïve (8)	67.19			
	OBurn (24)	63.63			
	NInterest (18)	43.56			

Table 6.4.5: Analysis results from the relationship between teletext experience and interactive television attractiveness across the whole sample.

The next set of tests investigated whether past use of teletext for holiday purposes would play a factor in the attractiveness of interactive television. Of the participants that had had access to teletext, 77% had used it for holiday purposes. While the

actual attractiveness score was higher than those that had not used teletext for such purposes (Not used \bar{x} 4.12, Used \bar{x} 5.00) this was not a significant difference (U 970.5, z -1.271, $p > .05$). This was also the case for intentions to use teletext in the future. While 59% of participants were considering the use of teletext in the future for holiday purposes, their evaluations of interactive television (\bar{x} 3.97) were not significantly higher than those not intending to use teletext in the future (\bar{x} 4.85; U 2793.0, z -1.595, $p > .05$). Thus, participants' intentions to use teletext for future holiday planning purposes are not related with how attractive interactive television would be for such purposes.

A final exploration was made of the past use and future use variables. The Kruskal-Wallis test found no significant difference in the interactive television attractiveness scores between the various groups of past and future use inclinations (χ^2 4.888, $p > .05$). This is clear when the actual means are compared: In Favour \bar{x} 4.98, Optimistic Naïve \bar{x} 5.25, Once Burned \bar{x} 5.04, Not Interested \bar{x} 3.61. Thus, teletext experience is only associated with an increase in interactive television attractiveness when considering the length of access and the perceived experience.

6.4.2.2 Actual Interaction Level Analysis

The analyses were run again, but this time split along the actual interaction levels: interacted (I), chose not to interact (NI) and not able to interact (NA). The **access** and **perceived experience** measures were positively correlated at the overall level. Each interaction level was correlated with the interactive television attractiveness scores (Table 6.4.6).

Teletext vs. iTV attractiveness	Kendall's Tau-b	
	Correlation Coefficient	
Access Overall Sample (n164)	.173	.005
Perceived Experience Overall Sample (n164)	.172	.002
Interaction Level		
Interacted (n49)	-.009	.473
Chose not to interact (n65)	.111	.149
No opportunity to interact (n50)	.182	.071
Perceived Experience (1-7scale)		
Interacted (n49)	.058	.310
Chose not to interact (n65)	.128	.095
No opportunity to interact (n50)	.201	.036

Table 6.4.6: Analysis results from the relationship between teletext experience and interactive television attractiveness across actual interaction levels #1.

There were no significant correlations for the number of months of access at the .05 significance level. However, given the significant result for the perceived experience variable for the not able to interact group ($r = .201, p < .05$), it is interesting to note that these participants also had a positive weak correlation with interactive television attractiveness at the .1 level ($r = .182, p < .1$). This indicates that the lack of an opportunity to interact allows a clearer association between a participant's teletext access and experience variables and their preferences towards interactive television in the holiday planning process. Thus one could say that the lack of interaction allowed the skills and experience attained via teletext to be extrapolated to the potentials of interactive television.

The next set of tests looked at the past teletext **use for holiday purposes**, intentions for teletext **use in the future** and the **combination** of these two variables (significant results in Table 6.4.7; complete results in Appendix 6A). Participants who had used teletext for holiday purposes in the past and chose not to interact with their treatment

felt that interactive television was more attractive than those who had not used teletext in the past (U 115.0, z -1.920, p<.05).

Teletext vs. iTV attractiveness					
	Mann-Whitney U				
	Groups	Mean Rank	U	Z	1SIG.
Chose Not to Interact	No (14)	15.71	115.0	-1.920	.028
	Yes (26)	23.08			
Future Intentions					
	Mann-Whitney U				
	Groups	Mean Rank	U	Z	1SIG.
Chose Not to Interact	No (29)	27.78	370.5	-2.021	.022
	Yes (36)	37.21			
No Opportunity to Interact	No (18)	19.83	186.0	-2.084	.019
	Yes (32)	28.69			
Combination	- No Significant Results -				

Table 6.4.7: Analysis results from the relationship between teletext experience and interactive television attractiveness across actual interaction levels #2.

When the future intentions to use teletext variable was examined, two significant differences emerged, one each on the groups that did not interact. Participants who chose not to interact but had intentions to use teletext in future holiday planning reported higher interactive television attractiveness scores than those who had no intention of doing so (U 370.5, z -2.021, p<.05). Participants with future intentions to use teletext in the control treatments also had a greater preference for interactive television than those not intending to use teletext (U 186.0, z -2.084, p<.05). When past use and future intentions were combined, none of the interaction levels distinguished between the groups on interactive television attractiveness scores; echoing the overall results (Table 6.4.5). Thus, since the overall results were insignificant and so was the group that interacted, it seems that experiencing interactive television during the experiment does not facilitate a relationship between

teletext experience and the attractiveness of interactive television for future holiday planning purposes, rather it interrupts it.

6.4.3 The Internet as a Pre-Disposition to iTV

The Internet has been rapidly adopted by individuals over the last 8 years and its acceptance into everyday life is reflective of this. In turn, it has made individuals comfortable with highly interactive media and appreciative of its technological potential not only for communication and entertainment but also as a goal-directed information tool. As with teletext, the first tests were on the overall sample.

6.4.3.1 General Analysis

Participants' **access** and **perceived experience** measures with the Internet were tested against the attractiveness of interactive television measure. Table 6.4.8 shows that neither measure is correlated with the interactive television attractiveness evaluations (Access: $r = .088$, $p > .05$; Perceived Experience: $r = .058$, $p > .05$). Even though access is significantly correlated at the .1 level, it is so very weakly ($r = .088$), which makes this result negligible. Thus, this implies that Internet experience is not related to how participants feel about interactive television as a destination information source.

The subsequent tests on **past holiday use**, **future use intentions** and the **combination** of these also do not proffer any significant results. Thus, whether or not a participant had used the Internet in the past for holiday planning did not make a difference in their interactive television evaluation ($U = 369.5$, $z = -.928$, $p > .05$).

Similarly, a participant's intentions to use the Internet in the future for holiday purposes did not differentiate interactive television's attractiveness (U 8.0, z -1.575, $p > .05$). Furthermore, the combination of past use and future intended use did not yield a significant difference between groups (χ^2 3.388, $p > .05$).

Internet vs. iTV attractiveness		Kendall's Tau-b			
		Correlation Coefficient	1SIG.		
Access		.088	.099		
Perceived Experience		.059	.180		
Measure	Mann-Whitney U				
	Groups	Mean Rank	U	Z	1SIG.
Past Holiday Use	None (6)	65.08	369.5	-.928	.177
	Some (158)	83.13			
Future Use Intentions	No (1)	9.00	8.00	-1.575	.058
	Yes (163)	82.95			
Measure	Kruskal-Wallis				
	Groups	Mean Rank	Chi ²	1SIG.	
Combination - past use and future use.	IFavour (157)	83.63	3.388	.092	
	ONaïve (1)	9.00			
	OBurn (6)	65.08			
	NInterest (0)	-			

Table 6.4.8: Analysis results from the relationship between Internet experience and interactive television attractiveness.

An important consideration on these analyses is the high percentage of participants that had Internet access (100%) and those that had it for more than 12 months (97%) and that the majority described themselves as very experienced (\bar{x} 6.29, std. dev. 1.08) thus providing little variance in the sample. Hence, Internet experience is not associated with participants' feelings towards interactive television as a holiday planning source.

6.4.3.2 Actual Interaction Level Analysis

The analysis along the actual interaction levels was also carried out for the Internet.

Out of the five sets of tests there were no significant results at the .05 level (see non-

significant results in Appendix 6D). However, as a point of interest at the .1 level of significance, participants that *chose not to interact* with the treatment had a weak positive correlation. Thus as the number of months they had access to the Internet increased so too did their appreciation of interactive television ($r .156, p<.1$). This mimicked the overall access test in the previous section ($r .088, p<.1$). While this result is not of importance in this study's results, it may indicate that there could be an association at a larger sample. Given this, it is suggested that experience with the Internet does not relate in any way to how interactive television is considered as a holiday information source.

6.4.4 Previous Interactive Television as a Pre-Disposition to iTV

Lastly is the proposition that direct skills and experiences from previous interactive television use will pre-disposition individuals to interactive television as a holiday planning source. That is, the more experience an individual has had with interactive television services, the more favourable they will be towards it for holiday planning purposes. Even though the experience with HomeChoice and other providers was surveyed separately, the analysis combined the two to provide a more representative view. The first set of tests looked at the overall sample.

6.4.4.1 General Analysis

The Kendall's Tau-b test (Table 6.4.9) between the number of months of **access** and interactive television attractiveness did not find a significant correlation ($r .045, p>.05$). However, a positive weak relationship was found between participants' **perceived experience** and interactive television attractiveness scores ($r .117, p<.05$).

Interactive Television vs. iTV attractiveness				Kendall's Tau-b	
				Coefficient	1SIG.
Access				.045	.238
Perceived Experience				.117	.023
Measure	Mann-Whitney U				
Past Holiday Use	Groups		U	Z	1SIG.
	None (56)	71.13	2387.5	-2.239	.013
	Some (108)	88.39			
Kendall's Tau-b Correlation			Correlation Coefficient	1SIG.	
Degree of Past Holiday Use (n180)			.057	.223	
Measure	Mann-Whitney U				
Future Use Intentions	Groups	Mean Rank	U	Z	1SIG.
	No (41)	59.68	1586.0	-3.604	.000
	Yes (123)	90.11			
Measure	Kruskal-Wallis				
Combination - past use and future use.	Groups	Mean Rank	Chi ²	1SIG.	
	IFavour (82)	97.70	18.068	.000	
	ONaïve (41)	76.93			
	OBurn (26)	62.21			
NInterest (15)	55.30				
2 highest groups	Mann-Whitney U				
Combination - past use and future use.	Groups	Mean Rank	U	Z	1SIG.
	IFavour (82)	67.40	1238.5	-2.419	.008
	ONaïve (41)	51.21			
3 groups	Kruskal-Wallis				
Combination - past use and future use.	Groups	Mean Rank	Chi ²	1SIG.	
	ONaïve (41)	46.72	4.416	.055	
	OBurn (26)	38.02			
	NInterest (15)	33.27			

Table 6.4.9: Analysis results from the relationship between interactive television experience and interactive television attractiveness.

While longer access to interactive television was not associated with interactive television attractiveness, how experienced participants felt they were was associated. When other data from the survey is considered, a potentially influential factor is the fact that participants tended to use the services predominantly for non-interactive purposes, such as viewing programming. This lack of experience with the interactive side of interactive television may be part of the reason why increased time with interactive television does not translate into a preference for it.

The next set of tests looked at participants' **past holiday use** of interactive television services. The Mann-Whitney U tests show that those that had used interactive television in the past for holiday purposes evaluated its attractiveness for such future use to be significantly higher (\bar{x} : Have Not Used: 3.95, Have Used: 4.77) than those who did not have such previous experience (U 2387.5, z -2.239, $p < .05$). However, when a correlation was conducted on those that had had some holiday use of interactive television, there was no correlation with interactive television attractiveness ($r .057$, $p > .05$). Thus it is not the amount of use but the fact of use that associate with higher interactive television attractiveness scores. Also, if participants had **future intentions** to use interactive television for holiday planning there was a positive association with more positive attractiveness, compared to those with no future intention to use interactive television (Actual \bar{x} : No: 3.17, Yes: 4.93; U 1586.0, z -3.604, $p < .05$).

The initial Kruskal-Wallis test of the combined measure also yielded a significant finding ($\chi^2 18.068$, $p < .05$). To identify where this difference lay the top two groups, In Favour and Optimistic Naïves, were compared in a Mann-Whitney U test and were found to be significantly different (U 1238.5, z -2.419, $p < .05$). The Optimistic Naïves were then compared to the remaining two groups and no significant difference was found ($\chi^2 4.416$, $p > .05$). Thus, participants that were in favour of interactive television, based on past experience and future use intentions, found interactive television to be significantly more attractive (\bar{x} In favour 5.21) than those who had a mixed combination or no experience at all (\bar{x} Optimistic Naïve 4.37, Once Burned 3.38, Not Interested 2.80).

Thus, participants’ perceived experience, past holiday use and future intended use of interactive television is positively associated with their evaluations of it as a holiday information source.

6.4.4.2 Additional Analysis

An additional investigation was carried out on the interactive television data at this point providing a context and added meaning to the attractiveness of interactive television as a planning source. The **attractiveness** evaluation for interactive television was compared to the other four information sources featured in the same question (freecall phone number, Internet, teletext and a travel agent) for each of the combined use groups (In Favour, Optimistic Naïve, Once Burned and Not Interested). For those participants In Favour of interactive television (Table 6.4.10), the Internet was the most attractive (χ^2 116.283, $p < .05$).

Group	Test	Information Source				
		iTV	Freecall	Internet	Teletext	Travel Agent
In Favour	Mean Ranks	3.55	2.86	4.19	2.12	2.27
	χ^2	116.283		df	4	SIG. .000
	Mean Ranks	3.20	2.64	-	2.01	2.15
	χ^2	50.279		df	3	SIG. .000
	Mean Ranks	-	2.30	-	1.80	1.89
	χ^2	13.549		df	2	SIG. .001
	Wilcoxon	Ranks	n	Mean Rank	z	2SIG.
	Freecall-iTV	Negative	45	32.44	-3.115	.002
		Positive	18	30.89		
		Ties	19	-		

Table 6.4.10: Comparison of source attractiveness means (1-7scale) for the In Favour participants.

On elimination of the overall highest scoring Internet, there was still a significant difference between the four sources. Interactive television and the freecall were the

next highest and thus compared before another source was removed. The Wilcoxon-Signed-Ranktest indicated that interactive television was the next most attractive ($z = 3.115, p < .05$) and thus freecall was returned to the next level of Friedman testing. On the mean ranks alone of this final test, it is obvious that the freecall is the third most attractive option, followed by teletext and the travel agent. Hence, participants with positive past use and future intentions for interactive television, it was the second most attractive information source.

Optimistic Naïve participants (Table 6.4.11), also found the Internet to be the most attractive ($\chi^2 = 72.264, p < .05$). However, when the Internet was taken out of the analysis, Wilcoxon-Signed-Rank tests found that interactive television was similar to the freecall option ($z = -1.478, p > .05$) and teletext and the travel agent were also considered to be similarly attractive ($z = -.054, p > .05$). This indicates that by not having past experience with interactive television but still holding it open as a future option, interactive television is as attractive as a free telephone call for acquiring further information on a destination.

Group	Test	Information Source				
		iTV	Freecall	Internet	Teletext	Travel Agent
Optimistic Naïve	Mean Ranks	3.30	3.07	4.40	2.02	2.20
	χ^2	72.264		df	4	
				SIG.	.000	
	Mean Ranks	3.04	2.89	-	1.98	2.10
	χ^2	28.265		df	3	
				SIG.	.000	
	Wilcoxon	Ranks	n	Mean Rank		2SIG.
	Freecall-iTV	Negative	15	17.83	-1.478	.140
		Positive	13	10.65		
		Ties	13	-		
	Wilcoxon	Ranks	n	Mean Rank		2SIG.
	Teletext-TravelAgent	Negative	12	13.38	-.054	.957
Positive		13	12.65			
Ties		16	-			

Table 6.4.11: Comparison of source attractiveness means for the Optimistic Naïve participants.

Participants who had had past holiday experience with interactive television but were not intending to use it again in the future (Once Burned, Table 6.4.12) also held the Internet to be the most attractive (χ^2 32.556, $p < .05$). However, all other sources were seen to be equally attractive (χ^2 6.723, $p > .05$). Thus a negative past experience with no intentions to use in the future is associated with considering interactive television to be as attractive as one of the less instantaneous sources such as a telephone call, checking teletext or visiting a travel agent.

Group	Test	Information Source				
			Freecall	Internet	Teletext	Travel Agent
Once Burned	Mean Ranks	2.98	3.04	4.31	2.08	2.60
	χ^2	32.556	df 4		SIG. .000	
	Mean Ranks	2.75	2.79	-	2.04	2.42
	χ^2	6.723	df 3		SIG. .081	

Table 6.4.12: Comparison of source attractiveness means for the In Favour participants.

Group	Test	Information Source				
		iTV	Freecall	Internet		Travel Agent
Not Interested	Mean Ranks	2.80	2.80	4.33	2.27	2.80
	χ^2	17.125	df 4		SIG. .002	
	Mean Ranks	2.57	2.63	-	2.17	2.63
	χ^2	1.645	df 3		SIG. .649	

Table 6.4.13: Comparison of source attractiveness means for the Not Interested participants.

The Not Interested participants, also scored the Internet as most attractive (Table 6.4.13; χ^2 17.125, $p < .05$) with the remaining sources being considered to be similarly attractive (χ^2 1.645, $p > .05$). Thus, having no idea about or interest in interactive television is associated with it being indistinguishable from other sources.

This extra analysis of the attractiveness scores shows that the Internet is the out right favourite among independent international travellers. Interactive television, however, is considered to be the second most attractive source from which to acquire

destination information *if* past experience has been positive and is coupled with positive future intentions to use interactive television. However, lack of past experience and only positive future intentions puts it in the same realm as a free phone call. Meanwhile a negative past experience causing it to be eliminated from future consideration or no knowledge of interactive television at all, means that it is not distinguished at all from freecall numbers, teletext, or the travel agent.

6.4.4.3 Actual Interaction Level Analysis

A number of pre-disposition variables produced significant results in the overall analysis and most of these also appeared when the actual interaction levels were considered individually. While the overall analysis found both number of months of **access** and **perceived experience** to be positively correlated, only two results were significant and then only at the .1 level (Table 6.4.14).

Previous iTV vs. iTV attractiveness	Kendall's Tau-b	
	Correlation Coefficient	1SIG.
Access Overall Sample (n164)	.045	.238
Perceived Experience Overall Sample (n164)	.117	.023
Access		
Interacted with simulation (n49)	-.114	.180
Chose not to interact with simulation (n65)	-.038	.352
No opportunity to interact with simulation (n50)	.170	.070
Perceived Experience		
Interacted with simulation (n49)	.076	.253
Chose not to interact with simulation (n65)	.104	.134
No opportunity to interact with simulation (n50)	.171	.056

Table 6.4.14: Analysis results from the relationship between teletext experience and interactive television attractiveness across actual interaction levels.

In both cases it was the participants that had no opportunity to interact (ie. Control treatments) that had a weak positive correlation between the access and perceived experience measures and their evaluations of interactive television as a holiday

planning source (Access: $r .170$, $p<.1$; Perceived Experience: $r .171$, $p<.1$). As participants that interacted or chose not to interact, did not have any significant correlations, it is suggested that perhaps the ability to interact did influence the attractiveness ratings and thus interrupt the access-attractiveness and perceived experience-attractiveness relationships.

Interactive Television vs. iTV attractiveness					
Past Holiday Use	Groups	Mean Rank	U		1SIG.
No Opportunity to Interact	No (13)	19.69	165.0	-1.688	.046
	Yes (37)	27.54			
Future Intentions	Groups	Mean Rank	U	Z	1SIG.
Chose Not to Interact	No (22)	22.45	241.0	-3.252	.000
	Yes (43)	38.40			
No Opportunity to Interact	No (7)	8.29	30.00	-3.406	.000
	Yes (43)	28.30			
Combination - Chose Not to Interact	Groups			Chi²	1SIG.
	IFavour (24)	41.60	12.446		.003
	ONaïve (19)	34.34			
	OBurn (14)	24.04			
	NInterest (8)	19.69			
Testing of similar groups	Groups	Mean Rank	U	Z	1SIG.
Chose Not to Interact – top two groups	IFavour (24)	24.31	172.5	-1.375	.085
	ONaïve (19)	19.08			
Chose Not to Interact - bottom two groups	OBurn (14)	11.89	50.5	-.387	.350
	NInterest (8)	10.81			
Combination - No Opportunity to Interact	Groups	Mean Rank		Chi²	1SIG.
	IFavour (33)	29.52	13.001		.003
	ONaïve (10)	24.30			
	OBurn (4)	11.25			
	NInterest (3)	4.33			
Testing of similar groups	Groups	Mean Rank	U	Z	1SIG.
No Opportunity to Interact – top two groups	IFavour (33)	23.12	128.0	-1.079	.140
	ONaïve (10)	18.30			
No Opportunity to Interact - bottom two groups	OBurn (4)	5.25	1.0	-1.871	.031
	NInterest (3)	2.33			

Table 6.4.15: Analysis results from the relationship between interactive television experience and interactive television attractiveness.

On exploring the variables of **past holiday use**, **future intentions** and the **combination** analyses (Table 6.4.15), only a few significant outcomes resulted.

Once more it was the non-interacted groups that had significant findings. Participants who had previously used interactive television for holiday purposes and were not able to interact found interactive television to be more attractive than those who had *no* previous interactive television holiday experience (U 165.0, z -1.688, $p < .05$). Participants that had intended to use interactive television in the future and chose not to interact gave higher attractiveness scores than those not intending to use interactive television in the future (U 241.0, z -3.252, $p < .05$). Future use intenders in the not able to interact groups also had higher scores than their non-intender counterparts (U 30.0, z -3.406, $p < .05$). Thus, since interacted participants reported no difference in attractiveness scores between those that intended and did not intend to use interactive television in the future, it would seem that actual interaction moderates the relationship, since non-interaction produces a significant relationship favouring those with positive intentions.

In the combination analysis, participants choosing not to interact with the treatment which had past use and future intentions (In Favour) or no past experience but future use intentions (Optimistic Naïve) reported higher interactive television scores than those in the Once Burned or Not Interested groups (χ^2 12.446, $p < .05$). The In Favour and Optimistic Naïve groups also had the higher attractiveness scores in the control treatment groups (χ^2 13.001, $p < .05$) and were found to be similar. However, those that had had a negative experience with interactive television (Once Burned) gave slightly higher attractiveness scores than those that were not interested at all (U 1.0, z -1.871, $p < .05$). Meanwhile, the participants that interacted with the treatments did not have significantly different interactive television attractiveness

scores across the past use and future intention variables. Thus even if they had negative past experiences or no pre-disposition of interactive television the attractiveness was similar to those with a positive pre-disposition. Thus, the actual interaction seems to have moderated the relationship, since when no interaction occurs there is a clear difference, with a positive pre-disposition associated with interactive television in a favourable light for future holiday planning.

6.4.5 Interactive Media Pre-Disposition Conclusions

The analyses suggest that previous experience with selected interactive media is associated with participants seeing interactive television as a valuable holiday information source (see Appendix 6E for a summary table of the findings). From the various tests conducted teletext and previous interactive television use came out with significant results, while none were found for Internet experience. The amount of access to and the level of experience an individual has had with teletext were positively correlated with the attractiveness of interactive television as a holiday information source. Thus, as teletext access and experience increased so too did participants' attractiveness evaluation of interactive television. When actual interaction behaviour was considered, the results suggest that interaction during the experiment moderates the relationship somewhat for the access, perceived experience and future use intention measures. That is, if a participant interacted with their treatment this influenced the attractiveness score for interactive television, reducing the bearing of past teletext experience on the score.

For previous interactive television experiences, access made no difference as to how participants viewed it as an information source. A mitigating factor may be that participants subscribed to interactive television services for reasons other than active interaction, such as accompanying broadband Internet access and extra programme channels as reported in Call-Backs and other parts of the questionnaire. Thus even though an individual may have had access to interactive television they may not have used it for interactive purposes. However, perceived experience with interactive television did prove to be positively correlated with attractiveness as a holiday planning source. Thus the more experienced a participant saw themselves to be, the more attractive interactive television was for holiday purposes. The actual interaction analysis brought to light the potential of not only interacting but also having the opportunity to interact, as having an effect upon the relationship between past experience and interactive television attractiveness.

The fact that participants had used interactive television for previous holiday purposes or intended to use interactive television in the future for such purposes, also proved to yield more positive attractiveness evaluations. This was even more so the case when a participant had both past experience and future intention to use interactive television for holiday planning (the In Favour group) as opposed to one or the other or neither. These outcomes seem to indicate that if past experience with interactive television in the holiday planning process was positive and encouraged positive future intentions, interactive television will be considered as an attractive source. Once more, actual interaction was found to be a moderating factor in the preference for interactive television, as otherwise only those participants previously

in favour or optimistic of interactive television would see it as a very attractive holiday information source. This, in hand with the comparisons with other selected information sources, suggests that interactive television has the potential to be a formidable competitor to the Internet as an information dissemination channel as soon as critical mass adoption is achieved.

Unfortunately the questionnaire had no measures that could help to further explain as to why the significant outcomes occurred and so one can only speculate. One possible explanation is that teletext prepared participants to interact in an otherwise passive and relaxing media situation which made them more open and accepting of the newer interactive television technologies. Furthermore, the relatively primitive interactivity and information presentation formats make the offerings of interactive television more palatable and user friendly. This aspect may also explain the lack of correlation with the Internet since highly experienced Internet users – which participants were - would expect a comparable level of interactivity, detail of information and assortment of information.

Looking at the actual interaction results, a pattern emerges. If a participant interacted with the experiment simulation, no correlation was found between previous experience and interactive television attractiveness. This was also true for most situations where participants had the opportunity to interact but chose not to do so. However, for those participants that had no opportunity to interact, correlation was found for previous interactive television experience (access and perceived) as well as teletext access. This suggests that the *opportunity* to interact may have had a

moderating role in how attractive interactive television would be in holiday planning. Hence, the ability to interact is a valuable feature of interactive television. Even more importantly this reinforces the notion that as user expectations of interactivity are cumulative, it is important that each experience is satisfying.

Thus, in summary, while overall the notion that past interactive media experiences (in particular teletext and previous interactive television) colours attitudes towards interactive television as a holiday information source rings true (with exceptions as mentioned above), one must bear in mind the moderating nature of the ability to interact and even to a greater extent actual interaction, with an interactive television promotional vehicle during the experiment.

6.5 Chapter Summary and Preview

The analysis showed that both previous teletext and interactive television experiences influence how participants evaluate interactive television as a potential holiday information source, however, on interaction with the treatment this connection seems to be over ridden by the interaction experience itself. This signals that each interactive experience is important and that it can have impact upon further interactive television use. The following chapter aims to investigate this interaction phenomenon in more detail to understand why participants interacted and what difference this may make to the promotional effort.

Chapter #7

Investigation#3: Understanding Interaction

Chapter Overview

This chapter investigates the dynamics of interaction: Why do people interact? and Does it make a difference? This extends the findings in the previous chapter which suggested that interaction during the treatment moderated interactive television pre-disposing factors such as destination familiarity, planning experience and interactive media experiences. It aims to understand whether actual interaction with the treatment contributed towards participants' attitudes towards interactive television, the promotional vehicle or the promotional opportunity. This is done by comparing the control group to the two interactive opportunities for each of the promotional vehicles, prior to an inter-vehicle comparison along each interactivity level. The data collected from the Call-Back participants is used to further understand the dynamics of interaction by considering participants' reasons for interaction.

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7.1 Investigation#3A: Interaction – Why Do It?

Why do viewers choose to take advantage of interactive opportunities on interactive television? Why did the participants interact with their treatments? The exploration of pre-dispositions towards interactive television suggested that there may be a link between an individual's destination familiarity, their experience of planning holidays and their teletext and interactive television experiences with how they would feel about using interactive television as a holiday information source. These analyses also suggested that there may be a moderating factor of actual interaction in these relationships – that it may be the actual interaction that influences the adoption of interactive television. This prompts the need for an independent look at why participants choose to interact.

Common sense would hold that only those truly interested in the offer presented by the interactive opportunity would interact. However, there may also be those that push their remote control button because they are bored or are curious to see what the offer is. On the other hand, those that are not interested in the offer would, logically, chose not to interact. However, some other reasons put forward include not being interested in interactivity, no consideration of using the button and not wanting to interrupt the programme (Stroud, 2003). Unfortunately, the questionnaire was not able to reveal why participants chose to interact or not to interact, so the call-backs and the Lab Sessions were used to gain some insight into this.

7.1.1 The Call-Backs – Reasons For (Not) Interacting

As previously shown (Chapter 4, Section 4.7.6) 49 participants or 43% of those able to, interacted with their treatments (Table 7.1.1). Even more interesting was that 9 participants (4 from the Ad treatment and 5 from the Show treatment) chose to request a brochure via their questionnaire rather than through their treatment and remote. From the 40 call-backs conducted a number of reasons were given for participants’ interaction choices (Table 7.1.2). The main reason why participants interacted was because they had a genuine interest in the destination (88% of interactors). Only 12% interacted out of curiosity for the interactive offer. This is a positive finding for advertisers as it shows that the majority of interactors can be potential customers rather than just browsers.

Treatment	Returns	Interacted	on back page of questionnaire
Control Ad	19	-	6
Control Show	31	-	7
Impulse Ad	29	10	4
Impulse Show	27	10	5
Telescopic Ad	29	16	6
Telescopic Show	29	13	6
Overall Sample	164	49	34

Table 7.1.1: Number of returns, participants who interacted with the treatment stimulant and requested a brochure from the back page of the survey.

Did You Interact?	Behaviour Reason	% of Interaction Answer	% of Overall Callbacks
Yes	Curiosity	12%	5%
	Interested	88%	41%
No	Not interested	55%	30%
	Did not see button	30%	16%
	Partner interacted already	10%	5%
	Prefer not to interact	5%	3%

Table 7.1.2: Call back reasons for interacting or not interacting with the treatments.

As suspected, the main reason why participants did not interact was because they were not interested in Western Australia (55%). Another proportion of participants did not see the interactive button on the screen (30%) and so did not interact. While this may be an experiment artefact, it may also be reflective of the wider interactive television experience. From the experiment perspective, the 20second ad may have been too short to give viewers enough time to be aware of and respond to the button; given that some research estimates average interaction time to be at 17seconds (IDS, 2003). A longer ad may have alleviated this issue as it would have given more time to the viewer to initiate the interaction. A suggestion put forward by a Lab Session participant, who also missed the button, was to provide a verbal prompt to announce the button and encourage interaction, or to use a different title on the button (Appendix 4E).

Other non-interactors preferred to keep their television experience relatively passive (5%) while still others (10%) chose not to interact because of their partner already having interacted. This latter reason is a factor of participants being self selected and the study allowing participation by more than one person per household. While this may seem like a wasted potential interaction (and easily overcome by redefinition of sampling parameters) it draws attention to the reality that television is not necessarily viewed alone, but rather with others. It also implies that one brochure or even one information gatherer may be sufficient in the holiday planning process for a travel party.

7.1.2 The Lab Session – Reasons For (Not) Interacting

The Lab Session participants were similar in their reasons for interacting or not interacting (Table 7.1.3). Genuine interest and curiosity were the only reasons participants interacted with the treatment and not interested and missing the button were also common reasons for not interacting. However, a third reason given was that they preferred the Internet to gather information and thus did not use the interactive television opportunity because they could research the destination better later on the Internet.

Did You Interact?	Behaviour Reason	% of Interaction Answer	Lab Sessions
Yes	Curiosity	50%	25%
	Interested	50%	25%
No	Not interested	50%	25%
	Did not see button	17%	8%
	Would rather use the Internet	33%	17%

Table 7.1.3: Lab Session participant reasons for interacting or not interacting with the treatments.

The captive nature of the Lab Session participants also allowed a deeper probing of the interaction experience (see Appendix 4E for interview notes). When asked for which situation they would interact, their number one criterion was that they would be interested in the destination on offer, with most interacting for a brochure (impulse response) and others also interacting for a destination video (telescopic approach). The interest in the destination would have to be relatively strong to interact for the destination video and participants commented that they would prefer that it did not interrupt the programme (ie. be available after the programme in a mall or on an active channel). When asked how their experience could have been better the most mentioned improvement was to make the destination video interactive in

itself. One suggestion was by making the map interactive so that viewers could select which region they would learn about, while the other proposed drop-down or pop-up menus. For both the impulse approach and the telescopic approach, participants felt that more information on the nature of the offer would have been beneficial. For example, what the brochure was about and how long the destination video would be.

Participants were also asked how they would ultimately like interactive television to be for planning holidays. The overwhelming consensus was that the information available would have to be in line with the detail that was available in guidebooks and the Internet and as efficient as the Internet, but in a visual format (ie. not text). The other consideration would be that they could have information on the destinations they were interested in. That is, most had a preference for goal-directed approach for gathering their information rather than sitting back and having to watch everything put in front of them. There was call for doing this both from a travel show programme and from a mall or dedicated channel situation. Only a couple of people commented that they would be prepared to book via the television, others favoured the Internet for this, or even the travel agent.

7.1.3 Pre-Disposition Support for (Not) Interacting

From exploring the reasons participants gave for interacting or not interacting it seems that the most important factor is that they have a genuine interest in the product (in this case a destination) being offered. However, can this be measured in any other way? Can an individual's attitudes towards that product determine

whether they will interact with the ad or show? Can their level of interactive media experience foreshadow their interaction? Does their travel and planning experience make a difference? To explore this, participants' attitudes towards Western Australia (WA) were measured in part one of the questionnaire, as was their perceived experience with teletext, the Internet and interactive television and their personal evaluations of their travel and holiday planning experience. See Chapter 4 and Chapter 6 for details on these measures.

When participants' attitudes towards WA were compared overall along interactivity levels (Table 7.1.4; complete table in Appendix 7A) those that interacted with their treatments had more positive attitudes towards WA than those that chose not to interact ($U = 1140.0$, $z = -2.618$, $p < .01$). This implies that a preference for a destination does encourage interaction.

Attitude towards Western Australia (1-5scale) Questionnaire Part#1						
Kruskal-Wallis: Overall level of actual interactivity; I vs. NI vs. NA	Groups			Chi²		SIG.
	I (49)	95.16		7.681		.021
	NI (65)	70.96				
	NA (50)	85.09				
Mann-Whitney U: Overall level of actual interactivity; I vs. NI vs. NA	Groups	Mean Ranks		U	Z	
	I vs. NI	66.73	50.54	1140.0	-2.618	.005
	NI vs. NA	53.42	63.95	1327.5	-1.712	.044
	I vs. NA	53.43	46.64	1057.0	-1.193	.117
Kruskal-Wallis: interactivity; iS vs. niS vs. naS	Groups	Mean Ranks		Chi²		SIG.
	I (23)	55.22		6.226		.044
	NI (35)	38.17				
	NA (31)	45.13				
Mann-Whitney U: interactivity; iS vs. niS vs. naS	Groups	Mean Ranks		U	Z	
	I vs. NI	36.04	25.02	252.0	-2.423	.008
	NI vs. NA	31.17	24.77	272.0	-1.502	.067
	I vs. NA	30.97	36.35	454.0	-1.160	.123
Mann-Whitney U: Telescopic Show interaction levels; iTSh vs. niTSh	Groups	Mean Ranks		U	Z	
	I (13)	18.35		60.5	-1.933	.028
	NI (16)	12.28				

Table 7.1.4: Comparisons of attitude towards Western Australia across levels of actual interactivity with treatment.

When treatments were considered along promotional vehicle lines (ad or show), only the show treatments echoed the overall finding that interactors had more positive attitudes towards WA (U 252.0, z -2.423, p<.01). This was more so the case in the treatment which offered the destination video (U 60.5, z -1.933, p<.05). This indicates that for participants that watched the travel show segment, only those that were sufficiently interested in WA chose to see the video. While this seems to suggest that interest in the destination results in interaction, it must be kept in mind that this was only so for the case of the travel show segment treatments and then only in the case of the opportunity to see a destination video. Impulse Show participants and Ad treatment participants could not have their interaction choice related back to their destination attitudes. An exploration for the reasons for this is beyond the scope of this particular study.

Perceived Experience with iMedia (interactive television only) (1-7scale)						
Kruskal-Wallis: Overall level of actual interactivity; I vs. NI vs. NA	Groups	Mean Ranks		Chi²		SIG.
	I (26)	42.88		8.574		.014
	NI (29)	32.00				
	NA (27)	50.37				
Mann-Whitney U: interactivity; I vs. NI vs. NA	Groups	Mean Ranks		U	Z	1SIG.
	I vs. NI	31.90	24.50	275.5	-1.721	.043
	NI vs. NA	22.50	34.94	217.5	-2.877	.004
	I vs. NA	24.48	29.43	285.5	-1.182	.237
Kruskal-Wallis: Show level of actual interactivity; iS vs. niS vs. naS	Groups	Mean Ranks		Chi²		SIG.
	I (10)	24.65		6.664		.036
	NI (20)	17.70				
	NA (15)	28.97				
Mann-Whitney U: Show level of actual interactivity; iS vs. niS vs. naS	Groups	Mean Ranks		U	Z	1SIG.
	I vs. NI	18.60	13.95	69.0	-1.373	.183
	NI vs. NA	14.25	23.00	75.0	-2.532	.006
	I vs. NA	11.55	13.97	60.5	-.835	.428

Table 7.1.5: Comparisons of perceived experience with interactive television scores across levels of actual interactivity with treatment. Note: as teletext and Internet analyses proved non-significant they are not included here but available in the complete table in Appendix 7A.

Participants' interaction behaviour was also analysed along their perceived experience with interactive media – teletext, the Internet and interactive television (Table 7.1.5; complete table in Appendix 7A). At the general level, only participants' interactive television experience differed significantly between interaction levels (χ^2 8.574, $p < .05$). Again, no significant difference was found for the ad treatments but there was a difference within the show treatments (χ^2 6.664, $p < .05$). This difference seemed to stem from the difference between the participants that chose not to interact and those not able to interact (U 75.0, z -2.532, $p < .01$). Since those that interacted with their show treatment did not feel more experienced with interactive television than those that chose not to interact with their show treatment, there must be another factor such as interest in the destination that caused them to interact.

Participants' perceived travel and planning experience scores was also tested but gave no significant findings (see Appendix 7A for complete results). A second set of tests were carried out for the planning experience variable, however, using the dichotomous variable of whether a participant had used an interactive television source previously to plan a holiday. This was taken as a yes or no measure from the list of information sources used in part one of the questionnaire to measure the utility and temporal use of sources. This dichotomous data was then put through a cross-tabulation but no significant findings emerged. Thus previous use of interactive television sources was not associated with a particular interaction choice.

7.1.4 Investigation#3A Conclusion

The analysis of the call-backs, the Lab Sessions and the pre-dispositional factors imply that genuine interest is the most important factor in deciding whether to interact or not. This was the most given reason by the main sample and the Lab Session participants. It was reinforced to an extent by the analysis of participants' attitudes towards WA which showed that those with more positive attitudes towards WA tended to interact with their treatments, in particular the travel show segment for the destination video. This finding is promising for advertisers as their interactive applications seem to entice already interested prospects which can be built into a valuable database.

7.2 Investigation#3B-F: Interaction – What Does It Do?

There are many things that interactivity is supposed to do. It is said to increase involvement time and flow, which in turn increases the emotional and cognitive involvement with a product (Ariely, 2000; Dholakia and Bagozzi, 2001; Smith, 2001; Yeo, 2001). Interaction is said to empower the viewer with choice, control and goal-directed behaviour and disadvantage the advertiser with a loss of exposures due to non-captive audiences (Ha and James, 1998; Anderson, 2001; Datamonitor, 2001). It promises the possibility of personalised viewing which should improve the personal investment of the viewer and would require the viewer to share personal information that can then be used to build a picture of the advertiser's market (Datamonitor, 2001; Brodin, Barwise et al., 2002).

Previous studies have shown interaction to increase the attitude toward the promotional vehicle, attitude toward the brand and behavioural intentions. Tanjic (2001) found that interacting for an ad from three equally involving product categories, resulted in more positive attitudes towards the ad, more positive attitudes towards the brand and more positive purchase intentions. Reading (2002) similarly found that allowing interaction in advertising presentations (telescopic:interactive versus infomercial:linear formats) improved attitude towards the brand and behavioural intentions for selected product categories. Yeo's (2001) look into the persuasive aspect of advertising found that interacting with an ad increased its effectiveness in producing more positive attitudes towards the ad and the brand and increased purchase intentions for low involvement product categories. Interaction was also associated with an increase in involvement with the ad and greater personal elaboration.

Being guided by the literature and previous interactive advertising studies, this research aims to add to the understanding about what interaction does to the promotional effort. To this end, measures for attitude towards the ad and attitude towards the brand were taken in the second part of the questionnaire, in addition to measure for involvement with the ad and attitude towards the destination. While the aim of this study was not to measure the intentions of going on holiday to Western Australia (WA) but rather to using interactive television as a holiday information source, an alternative behaviour measure was created. This was phrased as the 'attractiveness of interactive television' as a holiday information source and placed in part two of the questionnaire.

The exploration of this variable in relation to possible pre-dispositions in Chapter 6 reiterates that more investigation is needed to gauge what impact interacting with an interactive opportunity may have on the promotional effort. How does it change the attitude to the promotional vehicle? Does interaction make the individual like the product more? Does it make the experience more involving? Does it increase the individual’s openness to interactive television? These questions will be explored across the interaction levels, first within each promotional vehicle and then across the promotional vehicles to enable a best form guideline.

7.2.1 Common Method and Measures

The questions were explored using two approaches: within promotional vehicles and between promotional vehicles (Table 7.2.1). The ‘within promotional vehicle’ approach would distinguish between levels of interactivity, with the intention of identifying the most suitable form for that promotional vehicle. The ‘between promotional vehicles’ approach intended to find which promotional vehicle worked best with the specified level of interactivity.

Interactivity Option	Promotional Vehicle	
(Linear)	Control Ad	Control Show
(Brochure)	Impulse Ad	Impulse Show
(Video)	Telescopic Ad	Telescopic Show

Table 7.2.1: Analysis approaches: within analyses compare along the vertical (solid boxes), while between analyses compare the horizontal (dashed boxes).

Such dual analysis allows investigations into how the control version of the ad or the show compared to the corresponding brochure and video treatments (within) and whether any particular promotional vehicle-interactivity option combination was superior (between). By the interpretation of both of these analyses an overall recommendation can be given as to the most suitable promotional vehicle and interactive opportunity combination for long-haul destination such as WA, the destination in this instance. The within and between approach was applied to each of the measures investigating the impact of actual interaction. Before moving on to the analysis, each measure needs to be outlined.

7.2.1.1 Attitude Towards the Promotional Vehicle (for #3B)

The first measure, attitude towards the promotional vehicle (Figure 7.2.1; see Chapter 4, Section 4.5.3.4 for more details) was taken as it is an accepted measure of the effectiveness of promotional efforts (Haskins and Kendrick, 1997; Vakratsas and Ambler, 1999). The raw means show that generally those participants in the travel show treatments (\bar{x} 5.00) felt more favourably toward the promotional vehicle than those who were exposed to the ad (\bar{x} 4.30) (Table 7.2.2). This was also the case when compared across actual interactivity levels. Interestingly, while interactivity gave more positive attitudes in the ad treatments (\bar{x} 4.75), control treatment participants gave the most positive scores for the travel show treatments (\bar{x} 5.31). This measure is tested statistically within the promotional vehicles in Section 7.2.2 and between promotional vehicles in Section 7.2.3.

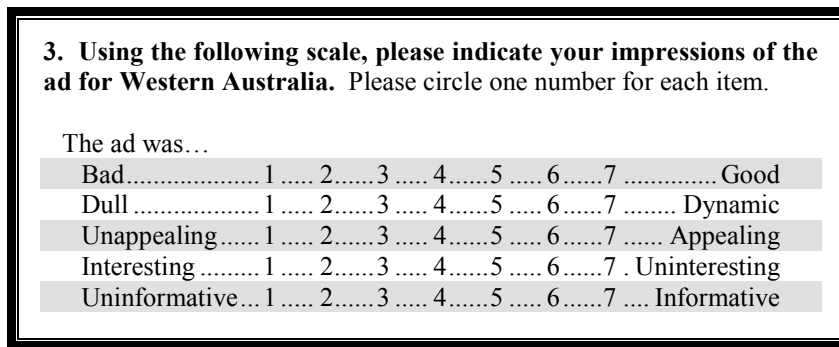


Figure 7.2.1: An example of the attitude toward the promotional vehicle (ad or travel show segment) measure as in part two of the questionnaire.

Groupings	Promotional Vehicle		Overall Sample
	Ad Treatments	Show Treatments	
Overall (n164)	4.30	5.00	4.68
Interacted (n49)	4.75	4.93	4.84
Chose Not to Interact (n65)	4.12	4.77	4.47
Interaction Not Available (n50)*	3.95	5.32	4.80
Impulse (n58)	4.16	4.49	4.33
Interacted (n20)	4.12	4.78	4.45
Chose Not to Interact (n38)	4.19	4.20	4.20
Telescopic (n56)	4.58	5.25	4.92
Interacted (n29)	5.15	5.05	5.10
Chose Not to Interact (n27)	4.00	5.45	4.73

Table 7.2.2: Attitude towards the promotional vehicle (1-7scale). *Interaction Not Available refers to control treatments.

7.2.1.2 Attitude Towards the Interactive Opportunity (for #3C)

In the same vein of the measurement of the attitude towards the promotional vehicle, participants' attitudes towards the interactivity opportunity were also measured (Figure 7.2.2; Table 7.1.4), with raw means being quite similar (Ad \bar{x} 5.74; Show \bar{x} 5.78). However, in both the ad and show treatments, the impulse opportunity (Ad \bar{x} 6.11; Show \bar{x} 6.07) seems to be more positively held than the telescopic opportunity (Ad \bar{x} 5.50; Show \bar{x} 5.56). This holds considerable interest as it would be expected that the more informative and entertaining opportunity of the destination video would be of more value to participants. This will be explored further in the analysis in

Sections 7.2.2 and 7.2.3. As this measurement is not applicable to participants that did not interact (by choice or in control treatments) it will be explored in a limited fashion.

5a. Please indicate how you felt about being able to request a brochure during the ad with your remote control. Please circle one number for each item.

Requesting a brochure was ...

Bad 1 2 3 4 5 6 7 Good

Not Useful 1 2 3 4 5 6 7 Useful

Unappealing 1 2 3 4 5 6 7 Appealing

Not Convenient 1 2 3 4 5 6 7 Convenient

Easy 1 2 3 4 5 6 7 Difficult

Unenjoyable 1 2 3 4 5 6 7 Enjoyable

Uninformative 1 2 3 4 5 6 7 Informative

Figure 7.2.2: An example of the attitude towards the interactive opportunity (brochure request of destination video) measure as in part two of the questionnaire.

Groupings	Promotional Vehicle		Overall Sample
	Ad Treatments	Show Treatments	
Overall (n49)	5.74	5.78	5.76
Impulse (n20)	6.11	6.07	6.09
Telescopic (n29)	5.50	5.56	5.53

Table 7.2.3: Attitude towards the interactive opportunity (1-7scale).

7.2.1.3 Involvement with the Promotional Vehicle (for #3D)

The second measure relating to the promotional vehicle is how involved participants were with it. Involvement has been often used in the marketing context to gauge the impact of promotional efforts. Generally the more involved an individual with an ad, for example, the more successful the ad has been (Buchholz and Smith, 1991). The raw means of the involvement measure (Figure 7.2.3; Table 7.2.4) suggest that participants watching the travel show segment (\bar{x} 4.14) were more involved with it than those watching the ad (\bar{x} 3.70). Involvement seems to peak for ad watchers

when they are able to interact (\bar{x} 4.22), especially for the telescopic opportunity (\bar{x} 4.25). For travel show segment watchers, involvement is highest for the linear experience (\bar{x} 4.48), or if they can interact on impulse (\bar{x} 4.27).

2. Please indicate how much the following statements about the ad for Western Australia apply to you. Please circle one number for each item.

	Not At All	Very Much
The ad was of interest to me	1	7
The ad was relevant to me.....	1	7
The ad involved me.....	1	7

Figure 7.2.3: An example of the involvement with the promotional vehicle measure as in part two of the questionnaire.

Groupings	Promotional Vehicle		Overall Sample
		Show Treatments	
Overall (n164)	3.70	4.14	3.94
Interacted (n49)	4.22	4.06	4.14
Chose Not to Interact (n65)	3.40	3.90	3.67
Interaction Not Available (n50)*	3.46	4.48	4.09
Impulse (n58)	3.81	3.85	3.83
Interacted (n20)	4.17	4.27	4.22
Chose Not to Interact (n38)	3.44	3.42	3.43
Telescopic (n56)	3.79	4.18	3.99
Interacted (n29)	4.25	3.90	4.08
Chose Not to Interact (n27)	3.33	4.46	3.90

Table 7.2.4: Involvement with the promotional vehicle (1-7scale). *Interaction Not Available refers to control treatments.

7.2.1.4 Attitude Towards the Destination (Western Australia) (for #3E)

Participants’ attitudes towards WA were measured in part one of the questionnaire and again in part two of the questionnaire (see Chapter 6, Section 6.2.1 and 6.2.2 for details). Like the attitude towards the promotional vehicle, attitude to a product or brand has also been cited as a measure of advertising effectiveness (Haskins and Kendrick, 1997; Vakratsas and Ambler, 1999). As Table 7.2.5 indicates, participants

had relatively positive attitudes towards WA after being exposed to their respective treatments (Overall \bar{x} 3.72), with very little difference between treatment groups. Those that interacted with the treatments (Ad \bar{x} 3.81; Show \bar{x} 4.04) seem to be slightly more inclined toward WA than those that chose not to interact (Ad \bar{x} 3.52; Show \bar{x} 3.65). The most positive attitude to WA came from Telescopic Show interactors (\bar{x} 4.10) and the least positive from Impulse Ad non-interactors (\bar{x} 3.46).

Groupings	Promotional Vehicle		Overall Sample
	Ad Treatments		
Overall (n164)	3.64	3.79	3.72
Interacted (n49)	3.81	4.04	3.92
Chose Not to Interact (n65)	3.52	3.65	3.59
Interaction Not Available (n50)*	3.58	3.75	3.69
Impulse (n58)	3.53	3.66	3.60
Interacted (n20)	3.60	3.70	3.65
Chose Not to Interact (n38)	3.46	3.61	3.54
Telescopic (n56)	3.79	3.90	3.85
Interacted (n29)	3.94	4.10	4.02
Chose Not to Interact (n27)	3.64	3.69	3.67

Table 7.2.5: Attitude towards Western Australia means from part two of the questionnaire (1-5 scale). *Interaction Not Available is equal to control treatments.

7.2.1.5 Interactive Television Attractiveness as a Holiday Information Source (for #3F)

The last measure, interactive television attractiveness, has already been detailed in Chapter 6 (Section 6.1) and is repeated in Figure 7.2.4 and Table 7.2.6. It represents how open or uninhibited participants are towards using interactive television as a holiday information source – essentially a measure of their behavioural intentions. A brief perusal of the interactive television attractiveness raw means suggests that there are potentially a number of differences between treatment cells.

5c. Please compare the experience you just had (requesting a brochure directly via the television) with more traditional ways for getting destination information?
 Please circle one number to indicate how attractive each item is.

	Unattractive							Very	Would
	1	2	3	4	5	6	7	Attractive	Not Use
Interactive digital television (as in this case)	1	2	3	4	5	6	7	0	
Freecall phone number (featured in the ad)	1	2	3	4	5	6	7	0	
A website address (featured in the ad)	1	2	3	4	5	6	7	0	
Teletext service	1	2	3	4	5	6	7	0	
A travel agent	1	2	3	4	5	6	7	0	

Figure 7.2.4: An example of the attractiveness of interactive television measures in part two of the questionnaire.

Groupings	Promotional Vehicle		Overall Sample
	Ad Treatments	Show Treatments	
Overall (n164)	4.47	4.51	4.49
Interacted (n49)	6.27	5.87	6.07
Chose Not to Interact (n65)	3.67	3.54	3.61
Interaction Not Available (n50)*	3.26	4.58	3.92
Impulse (n58)	4.55	4.69	4.62
Interacted (n20)	6.60	6.10	6.35
Chose Not to Interact (n38)	3.47	3.95	3.71
Telescopic (n56)	5.22	4.24	4.73
Interacted (n29)	6.06	5.69	5.88
Chose Not to Interact (n27)	4.00	3.06	3.53

Table 7.2.6: Attractiveness of interactive television (1-7scale) as a holiday planning source across experimental design factors. *Interaction Not Available refers to control treatments.

While there is little difference between the ad and show overall, this changes when participants are grouped by actual interactivity level. It seems that participants who interacted with the ad (\bar{x} 6.27) regard interactive television as more attractive than those who interacted with the show (\bar{x} 5.87). Those that were not able to interact with the show (\bar{x} 4.58) found interactive television a more attractive source than those viewing the linear ad (\bar{x} 3.26). When broken down by the interactive opportunities, participants using the impulse interactivity in both cases (Ad \bar{x} 6.60, Show \bar{x} 6.10) find interactive television more attractive than those using the telescopic interactivity (Ad \bar{x} 6.06, Show \bar{x} 5.69). This is reiterated by the high

attractiveness scores in the overall interaction (\bar{x} 6.07) and interacted opportunity scores (Impulse interacted \bar{x} 6.35, Telescopic interacted \bar{x} 5.88).

The preliminary explorations of the impact measures indicate various possible differences, however, these can only be confirmed to be significant via statistical testing. For analyses within promotional vehicles, Kruskal-Wallis tests were run between the three treatments cells. Any significant findings were further investigated with Mann-Whitney U tests between each pairing. The between promotional vehicle comparisons were carried out using Mann-Whitney U tests. While the 95% confidence interval was adopted as the standard ($p < .05$), significant results at the .1 level were also considered due to the exploratory nature of the study.

7.2.2 Within Promotional Vehicle Findings

By isolating the promotional vehicles and investigating them separately, the ability to interact on impulse for a brochure or telescopically for a destination video is compared to the control or linear version of the programme as well as to each other (Table 7.2.7). This allows the interactive concept to be assessed in a constant environment (ad or show) and the line of questioning follows: “is interactivity better than none?” and “what type of interactivity (impulse or telescopic) is better suited to the promotional vehicle?”. This line of investigation looks at interactive television attractiveness solely in the context of the experimental factors, thus how they may influence the participant to a particular evaluation of interactive television as a holiday planning source. Only significant results will be displayed in the tables, complete results are available in Appendix 7A.

Interactivity Option	Promotional Vehicle	
(Linear)	Control Ad	Control Show
(Brochure)	Impulse Ad	Impulse Show
(Video)	Telescopic Ad	Telescopic Show

Table 7.2.7: Within Promotional Vehicle analysis cells.

7.2.2.1 Ad Findings

The significant results from the analysis within the ad treatments are in Table 7.2.8 and 7.2.9. The analysis found that **attitude towards the ad** (#3B) differed between participants in the control treatment and those that chose to interact with the impulse or telescopic opportunities (χ^2 6.036, $p < .05$). The Mann-Whitney U tests found that this difference lay only between the control treatment participants and telescopic interactors (U 79.5, z -2.4.10, $p < .05$). Thus while watching the destination video (telescopic) was associated with improvements in how participants felt about the ad (\bar{x} 5.15), requesting a brochure (impulse; \bar{x} 4.12) did not have the same effect. However, those that interacted with the Impulse Ad found this interactive opportunity to be quite favourable (\bar{x} 6.11) when compared to the Telescopic Ad (\bar{x} 5.50) (U 51.0, z -1.532, $p < .1$). As previously mentioned (Section 7.2.1.2) this may be due to the familiarity of the Impulse approach and/or the minimum effort involved.

Attitude towards Ad (1-7scale) across:						
Kruskal-Wallis test of: Control participants and those that chose to interact for impulse or telescopic (45)	Group	Mean Rank	Chi²	SIG.		
	Ctrl. (19)	19.08	6.036	.049		
	iImp. (10)	20.15				
	iTsc. (16)	29.44				
Mann-Whitney U comparisons: Control and Chose to interact comparisons	Groups	Mean Ranks	U	Z	1SIG.	
	Ctrl. vs. iImp.	14.89	15.20	93.0	-.092	.464
	Ctrl. vs. iTsc.	14.18	22.53	79.5	-2.410	.008
	iImp. vs. iTsc.	10.45	15.41	49.5	-1.613	.054
Attitude towards interactive opportunity (1-7scale) across:						
Mann-Whitney U comparison: Interacted Impulse and Telescopic groups (26)	Groups	Mean Ranks	U	Z	1SIG.	
	iImp. (10)	16.40	51.0	-1.532	.063	
	iTsc. (16)	11.69				
Involvement with Ad (1-7scale) across:						
Kruskal-Wallis test of: Interacted (I), Chose not to interact (NI) and Not able to interact (NA) (75)	Group	Mean Rank	Chi²	SIG.		
	I (26)	45.65	5.039	.081		
	NI (30)	33.17				
	NA (19)	35.16				
Mann-Whitney U comparisons: Interactivity levels	Groups	Mean Ranks	U	Z	1SIG.	
	I vs. NI	33.75	23.95	253.5	-2.254	.012
	NI vs. NA	24.72	25.45	276.5	-.175	.431
	I vs. NA	25.40	19.71	184.5	-1.441	.075
Mann-Whitney U comparison: Ad Telescopic treatment interactivity levels	Groups	Mean Ranks	U	Z	1SIG.	
	iTsc. (16)	16.03	55.5	-1.613	.065	
	niTsc. (11)	11.05				
Attitude towards Western Australia (1-5scale) across:						
- No significant findings -						

Table 7.2.8: Significant results for ‘within’ ad analysis for the measures of attitude towards the ad, attitude towards the interactive opportunity, involvement with the ad and attitude towards Western Australia.

The **involvement with the ad** (3#D) reported by participants also was significantly different between interactivity levels (χ^2 5.039, $p < .1$) and this seemed to stem from the difference between the participants that interacted with the ad and those that chose not to (U 253.5, z -2.254, $p < .05$). The ad interactors were also more involved than the Control Ad participant (U 184.5, z -1.441, $p < .1$). In addition, a difference existed at the .1 level between Telescopic interactors and Telescopic non-interactors, favouring interactors (U 55.5, z -1.613, $p < .1$). Thus, those that interacted (\bar{x} 4.22) (in

particular, Telescopic interactors (\bar{x} 4.25) felt more involved with the ad than those that chose not to interact (\bar{x} 3.40).

iTV attractiveness (1-7scale) across Ad actual interactivity levels:						
Kruskal-Wallis test of: Interacted (I), Chose not to interact (NI) and Not able to interact (NA) (75)	Group	Mean Rank	Chi	SIG.		
	I (26)	56.19	28.762	.000		
	NI (30)	29.52				
	NA (19)	26.50				
Mann-Whitney U comparisons: Interactivity levels	Groups	Mean Ranks	U	Z	1SIG.	
	I vs. NI	39.46	19.00	105.0	-4.784	.000
	I vs. NA	30.23	13.11	59.0	-4.436	.000
	NI vs. NA	26.02	23.39	254.5	-.633	.234
iTV attractiveness (1-7scale) across Ad interactivity types (all):						
Kruskal-Wallis test of: All participants in the control, impulse and telescopic groups; Ctrl. vs. Imp. vs. Tsc (75)	Group	Mean Rank	Chi	SIG.		
	Ctrl. (19)	26.50	8.201	.017		
	Impc (29)	39.26				
	Tsc. (27)	44.74				
Mann-Whitney U Control vs. all in impulse and telescopic groups	Groups	Mean Ranks	U	Z	1SIG.	
	Imp. vs. Tsc.	26.69	30.44	339.0	-.880	.190
	Ctrl. vs. Imp.	19.82	27.57	186.5	-1.900	.029
	Ctrl. vs. Tsc.	16.68	28.30	127.0	-2.926	.002
iTV attractiveness (1-7scale) across Ad interactivity types (chose to interact):						
Kruskal-Wallis test for: Control participants and those that chose to interact for impulse or telescopic; Ctrl vs. iImp. vs. iTsc. (45)	Group	Mean Rank	Chi²	SIG.		
	Ctrl. (19)	13.11	20.612	.000		
	iImp. (10)	33.30				
	iTsc. (16)	28.31				
Mann-Whitney U comparison: Control and Chose to interact comparisons	Groups	Mean Ranks	U	Z	1SIG.	
	iImp. vs. iTsc.	15.90	12.00	56.0	-1.391	.082
	Ctrl. vs. iTsc.	12.26	24.81	43.0	-3.663	.000
	Ctrl. vs. iImp.	10.84	22.90	16.0	-3.680	.000
iTV attractiveness (1-7scale) across Ad Impulse and Telescopic levels of actual interaction:						
Mann-Whitney U comparison: Ad Impulse interactivity levels: iIAd vs. niIAd	Groups	Mean Ranks	U	Z	1SIG.	
	iImp. (10)	22.90	16.0	-3.700	.000	
	niImp. (19)	10.84				
Mann-Whitney U comparison: Ad Telescopic interactivity levels: iTAd vs. niTAd	Groups	Mean Ranks	U	Z	1SIG.	
	iTsc. (16)	17.47	32.5	-2.821	.003	
	niTsc. (11)	8.95				

Table 7.2.9: Significant results for ‘within’ ad analysis for the measure of interactive television attractiveness as a holiday information source.

The analysis did not find any significant differences for the **attitude towards WA** measure between ad participants (Table 7.2.8), but a number were found for the evaluations of **interactive television attractiveness (3#F)** as a holiday planning

source. The results in Table 7.2.9 show that participants that interacted with the ad scored interactive television as more attractive than those who chose not to interact or were in the control treatment (χ^2 28.762, $p < .001$). This was supported by the subsequent Mann-Whitney U tests (I vs. NI: U 105.0, z -4.784, $p < .001$; I vs. NA: U 59.0, z -4.436, $p < .001$). Thus interactors (\bar{x} 6.08) were more inclined to using interactive television for future holiday information than those that chose not to interact (\bar{x} 3.60) or were exposed to the linear version (\bar{x} 4.08).

When the ad treatments were broken down into the control, impulse and video options, a difference was also found (χ^2 8.201, $p < .05$). This difference found impulse and the telescopic treatment participants to be more open to interactive television than control treatment participants (Ctrl. vs. Imp.: U 186.5, z -1.900, $p < .05$; Ctrl. vs. Tsc.: U 127.0, z -2.926, $p < .05$). The distinction became even clearer when only those participants interacting with their treatment were compared with the control treatment (χ^2 20.612, $p < .05$). In this case, aside from the difference between the control and the impulse (U 16.0, z -3.680, $p < .001$) or control and telescopic treatments (U 43.0, z -3.663, $p < .001$), a small difference also emerged between the impulse and telescopic treatments at the .1 level (U 56.0, z -1.391, $p < .1$). Thus while all participants that interacted with the ad found interactive television more palatable for holiday information those that interacted with the impulse approach had more of an inclination towards interactive television than their telescopic counterparts (Control \bar{x} 3.26, Impulse \bar{x} 6.60, Telescopic \bar{x} 6.06). Final tests were run between those that interacted and those that chose not to interact with their impulse or telescopic opportunities. On both occasions those that interacted

were more inclined towards using interactive television for informing themselves for international holidays (Impulse: $U = 16.0$, $z = -3.700$, $p < .001$; Telescopic $U = 32.5$, $z = -2.821$, $p < .005$).

These analyses suggest that the ad is improved when offering an interactive opportunity. Impulse response interactivity results in interactive television becoming a slightly more attractive planning tool than a linear ad, while the telescopic opportunity not only improves the attractiveness of interactive television as a planning tool, but it also considerably improves the attitude towards the ad. It is suggested that this may be due to the substantial increase in information that the destination video adds to the ad's basic message. Interestingly, it is the impulse opportunity rather than the telescopic opportunity that receives the more positive evaluation. Interaction also increases involvement with the promotional vehicle and even more so when it is telescopic interaction. Thus, by experiencing interactive television participants were more readily inclined to using it in their future long-haul holiday planning.

7.2.2.2 Travel Show Findings

The significant findings from the analysis within the show treatments are in Table 7.2.10 and 7.2.11. The analysis found that participants' **attitudes towards the show** (3#B) were significantly more positive if they had chosen not to interact with the Telescopic Show than those that chose not to interact with the Impulse Show ($U = 70.5$, $z = -2.706$, $p < .005$). While attitude towards the show as a measure is generally understood as resulting from the behaviour, in this case it may also reflect the

attitude that caused the behaviour. For example, instead of lessening their attitude towards the show, impulse non-interactors chose not to interact because their interest in the segment was not strong enough to warrant it. Alternatively, comments given by the Lab Session participants (discussed in Section 7.1; details in Appendix 4E) suggest that the significantly higher attitude scores given by telescopic non-interactors seem to be reflective of the desire not to interrupt the travel show segment because they were sufficiently enjoying it. However, Lab Session participants also noted that while a 6minute destination video may interrupt their viewing, having such a telescopic opportunity after the programme or from a dedicated site would be something they would take advantage of. No significant difference was found between the show treatments for participants' **attitude towards the interactive opportunities** (3#C).

Involvement with the show (3#D) seems to mimic the attitude measures. Once more there is a difference between the impulse and telescopic non-interactors and the control treatment (χ^2 5.197, $p < .1$). This difference stems from participants in the control treatment being more involved than those impulse non-interactors (U 190.5, z -2.085, $p < .05$) and telescopic non-interactors being more involved than impulse non-interactors (U 95.5, z -1.877, $p < .05$).

The distinction between the telescopic and impulse non-interactors may be an artefact of participants' involvement causing them to not interact with the show rather than their non-interaction generating the increased involvement. Furthermore, there may be various reasons why participants chose not to interact as discussed in

the attitude towards the show analysis. However, as this was not able to be measured in the questionnaire, these are merely suggestions based on Call-Back and Lab Session participant comments.

Attitude towards the Show (1-7scale):						
Kruskal-Wallis test for: Control participants and those that <u>chose not to interact</u> for impulse or telescopic (66)	Group	Mean Rank	Chi²	SIG.		
	Ctrl. (31)	37.77	9.422	.009		
	Imp. (19)	22.13				
	Tsc. (16)	38.72				
Mann-Whitney U comparison: Control and chose not to interact comparisons	Groups	Mean Ranks	U	Z	1SIG.	
	Ctrl. vs. niTsc.	23.94	24.13	246.0	-.045	.482
	niImp. vs. niTsc.	13.71	23.09	70.5	-2.706	.004
	Ctrl. vs. niImp.	29.84	18.42	160.0	-2.692	.004
Attitude towards interactive opportunity (1-7scale) across:						
- No significant findings -						
Involvement with Show across:						
Kruskal-Wallis test for: Control participants and those that <u>chose NOT to interact</u> for impulse or telescopic (66)	Group	Mean Rank			SIG.	
	Ctrl. (31)	36.82	5.197	.074		
	Imp. (19)	25.05				
	Tsc. (16)	37.09				
Mann-Whitney U comparison: Control and those that <u>chose not to interact</u> for impulse or telescopic	Groups	Mean Ranks	U		1SIG.	
	Ctrl. vs. niImp.	28.85	20.03	190.5	-2.085	.019
	Ctrl. vs. niTsc.	23.97	24.06	247.0	-.023	.491
	niImp. vs niTsc	15.03	21.53	95.5	-1.877	.031
Attitude towards Western Australia (1-5scale) across:						
Kruskal-Wallis test for: Interacted (I), Chose not to interact (NI) and Not able to interact (NA) (89)		Mean Rank			SIG.	
	I (23)	56.11	6.807	.033		
	NI (35)	38.33				
	NA (31)	44.29				
Mann-Whitney U comparison: Interactivity levels	Groups	Mean Ranks	U	Z	1SIG.	
	I vs. NI	36.48	24.91	242.0	-2.594	.005
	NI vs. NA	31.41	35.85	469.5	-.954	.170
	I vs. NA	31.63	24.44	261.5	-1.688	.046
Mann-Whitney U comparison: Impulse Show treatment interactivity levels	Groups	Mean Ranks	U	Z	1SIG.	
	iImp. (10)	18.90	56.0	-1.827	.039	
	niImp. (19)	12.95				
Mann-Whitney U comparison: Telescopic Show treatment interactivity levels	Groups	Mean Ranks	U	Z	1SIG.	
	iTsc. (13)	18.08	64.0	-1.781	.042	
	niTsc. (16)	12.50				

Table 7.2.10: Significant results for ‘within’ show analysis for the measures of attitude towards the show, attitude towards the interactive opportunity, involvement with the show and attitude towards Western Australia.

Participants' **attitude towards Western Australia (3#E)** differed between levels of interaction (χ^2 6.807, $p < .05$), with interactors (\bar{x} 4.04) feeling more positively towards WA than either of those participants choosing not to interact (\bar{x} 3.65; U 242.0, $z = -2.594$, $p < .01$) and control participants (\bar{x} 3.75; U 261.5, $z = -1.688$, $p < .05$). Impulse interactors (\bar{x} 3.70) or telescopic interactors (\bar{x} 4.10) felt more strongly about WA than impulse non-interactors (\bar{x} 3.61) or telescopic non-interactors (\bar{x} 3.69) (Impulse U 56.0, $z = -1.827$, $p < .05$; Telescopic U 64.0, $z = -1.781$, $p < .05$). This implies that those participants that interacted with their treatments then felt more positively towards WA – either before interacting or after interacting.

iTV attractiveness (1-7scale) across Show actual interactivity levels:						
Kruskal-Wallis test for: Interacted (I), Chose not to interact (NI) and Not able to interact (NA) (89)	Group	Mean Rank	Chi²	SIG.		
	I (23)	60.11	12.852	.002		
	NI (35)	35.64				
	NA (31)	44.35				
Mann-Whitney U comparison: Interactivity levels	Groups	Mean Ranks	U	Z	1SIG.	
	I vs. NI	38.70	23.46	191.0	-3.418	.001
	I vs. NA	33.41	23.11	220.5	-2.437	.008
	NI vs. NA	30.19	37.24	426.5	-1.508	.066
iTV attractiveness (1-7scale) across Show interactivity types (chose to interact):						
Kruskal-Wallis test for: Control participants and those that <u>chose to interact</u> for the brochure or video (54)	Group	Mean Rank	Chi	SIG.		
	Control (31)	23.11	6.502	.039		
	Impulse (10)	36.15				
	Video (13)	31.31				
Mann-Whitney U comparison: Control and Chose to interact comparisons	Groups	Mean Ranks	U	Z	1SIG.	
	Imp. vs. Tsc.	13.25	11.04	52.5	-8.23	.205
	Ctrl. vs. Tsc.	20.50	27.27	139.5	-1.628	.052
	Ctrl. vs. Imp.	18.61	28.40	81.0	-2.290	.011
iTV attractiveness (1-7scale) across Show Impulse and Telescopic levels of actual interaction:						
Mann-Whitney U comparison: Impulse Show treatment interactivity levels	Groups	Mean Ranks	U	Z	1SIG.	
	iImp. (10)	19.80	47.0	-2.248	.014	
	niImp. (19)	12.47				
Mann-Whitney U comparison: Telescopic Show treatment interactivity levels	Mean Ranks	U	Z	1SIG.		
	iTsc. (13)	19.62	44.0	-2.675	.004	
	niTsc. (16)	11.25				

Table 7.2.11: Significant results for 'within' show analysis for the measure of interactive television attractiveness as a holiday information source.

Show treatment participants also differed in their evaluations of **interactive television attractiveness** (χ^2 12.852, $p < .005$; Table 7.2.11; #3F) and subsequent Mann-Whitney U tests indicate that there are clear differences between all three interactivity levels. Those that chose to interact with their show treatment were more in favour of interactive television as a holiday planning source (\bar{x} 5.87) than those that chose not to interact (\bar{x} 3.54; U 191.0, z -3.418, $p < .001$) and control participants (\bar{x} 4.58; U 220.5, z -2.437, $p < .01$). Furthermore, control participants found interactive television slightly more attractive than those choosing not to interact (U 426.5, z -1.508, $p < .1$).

This suggests that another reason could lie behind such results: that choice of interaction is based upon attitudes towards interactive television. This would mean that those apprehensive about interactive television per se would choose not to interact, while those inclined to interactive television would choose to interact. This is supported in part by the Chapter 6 analysis (Section 6.4.4) which indicated that higher levels of perceived interactive television experience, previous use for holiday purposes and intentions to use it for holiday purposes in the future, related to higher attractiveness evaluations. However, Chapter 6 also suggested that interacting with the treatment *alone* could enhance attractiveness evaluations.

Analysis comparing the control participants to the impulse interactors and telescopic interactors also found a significant difference (χ^2 6.502, $p < .05$), mainly due to the difference between impulse interactors and control participants (U 81.0, z -2.290, $p < .05$). Telescopic interactors were also found to be more open to interactive

television compared to the control participants ($U = 139.5$, $z = -1.628$, $p < .1$). Thus, interaction with either impulse or telescopic opportunities seems to be accompanied by more positive partiality towards interactive television as a holiday planning source than linear viewing. Further query into the brochure and video treatments resulted in interactors giving higher attractiveness scores than their non-interactor-by-choice counterparts (Impulse $U = 47.0$, $z = -2.248$, $p < .05$; Telescopic $U = 44.0$, $z = -2.675$, $p < .05$).

From these analyses, it seems that interacting with the travel show segment not only improves the attractiveness of interactive television as a holiday planning source (in particular impulse interaction), but is also associated with a more positive attitude towards the destination (WA). Thus, in trialling interactive television by requesting a brochure from a travel segment, participants were more open to its future use in long-haul holiday planning. However, interaction does not enhance the attitudes towards the travel show segment or participants' involvement with the show. Rather these analyses suggest that those with more positive attitudes towards the show, or those that are more involved with the show, chose not to interact. Given the feedback from Lab Session and Call-Back participants this may be so as not to interrupt the viewing experience of the travel show segment in the case of the telescopic opportunity (destination video). The avoidance of impulse interaction (requesting a brochure) may be more to do with not being involved enough to prompt interest in this additional information.

7.2.3 Between Promotional Vehicle Findings

The within promotional vehicle analyses found that actual interaction improved participants inclinations towards using interactive television as a holiday information source in both the ad and travel show cases. However, interactivity had quite dissimilar consequences in the attitude held towards the ad or show, attitudes towards interactive opportunities, involvement with the ad or show and the attitude towards WA.

Interactivity Option	Promotional Vehicle	
	TV Ad	Travel Show Segment
	Control Ad	Control Show
(Brochure)	Impulse Ad	Impulse Show
	Telescopic Ad	Telescopic Show

Table 7.2.12: Between promotional vehicle analysis cells.

These differences and the nature of the study, prompt comparisons between the two promotional vehicles along the control, impulse and telescopic factors (Table 7.2.12). Such comparison allows the investigation into whether the promotional vehicle itself influenced the attractiveness or attitude evaluations and whether a particular interactive opportunity works better with a particular promotional vehicle. Again, only significant results are discussed with complete results being available in Appendix 7A.

With only two promotional vehicles, Mann-Whitney U tests were used to find differences in the five variables with significant results displayed in Table 7.2.13.

On an overall level, there was a significant difference between the ad and show treatments regarding participants' **attitudes towards the promotional vehicle** (3#B). Participants felt more positively towards the travel show segment than they did to the ad ($U = 2446.5$, $z = -2.945$, $p < .005$). This is reflected in the means where attitude towards the show is 5.00 compared to the average of 4.30 for the ad, on the 1 to 7 scale.

Attitude towards the promotional vehicle (1-7scale) across:					
Mann-Whitney U comparison:	Groups	Mean Ranks	U	Z	1SIG.
Overall treatments:	Ad (75)	70.62	2446.5	-2.945	.002
Ad vs. Show (n164)	Show (89)	92.51			
Mann-Whitney U comparison:	Groups	Mean Ranks	U	Z	1SIG.
Control treatments:	CAd (19)	17.32	139.0	-3.113	.001
CAd vs. CSh (50)	CSh (31)	30.52			
Mann-Whitney U comparison:	Groups	Mean Ranks	U	Z	1SIG.
Chose Not to Interact:	niAd (30)	28.77	398.0	-1.673	.047
niAd vs. niSh (65)	niSh (35)	36.63			
Mann-Whitney U comparison:	Groups	Mean Ranks	U	Z	1SIG.
Chose <u>Not</u> to Interact Telescopic:	niTAd (11)	10.73	52.0	-1.780	.038
niTAd vs. niTSh (27)	niTSh (16)	16.25			
Attitude towards interactive opportunity (1-7scale) across:					
- No significant findings -					
Involvement with promotional vehicle (1-7scale) across:					
Mann-Whitney U comparison:	Groups	Mean Ranks	U	Z	1SIG.
Overall treatments: Ad vs. Show (164)	Ad (75)	74.69	2751.5	-1.939	.029
	Show (89)	89.08			
Mann-Whitney U comparison:	Groups	Mean Ranks	U	Z	1SIG.
Control treatments:	CAd (19)	20.26	195.0	-1.994	.023
CAd vs. CSh (50)	CSh (31)	28.71			
Mann-Whitney U comparison:	Groups	Mean Ranks	U	Z	1SIG.
Chose Not to Interact:	niAd (30)	29.03	406.0	-1.571	.058
niAd vs. niSh (65)	niSh (35)	36.40			
Mann-Whitney U comparison:	Groups	Mean Ranks	U	Z	1SIG.
Chose Not to Interact Telescopic:	niTAd (11)	10.86	53.5	-1.705	.045
niTAd vs. niTSh (27)	niTSh (16)	16.16			
Attitude towards Western Australia (1-5scale) across:					
- No significant findings -					

Table 7.2.13: Significant results for ‘between’ promotional vehicle analysis for the measures of attitude towards the show, attitude towards the interactive opportunity, involvement with the show and attitude towards Western Australia.

This bias was reflected in a number of other comparisons. Participants in the Control Show (\bar{x} 5.32) had more positive attitudes towards the show than those in the Control Ad (\bar{x} 3.95; U 139.0, z -3.113, $p < .005$). Show non-interactors (\bar{x} 4.77) for either interactive opportunity reported greater attitude scores than their ad counterparts (\bar{x} 4.12; U 398.0, z -1.673, $p < .05$). This seems to have been symptomatic of the telescopic non-interactors from either the ad or show (Ad \bar{x} 4.00; Show \bar{x} 5.45; U 52.0, z -1.780, $p < .05$). Given these differences between the non-interacting participants and no significant differences between the interacting participants, it can be inferred that participants' attitude towards the ad increased upon interaction to reflect those held by show interactors or alternatively that show interactors attitudes towards the show decreased to ad interactor level. This is reflected in the ascending nature of the ad's attitude means across the three interaction levels (CAd \bar{x} 3.95; niAd \bar{x} 4.12; iAd \bar{x} 4.75) and the somewhat decrease in the show's attitude means (CSh \bar{x} 5.32; niSh \bar{x} 4.77; iSh \bar{x} 4.93).

Interestingly, the pattern of differences in the attitude towards the promotional vehicle between the ad and the show are repeated in the **involvement with the promotional vehicle** (3#D) measure. Again, the show was the vehicle with which participants felt more involved overall (U 2751.5, z -1.939, $p < .05$), in the control treatments (U 195.0, z -1.994, $p < .05$), for those that chose not to interact (U 406.0, z -1.571, $p < .1$) and for telescopic non-interactors (U 53.5, z -1.705, $p < .05$). Thus in non-interaction (forced or chosen) situations the show is more involving than the ad. Given the non-significant differences between the interacted treatments, the interacted with ad seems to be as involving as an interacted with show. Again such

notions are signalled by the involvement means for the ad and show treatments: CAd \bar{x} 3.46; niAd \bar{x} 3.40; iAd \bar{x} 4.22; CSh \bar{x} 4.48; niSh \bar{x} 3.90; iSh \bar{x} 4.06.

Attitude towards the interactive opportunity (3#C) and attitude towards WA (3#E) did not yield any significant differences (Table 7.2.13) and only two differences transpired from the analysis of **interactive television attractiveness (3#F)** scores (Table 7.2.14). Control Show participants evaluated interactive television as a more attractive holiday information source than Control Ad participants (U 192.0, z -2.071, p<.05). On a slightly less significant level, participants being offered the Telescopic Show treatment also were more inclined towards interactive television in holiday planning than their Telescopic Ad counterparts (U 299.5, z -1.536, p<.1). Given that interactive television attractiveness differed on control treatments and not between the participants that interacted with their treatments (no significant findings) it may be reasoned that interacting with an ad or a show may balance out the inherent difference provided by the nature of the content.

iTV attractiveness (1-7scale) across:					
Mann-Whitney U comparison:	Groups	Mean Ranks	U	Z	1SIG.
Control treatments: CAd vs. CSh (50)	CAd (19)	20.11	192.0	-2.071	.019
	CSh (31)	28.81			
Mann-Whitney U comparison:	Groups	Mean Ranks		Z	1SIG.
All Telescopic treatments: TAd vs. TSh. (56)	TAd (27)	31.91	299.5	-1.536	.063
	TSh (29)	25.33			

Table 7.2.14: Significant results for ‘between’ promotional vehicle analysis for the measure of attractiveness of interactive television as a holiday information source.

7.2.4 Investigation#3B-F Conclusions

Combining the within and between analyses creates a detailed account. The ‘between’ analyses suggest that the travel show segment in general is a more

desirable form of information (higher attitudinal and involvement scores) and in its linear format it is also associated with higher attractiveness evaluations of interactive television, when compared to the television ad. However, the ‘within’ promotional vehicle analysis implies that the ad is enhanced by interactivity per se (in particular by telescopic interactivity) by more positive attitude towards the ad, attitude towards the interactive opportunity, involvement with the ad and openness towards interactive television as a holiday source. Furthermore, the ‘within’ results indicate that participants feel better about the travel show with no interactivity and that only a short interruption of requesting a brochure (impulse) is acceptable. From this, the argument put forward in the previous chapter (Chapter 6) seems once more to be relevant. The information-poor ad is enhanced by extra information during the interactive opportunity and this in turn enhances the attitude towards interactive television in general. Meanwhile the travel show segment seems to be better off in its linear form, or if interruption is minimal.

7.3 Chapter Summary and Preview

The above analysis showed that there were significant differences between the treatments used in the experiment. Interactivity does not seem to be a ‘one size fits all’ solution for different types of promotional vehicles, rather interactivity needs to be applied in ways that enhances and does not detract from the viewing and brand experience. The next set of chapters draws together the findings from the three analysis chapters before concluding the thesis.

Part #3

Application and Conclusion

Part #3 Overview

Part Three's two chapters present how the research's findings may be applied to industry before concluding the thesis with limitations and recommendations.

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Chapter #8

Main Learnings Applied

Chapter Overview

This chapter opens Part Three of the thesis and brings together the findings of the analyses carried out in Chapter 5, Chapter 6 and Chapter 7. It first ties the findings back to the literature and then discusses them in relation to the travel and tourism industry – both from the travellers’ and destination marketing organisations’ perspectives - commenting upon potential uses and improvement possibilities.

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8.1 Introduction

Part two of the thesis attended to the analysis of the research data according to the three investigations presented in Chapter Four (Section 4.3). A number of significant findings were made that impact both upon the literature previously drawn from and the tourism and interactive television industries. The theoretical implications include information source use by travellers, the transference of knowledge and skill, and the understanding of the interactive television medium and consumer. Industry applications fall into three main concepts dealing with the adoption of interactive television, the state of promotional vehicles on interactive television and how the later may generate leads for the travel and tourism industry.

8.2 Findings: Theoretical Implications

The considerable literature on traveller use of information provided this research with a basis for how travellers use a number of traditional information sources for planning a variety of holidays (Gitleson and Crompton, 1983; Snepenger, Megad et al., 1990; Fodness and Murray, 1997; Fodness and Murray, 1999; Bieger and Laesser, 2001). However it was the multi-dimensional grids used by Fodness and Murray (1998) in USA domestic travel research that were adapted by this research to explore information source use by the UK to WA pleasure market. These grids were adapted in a number of ways.

Aside from applying the grid concept to a long-haul international market, this study also developed its own measures that easily plotted the locations of traditional and

new information sources. These two factors may account for the differences between locations of similar information sources between the two studies. Moreover, it included new sources that were pertinent not only to the UK market (teletext) and international travel segment (the Internet), but also sources that had been relevant at the time of previous research (television) and media emerging from recent advances in technology (interactive television) as well. Furthermore, the television media were segmented into programming content and advertising, providing the opportunity to analyse two very different paths for promotion.

This provided an updated relational picture of how information sources were being used by the UK traveller on international holidays. While the Internet was considered very similar to intra- and inter-personal sources, the teletext, television and interactive television sources were typical mass media sources (see Figure 5.2.1, Section 5.2.2). Furthermore, the research broke down the new sources for typical long-haul versus short-haul travellers and found differences in temporal use (see Figure 5.3.3 and 5.3.4, Section 5.3.4.1).

The research also found support for the concept of knowledge transference from a familiar to a novel environment (Singley and Anderson, 1989; Gregan-Paxton and Roedder John, 1997). This was illustrated by the positive association between previous teletext experience (access and perceived experience) and the openness towards using interactive television use in the holiday planning process. Results suggested that participants that had more experience with teletext felt more comfortable with including interactive television in their holiday planning process

than those with less experience (Section 6.4.2). Past interactive experience (perceived) was also positively associated, thus suggesting a more direct transfer of knowledge, while the Internet provided no significant associations. However, comments made by The Lab Session participants about their ultimate interactive television travel experience also hinted at the influence that the Internet has had on their expectations of interactive television (see Section 4.6.4 and Appendix 4E).

The investigations in all three analysis chapters also added to the current literature available on interactive television consumers (such as O'Donovan and Daum, 2000; Freeman and Lessiter, 2001; Brodin, Barwise et al., 2002; Austin, 2003; Freeman and Lessiter, 2003; Mercier and Barwise, 2004). This research used current interactive television users via the HomeChoice video-on-demand network. The previous literature indicated that this may mean the sample would consist of early technology adopters (Riseley, 1998) or that by now a more mainstream user may have been on board (Brodin, Barwise et al., 2002; Austin, 2003).

While the average participant of this research was male, in the 30-34 age bracket (22%) and earned about £811 per week (ie. your typical early adopter), participants ranged from the 18-24 year old bracket (5.5%) to the 60+ year bracket (3%) with very similar technology experience levels (see Appendix 8A). Hence, according to the data collected in this study individuals making use of interactive television services are beginning to become more diverse. However, given the main purposes for use and the perceived lack of experience as interactive television users (see Table 4.7.6) it still seems that consumers are signing up with such providers for other

factors such as better programming (Brodin, Barwise et al., 2002; TRP, 2002; Barwise and Mercier, 2004; Mercier and Barwise, 2004). This indicates that the true adoption and mature market is still some time off. Thus, the continued education of consumers about different interactive television benefits is *still* an important mission and that interactive television design and application still requires more research and development.

8.3 Findings: Industry Applications

The findings from this research can be applied to a number of issues that are of particular interest to the travel and tourism industry – both from the travellers’ and destination marketing organisations’ perspectives. The first issue is consumer focused and draws both from the pre-disposition analysis (Investigation#2, Chapter 6) and the information source use analysis (Investigation#1, Chapter 5) in looking at how interactive television may be adopted as a holiday information source by travellers. Next, the state of interactive television promotional vehicles is discussed with much of the material coming from Investigation#3 in Chapter 7. Lastly, Chapter 5 and Chapter 7 (Investigation#1 and #3, respectively) provide discussion for interactive television opportunities as lead generation tools for the travel industry.

8.3.1 Adoption of Interactive Television as a Holiday Information Source

Combining the analysis of pre-dispositions towards interactive television from Investigation#2 in Chapter 6 with the understanding of information source use gleaned from Investigation#1 in Chapter 5, an insight is obtained as to how

individuals may go about adopting interactive television into their holiday planning repertoire. Information sources seem to be used in conjunction with each other but some play a more decisive role than others, namely personal sources and the Internet (Section 5.2.2). Interactive television currently is a contributory source more similar to mass media and teletext than its more decisive Internet roots, especially so for long-haul purposes (Section 5.3.4). However, the experimental treatments suggest that it has the potential to be a more decisive source (Section 5.4.3).

One way it may achieve this position is for the content to better match the information being sought by travellers. Perusal of some current offerings finds short-haul destinations well catered for, but more out of the way destinations lacking (Appendix 2A). The interactive treatments showed how matching content to the destination of interest could make interactive television into a more influential source. This notion is also supported by the Lab Session participants who commented that they would be more inclined to use interactive television if the content that they required would be easily accessible through it, but currently they are drawn to the Internet (Appendix 4E). However, this does not mean that interactive television need become the Internet or any other source for that matter. The participants that have not had experience with interactive television or have had negative experiences considered it to be a similarly attractive option as making a free telephone call for information, using teletext or seeing a travel agent (Section 6.1). Interactive television must therefore distinguish itself from these other sources and utilise its inherent qualities of high definition audio-visual presentation and entertainment discourse to deliver the rich information that travellers seek.

Key Finding:

Interactive television has the potential to become a more influential information source for travellers and long-haul travellers in particular, when it meets travellers' information needs.

Despite circumstantial differentiation from other sources, interactive television received relatively positive evaluations from participants (Section 6.1). This was particularly so if participants had had experience with a wide range of information sources and types of information in their past planning experiences. Previous use of mass media, interactive media or heavy use of destination specific literature also pointed towards favourable evaluations of interactive television. Thus, the wider an individual's experience with where to get holiday information from, the more comfortable they are with using interactive television in such a way (Section 6.3.3). Typical short-haulers were particularly fond of interactive television, while long-haulers only warmed to it if they had used it previously or were big users of destination specific literature (Section 6.3.3.1). This again highlights that current interactive television seems to cater for short-haul destinations and less so for long-haul destinations.

Key Finding:

More experienced planners and short-haul travellers are open to using interactive television in their holiday planning arsenal.

Previous access to and experience with teletext, as well as perceived experience with previous interactive television pre-empted more positive evaluations of interactive

television for planning international holidays (Section 6.4). This reinforces interactive television's proximity to its television roots and emphasises how important this culture is to interactive television's evolution. It also evidences that it is not the interactive-laden Internet that allows individuals to relate to and accept interactive television, but rather the simple and pioneering teletext. This may be due to the similar surroundings that the viewer uses teletext in, or the familiar use of the remote control, or it may even be that teletext's processes function similar to interactive television and are thus transferable (eg. like the notion of technology generations presented by Docampo-Rama, 2001). These explanations lend themselves to further verification by future research.

Key Finding:

Individuals understand interactive television through their experience with teletext rather than the Internet. Thus interactive television must take advantage of this background and evolve its interactivity from this discourse.

Another insight into the use and potential adoption of interactive television came out of the analysis of the past use and future intention data (Section 6.4). The four groups formed from this analysis suggest that each interactive television experience is active in opening individuals to using interactive television again in the future and that a negative experience dissuades them from this. This highlights not only the function of past experience on future intentions and attitudes but it also shows the importance of cumulative experiences. To ensure an individual's positive outlook upon interactive television it helps that each encounter is positive. Thus, relevant content should be shown via suitable interactivity. In support of this, the action of

interacting with the treatment coincided with an increase in how attractive interactive television was regardless of the participants' pre-disposition (Section 6.4) and when asked whether they would interact for the video or brochure again, all interactors responded positively (p278). This again underlines the importance of a satisfying experience.

Key Finding:

Positive experiences with interactive television will lower apprehensions and foster future intentions to use interactive television for holiday planning. These experiences are often more important than pre-disposing factors.

Thus the key to having interactive television adopted into the holiday planning process seems to be a positive history with it or experience with teletext, a wide ranging experience with planning information sources and being presented with destination relevant information. This last element is an important factor for long-haul traveller's uptake of interactive television, which is currently lacking.

8.3.2 Promotion Vehicles and Interactive Television

Destination marketing organisations have a bevy of communication channels and opportunities at their disposal (see Chapter 2 for a discussion). The television ad or commercial and the travel show segment are just two of these and are commonly used by many destinations. Each of these promotional vehicles has its own unique communication objectives and faculties to employ. The ad is typically used to create awareness and prompt travellers about a destination, while the travel show segment does this plus allows dissemination of more detailed information on a destination via a particular location or activity. This difference saw the travel show segment being

more involving and receiving more positive reactions from the participants compared to the ad (Chapter 7).

Key Finding:
Travel show segments are more engaging and influential than travel ads.

One of the main aims of this research was to better understand what effect interaction may have upon these two typical promotional vehicles (Investigation#3 in Chapter 7). Interacting with either an ad or the show segment influenced how participants evaluated them. Interacting with the ad increased positive attitudes while interacting with the travel show lowered attitudes when compared to the control treatment evaluations. In *this case* the findings imply that ads are enhanced by interactivity while travel shows are best left in a linear format. Lab Session participants (Section 7.1.2) commented that non-interaction was so as not to interrupt the story and that an extra information opportunity would be appreciated either at the end of the travel show or from an interactive service portal (eg. travel channel or shopping area).

A similar effect occurred with the level of involvement participants felt with the ad or show (Sections 7.2.2 and 7.2.3). Interacting with the ad made it a more involving experience while involvement with the show was highest for linear viewers and those not choosing to interact. Thus, the ad gains more from interactivity than the travel show segment does. This may be due to the limited nature of the information that the ad imparts. The ad is information-poor and is thus enriched by the telescopic offering of the information-rich destination video. Meanwhile the information-rich

travel show can only be marginally enhanced by more information from the telescopic approach and thus in that case the ability to impulse request a brochure fares better.

Key Finding:

Interactivity is most effective when it can add substantial value to the experience with the promotional vehicle and brand. Ads are enhanced significantly with a telescopic approach offering a destination video.

Interactivity should not disrupt the viewing experience. Travel shows are most effective if interruption from interactivity is kept to a minimum or it is offered at the end of the programme or from an interactive service portal.

The different combinations of promotional vehicle and interactive opportunity also move ahead of their linear counter parts in the planning process (Chapter 5). The interacted promotional vehicles are slightly less of an on-going source than their linear counterparts (Section 5.4.2). This shows that while the basic promotional vehicle can be an effective communication device, adding an interactive opportunity for more detailed information into it can then conveniently cater for those travellers that have already chosen the destination and would require more information, bringing them closer to the point of commitment to the destination and purchase of the holiday.

Key Finding:

Interactivity extends the life of the promotional vehicle by making it useful to a greater breadth of travellers across the planning process. Browsers can benefit from the promotional vehicle and those further along the process can take advantage of the interactive opportunity.

Thus, interaction enhances basic forms of promotional communications. However, care must be taken that the interactivity adds value to the initial communication and does not detract from it. A short communication such as an ad stands to benefit from impulsive interactivity such as the ability to request a brochure, but even more so from electing to interact with a telescopic opportunity to view an entertaining informational video on the desired destination. Meanwhile, content-based promotion such as a story in a travel show is more effective if linear, but the option to access more information after the show should be made available to exploit the interest generated by the story.

8.3.3 Interactive Television Opportunities as Lead Generation Tools

Destination marketing organisations (DMOs) currently feel comfortable with the functionality of interactive television for building their databases via brochure requests, but are calling for a further reduction in costs associated with this direct response channel (Section 2.3.5, p43-46). While conversion data was not available from the DMOs interviewed, one of the main findings of this research should prove to be encouraging news for them: viewers' main motivation for interacting with their treatments was because they had a genuine interest in the destination being featured, with only a small percentage doing so out of curiosity (Sections 7.1.1 and 7.1.2). This bodes well for the travel industry as the current trend in using interactive television in their communication and marketing arsenal is to generate leads. This study showed that these leads are qualified to the point of being sufficiently attracted to the destination to involve themselves with it for more information (Sections 7.2.2

and 7.2.3). A brief analysis of participants' reasons for or against consideration of Western Australia for their next holiday expands this level of qualification.

For the destination in question, the reasons why interactors would and would not consider Western Australia were briefly looked at to gain insight as to the calibre of potential leads (see table in Appendix 8B). It was found that more than half (59%) of interactors would consider Western Australia and 31% did so because of their interest in the destination itself. Another 1 in 7 participants interacted with the consideration of visiting friends and relatives in Western Australia or because they had visited before. Interactors' main reason against Western Australia as their next holiday was that while they may have been intrigued by Western Australia, they considered it to be too expensive and/or too long a flight at this point in time (25%). For some respondents this position is likely to change in the future as their family situation changes, their annual leave accumulates once more, they include it into a larger world trip, or their financial position improves. Meanwhile of those interactors that were not considering WA, 5% did so because they had already booked their next holiday and 9% had other destinations ahead of Western Australia in their consideration set. These findings show that those interacting and sharing their details with the DMOs are, in the main, valuable leads that are ready to travel or will retain the information for the future, rather than just browsers.

Key Finding:

More than half of leads generated by interactive television applications are already considering the destination. Those not including the destination in their consideration set are dictated by temporal personal constraints.

Another point of interest for lead generation purposes was the finding that the interactive television treatments dispersed themselves along the temporal use dimension of the two dimensional grids (Chapter 5; see Figure 8.4.1). While the Telescopic Ad was similar to the Impulse Show, the significant temporal difference between the Impulse Ad and Telescopic Show combinations suggests that leads generated from these two approaches may require and benefit from tailored information packages to cater for the differing stages of their planning process.

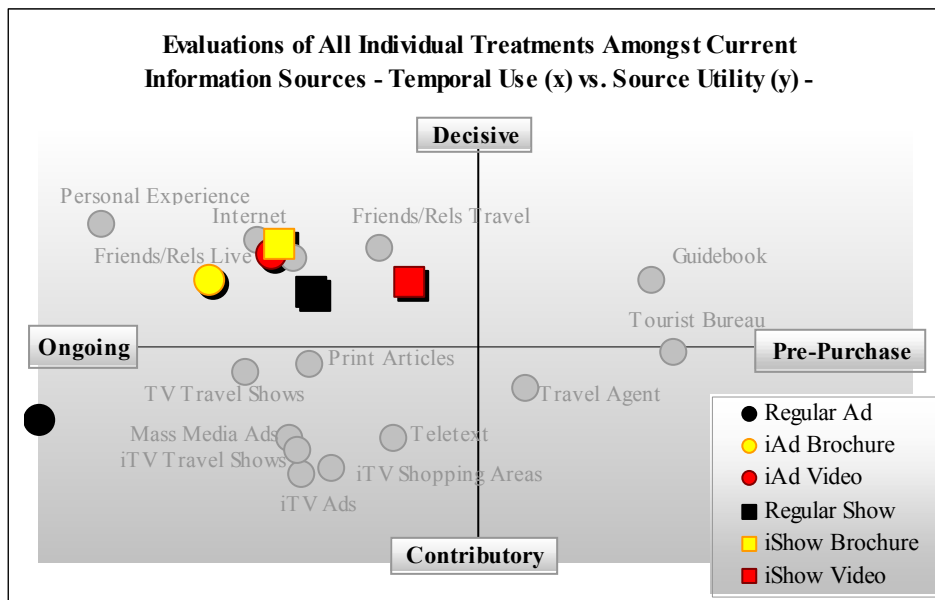


Figure 8.3.1: Temporal use and source utility plot of the experiment treatments over the information sources used in the past by participants (measured in Part#1 of the questionnaire).

Those requesting a brochure from an ad (Impulse Ad) seem not to be at the same stage in their planning process as those watching a video from the travel show segment. Ads are often purposed to create awareness, remind or to build image (due to their limited content and detail) and thus are consulted to flesh out a traveller's options. By requesting a brochure from an ad they satisfy the awareness and curiosity prompted by the ad very early in their planning process. This suggests that

a general destination brochure may be suitable to fulfil their information needs to help them decide upon where to go for their holiday. Thus this combination can assist in moving the destination from the traveller's awareness set to their consideration set through a generalised brochure.

Travel shows on the other hand are more detailed in their content and tend to have an activity or an overview of a destination per segment with minimal functional information. While these can act like ads in creating awareness and interest, they offer much more and can be watched for that extra bit of experiential information not found elsewhere after the destination has been chosen. The Telescopic Show situation is consulted at a later stage than the ad in the planning process, after the destination has been chosen. This stage calls for more detailed, functional, activity level information and helps move the traveller along their planning journey. It is important that the additional information is of significantly greater quality and detail than that offered by the travel show segment.

Key Finding:

Different combinations of promotional vehicle and interactive opportunity can cater to travellers at different stages of the holiday planning process.

Impulse Ads can move the traveller from the awareness to the consideration stage.

Telescopic Shows can assist travellers in planning their destination activities.

Thus, through the types of information requested from different promotional tools, DMOs may be able to get a feel for where in the planning process travellers are to the destination. Whether one or the other information gatherer is more likely to actually visit the destination is outside the scope of this research but would be well

suited to a conversion focused study. It is also important to note that while there will always be exceptions to the rule, this will be even more evident if only the one point of information request is made available to travellers. For example, if only an ad is run and it only offers the chance to request a brochure then those travellers further along the planning path may still request one as that is their only opportunity via this medium to get extra information. As previously discussed (Chapter 2 and Chapter 3) the travel industry also uses service portals to promote their products. While the Lab Session participants expressed genuine interest in taking advantage of such a forum in conjunction with a travel show (Appendix 4E), as a sole promotional vehicle it would require separate investigation which was beyond the scope of this research.

8.4 Chapter Summary and Preview

“The excitement over new interactive media has implied that interactive systems should always be superior to traditional advertising. [However,] interactivity may interrupt the process of persuasion.”

(Bezjian-Avery, Calder et al., 1998, p24, 30)

Bezjian-Avery et al (1998) demonstrated that interactivity per se is not always superior to the linear form in regards to computer-mediated interactive advertising. Similarly, this research has shown that while interactivity can be beneficial to some formats of promotion it is not always so. The television ad typically gains from offering further information to the traveller, but the engaging travel show is best viewed linearly with extra information being offered after. If interactivity is applied appropriately, interactive television has the potential to be a valuable information

source not only for the long-haul traveller but also for the travel industry in gathering information on and catering better to, their prospective visitors. The findings and recommendations of this research are in the context of travellers from the United Kingdom to Western Australia. These and other limitations of the research are discussed in the following and last chapter. Recommendations for improvements and further research avenues are presented before concluding remarks are given.

Chapter #9

In Conclusion

Chapter Overview

This chapter brings the thesis to conclusion. It opens with a brief summary of the main findings and their implications before moving on to a discussion of the research’s limitations and recommendations for improvements and avenues for further research.

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9.1 Introduction

The main objective of this research was to gain a better understanding of the holiday decision process associated with long-haul travel in the context of new media and in particular interactive television. This was operationalised with the UK international traveller market being the consumers of interest and Western Australia being the holiday destination in point. To explore this and to begin to fill the gap in the literature on how interactive television is currently used and what its potential is in the travel industry, three ‘Investigations’ were formed.

The first looked at information source use by international UK travellers, including how they use current interactive television sources and what the potential of interactive television sources could be. This investigation would allow a fuller understanding of the roles of different information sources and relationships between them. The second investigation aimed to understand possible pre-dispositions towards interactive television stemming from the notion that past experiences can influence future behaviour by the transference of skills. The results from this investigation would bring understanding to some of the reasons behind individuals’ adoption of, or potential to adopt, interactive television, as well as understanding interactive television’s connection to its root media. The last investigation sought to explore and gain insight into why individuals chose to interact and how that in turn impacted upon elements such as advertising effectiveness measures.

These investigations were explored and analysed throughout Chapter 5, Chapter 6 and Chapter 7, respectively. Chapter 8 then combined the results from these to examine more directly related issues for the travel industry from both the traveller's and industry perspective. These findings and discussions will be briefly reiterated below before the limitations of this research are presented. Recommendations on improvements and further research are also given.

9.2 Discovering the Investigations

Investigation #1 aimed to establish an understanding of information source use in international holiday planning. It did this through the use of source utility and temporal evaluations on a pre-determined list of sources that are typically used by UK travellers. When translated to a two dimensional grid these evaluations allowed a graphical representation of how information related to each other and thus how they differed in their planning process roles. The six treatments were also placed on these grids and statistical analysis carried out.

These analyses provided support for the notion that sources are used in combination as well as redefining previous understanding of how particular sources are used. For these participants the Internet was as useful as the personal sources while the travel agent (considered to be a typical personal source) was perceived to be more similar to the tourist board/authority and the guidebook. Interactive television is currently on par with its television roots and there is a difference in how short-haul and long-haul travellers utilise it. There seem to be more offers for short-haul travellers to use

interactive television while there seems to be a lack of suitable content for long-haul destinations. This explanation is reinforced by the more Internet-like position of the interactive treatments, which presented information relevant to the destination in question (Western Australia) and thus became more useful.

The location of the interactive treatments not only show the potential of interactive television when content is related to destination in question, but also that different promotional vehicle and interactive opportunity combinations are perceived to be of different purposes by travellers. The most significant was the difference between the Impulse Ad and Telescopic Show combinations, with the latter being more useful and used at a later stage in the planning process. The Telescopic Show combination was also the only treatment that was significantly different to personal experience in that it is used at a later stage in the planning process. In conjunction with the interviews with the Lab Session participants, this chapter and investigation showed that there is great potential for interactive television as a valuable information source for international and in particular long-haul travellers, if the relevant content is made available via suitable interactive opportunities.

The findings from Investigation #1 in Chapter 5 contributed to better understanding not only the use of information sources in the planning process but also to how travellers would adopt interactive television in this process and how tourism marketers could exploit these avenues for qualified leads.

Chapter 6 addressed the second investigation by dealing with the potential pre-dispositions towards interactive television. This gave even more insight into how travellers would adopt interactive television by exploring their previous experiences with interactive media, travelling on and planning international holidays and their familiarity with Western Australia. The analysis found that of the experience with the three interactive media, only previous teletext and interactive television experiences were related to how they viewed interactive television as a holiday information source. Furthermore, while both the length of access to and experience with teletext rated significantly, only the perceived experience with interactive television was a significant measure. This reflects the still present trend for interactive television to be adopted mainly for its programme selections rather than its interactive services.

The analysis of participants travel and planning experiences found that while an individual's previous travel experience had no connection to their evaluations of interactive television, their experience with multiple information sources did. The more sources and types of sources that an individual had had experience with the more likely they were to accept interactive television as a useful source. This was more easily the case for short-haul travellers but long-haul travellers were more likely to have needed experience with heavy use of destination specific literature or interactive television itself. As for a participant's experience with the destination itself, an inclination towards Western Australia suggested that the participant would view interactive television in a more positive light, however, there seemed to be a mediation of this relationship by the actual interaction with the treatment. This

mediation had also occurred in the analysis for interactive media and travel/planning experience and thus prompted the need even more for the exploration of the third investigation in Chapter 7.

The reasons why participants interacted and the impact of interaction were considered in Investigation #3 in Chapter 7's analysis. For destination marketers it is encouraging to see that individuals will generally interact out of genuine interest in the destination, meaning that leads gathered through interactive applications will be of significant value. This was also not a novel behaviour as all participants that interacted said they would do so again in a similar situation. Interacting was shown to enhance not only individual's attitude towards the promotional vehicle (in particular the ad) but also to heighten involvement and attitudes towards the destination in some cases and generally, the attractiveness of interactive television's role as a holiday planning source. The analysis from this investigation gave insight into how interactive television could be used for generating lead purposes by destinations and how different promotional vehicle and interactive opportunity combinations work.

These individually focused analysis chapters allowed three very separate avenues of investigation to be carried out clearly, while also allowing the results to contribute to understanding the three industry-pertinent discussion issues from Chapter 8.

9.3 Summary of Key Findings

- Interactive television has the potential to become a more influential information source for travellers and long-haul travellers in particular, when it meets travellers' information needs.
- More experienced planners and short-haul travellers are open to using interactive television in their holiday planning arsenal.
- Individuals understand interactive television through their experience with teletext rather than the Internet. Thus interactive television must take advantage of this background and evolve its interactivity from this discourse.
- Positive experiences with interactive television will lower apprehensions and foster future intentions to use interactive television for holiday planning. These experiences are often more important than pre-disposing factors.
- Travel show segments are more engaging and influential than travel ads.
- Interactivity is most effective when it can add substantial value to the experience with the promotional vehicle and brand. Ads are enhanced significantly with a telescopic approach offering a destination video.
- Interactivity should not disrupt the viewing experience. Travel shows are most effective if interruption from interactivity is kept to a minimum or it is offered at the end of the programme or from an interactive service portal.
- Interactivity extends the life of the promotional vehicle by making it useful to a greater breadth of travellers across the planning process. Browsers can benefit from the promotional vehicle and those further along the process can take advantage of the interactive opportunity.

- More than half of leads generated by interactive television applications are already considering the destination. Those not including the destination in their consideration set are dictated by temporal personal constraints.
- Different combinations of promotional vehicle and interactive opportunity can cater to travellers at different stages of the holiday planning process. Impulse Ads can move the traveller from the awareness to the consideration stage. Telescopic Shows can assist travellers in planning their destination activities.

9.4 Contributions of the Study

Through its key findings this research has contributed to bridging the gap in the understanding of the holiday planning process and the use of interactive television. It has furthered the understanding of how travellers use information sources to plan their international and long-haul holidays not only through the adaptation of the Fodness and Murray (1998) grid but also by including modern sources (eg. television, teletext and the Internet) with more traditional sources. It has shown how a nascent medium such as interactive television currently fits into this process and how it may potentially be used. It has explored possible pre-dispositions using interactive television in planning an overseas holiday and that there is a case for the transfer of knowledge (Singley and Anderson, 1989) between previous teletext experience and the use of interactive television. Furthermore, it has highlighted reasons why participants interact, what these interactors look like and the impact of that interaction upon the promotional effort.

In addition to contributions made to the interactive television and tourism knowledge base, this research has also shown that it is possible to achieve a balance between the internal and external validity of a study. By using the VOD platform and allowing participants to partake in their own homes, the results are more reflective of everyday viewing behaviours and experiences than a controlled laboratory setting would be – thus providing external validity. Internal validity was provided by ascertaining similarity in responses between the main participants and the controlled Lab Session participants. Furthermore, by avoiding the use of a student population and drawing from the subscriber base, this study also attempted to produce results that are applicable to a wider variety of people.

9.5 Limitations and Recommendations

In interpreting the findings of this study a number of qualifications must be kept in mind. The study's pre-planned parameters and implementation outcomes both limit the results to a certain context. Limitations to result interpretation will be dealt with here only briefly; a more detailed analysis is available in Chapter 4's critical analysis of the method's strengths and weaknesses.

The most limiting factor in this study was the lower than expected response rate. The number of participants involved (164) was well below the original anticipated response level (300) and this allowed only non-parametric statistics to be used for data analysis. A main contributor to this was the restructure of the HomeChoice

business model and product offering, reducing its subscriber base from 11,500 to 3,500. This reduced subscriber base was compounded by customer dissatisfaction with the VOD component of the HomeChoice offering and the use of the HomeChoice subscription foremost for broadband Internet access rather than VOD. It is anticipated that if the study was run at a time when customer satisfaction was higher and the product offering was more focused on the television product, the response from the subscribers would have been more enthusiastic. However, measures were taken in an attempt to counteract the decreased subscriber pool (the Lab Sessions and the Call-Backs) to assist in attaining more depth to the data.

Another limiting factor of the sample was the skew towards higher earning, more technologically adept, younger males than would otherwise be in the wider London and UK populations. This skew was somewhat anticipated as these types of individuals are early adopters of new technologies such as HomeChoice. However, as this study looked into interactive television which is a nascent technology, the sample may well be reflective of the individuals using such media channels. Thus while the findings may not be completely transferable to the London and UK populations on a whole, they are applicable to those interested and adopting these new television technologies. The research's conclusions may change focus as interactive television matures and a more mainstream community become familiar and involved with the technology. A study utilising such a mature audience at the point of critical mass or mass adoption would be beneficial for the interactive television, advertising and travel industries, as well as furthering the understanding initiated by this research.

While the study's findings can be applied to the London and UK interactive television market, when applying these findings to other markets a number of things need to be kept in mind. Firstly, the unique experience that the UK has had with teletext technologies which is considerably different from somewhere like the USA. Secondly, the fact that the UK's interactive television industry is relatively mature and thus consumers have had considerable experience with this media already compared to other markets. Lastly, caution should also be taken when interpreting these results for other holiday destinations as this was based on the long-haul, fairly familiar destination of Western Australia.

The self-selection of participants may be seen as another limitation. While most study participation is essentially self-selected due to the need of consent by the participant, in this case it seems that participants who had an interest in Western Australia or Australia in general may have been more likely to participate than others. This may have been a result of the study promotion featuring footage of Western Australia and that the prize draw was for two tickets to (Western) Australia. However, this was spread across all treatment cells and thus was a common factor under which results were attained. Furthermore, as it was not possible to query those viewers who chose not to participate this relationship is only a suggestion. While not an option for this study, future studies may choose a major prize unrelated to the destination in question to lessen the degree of such a possible bias.

The treatment content itself may have confounded the research's results. The travel show segment on swimming with whale sharks and the ad for the tree top walk present considerably different holiday experiences available in WA that may appeal more or less to certain individuals. This may have effected whether or not people interacted with their treatment and also the overall attitude towards the promotional vehicles and WA. Other studies may attempt to overcome this by using promotional vehicles produced for the same tourist experience with the same messages and arguments. Another option is also to pre-test participants' involvement with destination or activity categories prior to the treatment, as is often done in consumer good research and then select the content with prior knowledge on this element and control for it in the analysis.

Within the implementation of the study, there were a small number of cases that saw participants not interacting with the treatment because their 'partner already had'. This reflects a realistic situation in travel planning where although both people in a travel party see the ad or show, one may be the planner and thus relieves the other of the chore of collecting information. This may not necessarily mean that the non-interactor is less interested in the destination or comfortable with interactive television. However, to avoid this decline in potential interactors in future research it may be best to limit participants to one per household.

Another avenue for improvement is implementing further precautions to control for 'testing effects'. While control cells without interactivity were set up, no measures were taken to test participants *only* on the second half of the questionnaires. This

would have confirmed that the results were a product of the treatment rather than a factor of the questioning itself (Morwitz, Johnson and Schmittlein, 1993). This was a step unavailable to the study due to very low participation, increasing each participant's value to take part in the research cells.

9.6 Avenues for Further Research

Aside from replicating the study with a larger sample, at a more mature stage in the interactive television lifecycle, a different travel market or a different destination, there are a number of avenues for further research stemming from this study's results. Already in looking at the use of information source use in holiday planning, it became clear that short-haul and long-haul travellers differed in their interactive television use. This difference could be further explored as to what particular functions or content a short-haul traveller requires in comparison to a long-haul traveller from interactive television.

Another avenue that merits further investigation is to gauge how other and new interactive television applications and sources fit into the information source mix for international travellers. This would not only be able to verify or rectify the findings of this research but it would also provide insight into the communication gaps available to be filled by new applications. For example, a popular promotional tool used by many consumer good marketers is to sponsor or have a game tailored to their product. These interactive television games range from trivia to arcade styles and often include knowledge of or characters representing the product. How could an

interactive television game based on a destination benefit that destination's image and promotion, or entice potential visitors?

In the same vein, future studies may also like to consider further examining the drivers of interactive television adoption and how these impact upon a 'best' measurement of individual's experience with interactive television. It is anticipated with the growth and evolution of interactive television technology and its own discourse that reasons for adopting interactive television may move away from extra programming and more towards the convenience of its interactive services. This may see the 'length of access' measure being more similar to the 'perceived experience' measure as used in this research.

Aspects of the method used in this research could also be further explored. Aside from using different forms/platforms of interactive television (eg. Satellite, cable, or terrestrial providers) future studies could also look into different forms of collecting data. An option may be to employ an on-screen questionnaire rather than the paper/pencil form this research elected to use. However, it is cautioned that an on-screen questionnaire would benefit from a simple line of questioning exploring only a small number of variables.

9.7 Concluding Remarks

This research was explanatory in nature and aimed to add to the tourism information source use literature as well as contributing to our understanding of interactive

television in general. It queried a number of variables and gained an insight into the current use and potential use of interactive television in planning international holidays, in particular long-haul. It showed that interactive television has the potential to be an important part of marketing to, communicating with and informing travellers in an entertaining but functional manner. Its findings have only begun to address the gap in the knowledge of how interactive television works. There is still considerable need to investigate how interactivity is changing the television viewing experience, the function of promotional efforts and, in conjunction with other new interactive media, the planning of international holidays. The challenge is now to build upon this knowledge and investigate this area from as many different established disciplines as possible so that it may be well integrated into our current understanding and assist in the evolution of our understanding of tourism, traveller behaviour, media use and destination marketing.

Part #4
References and Appendices

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