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How to cite:

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Version: Accepted Manuscript

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# ***Consumers, Channels and Communication: Online and Offline Communication in Service Consumption***

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## **Abstract**

This paper reports on a study that investigated consumer use of e-services in a multi-channel context. To develop a deeper understanding of what makes consumers decide to use the online channel, and contrary to most HCI studies on the use of e-services that focus on the use of the online channel in relative isolation, this study examined consumer channel-choice beyond the instances of internet use. The consumption behaviour of its participants was investigated across channels in an in-depth qualitative study. The analysis of the elicited rich data focused specifically on the investigation of voluntary consumer movements between online and offline channels during the course of a consumption process. The results indicate that participants often use multiple channels in parallel and frequently switch between channels. Literature from marketing and consumer research was used as the perspective to explore the rationale for the complex and dynamic reported consumer behaviour.

## **Keywords**

E-commerce, Human-Computer Interaction, Consumer Research, Self-Service Technology, consumer channel choice

## **1. Introduction**

The use of web-based systems for search and purchase of products and services has grown rapidly over the past years. The percentage of people using the web is approaching 70 percent of the total population in Western industrialised countries (Assael, 2005). In 2005, the total consumer spending in the US on online retail services rose by 20% over the spending in 2004 (Mulpuru et al., 2006; Lipsman, 2006). In the UK on-line sales currently make up 6.5% of total retail sales, and are expected to rise to 25% by 2009 (Blakely, 2005). Central to this growth in e-commerce activity has been the rapid adoption of electronic distribution channels by service sector organisations as a means of both enhancing accessibility for consumers and reducing service delivery costs (Laing and Hogg, 2003). The internet has emerged as a major arena of service delivery and consumption. Among the sectors characterised by particularly rapid development of e-commerce channels have been financial and travel services.

One of the issues in research on the increasing use of online services is whether people are replacing traditional face-to-face communications by using e-services. Are they embracing the internet as an alternative to traditional offline channels such as telephone, shops and mail order, or do they use the internet as an additional channel for the search and purchase of products and services, while continuing to use the traditional channels? When and why do consumers decide to use either the online or offline channels? Since most consumers in Western, industrialised countries have easy access to multiple channels; they are relatively free to choose the channel they prefer to use. This paper reports on a study that investigated consumer use of e-services in a multi-channel context. The focus of the study was the examination of consumer channel free choice situations. The domain of investigation was leisure travel preparations. In interviews and diaries the participants reported on the leisure travel preparations they engaged in over a long period of time (1 to 1.5 years). The consumption behaviour of the participants in the study was investigated across channels in an in-depth qualitative study.

The perspective for the study was broadened from the traditional HCI focus on Human-Computer Interaction to also include interactions and communications

through other, offline channels during the course of a consumption process. A consumption process may consist of several face-to-face and/or virtual encounters between a consumer and a business. It encompasses all the communications that happen during the consumer-service provider interactions (Shostack, 1985). The focus on the consumption process widens the traditional HCI focus from an isolated user-system interaction to a series of (virtual) encounters that extends from a broad search for a product or service, to deliberating the potential offers, deciding on the most preferred option and, finally, to the actual purchase. The development of web-based service delivery channels needs to be understood within this broader context of consumer-supplier interaction. The success of an online service cannot be based solely upon the evaluation of the use of a website. The characteristics of the total service experience across the entire consumption process influence a consumer's assessment of the quality and usefulness of an e-service (Minocha et al., 2004).

To better distinguish between the actual website and the broader service experience, the terms 'e-commerce website' and 'e-service' are used. The term e-commerce website refers to the user interface of an e-commerce environment. The term e-service refers to the wider process of online selection, inspection, negotiation and communication with the business that offers a particular product or service. An e-service is the overarching consumer-centric concept of service as 'bits of usefulness' that help people solve problems and meet their needs (Rust and Kannan, 2003). An important aspect of e-services is communication, the exchange of information between a consumer and a business. As sections 2, 4 and 5 of this paper describe, contemporary consumers are well informed and use the available information to control their negotiations with e-service providers. The dynamics of the interactive use of e-services are driven by the consumers (Ruyter et al., 2001). Therefore, it is important to adopt a consumer-centered perspective in investigations on the use of web-based systems. Through their multi-channel use, while purchasing products or services, consumers are communicating in various ways with service providers. The objectives of the study reported in this paper were to investigate consumer channel choice in a multi-channel environment, and to identify behavioural patterns in the multi-channel consumption and communication processes.

## **2. Literature on consumer use of e-services**

For a discussion of the use of e-services in the context of a multi-channel environment, the literature on marketing and consumer behaviour offers theories and models that can inform HCI and aid the understanding of communications during the service encounter. This literature is seldom referred to in HCI literature that discusses the use of e-services. The three most relevant and pertinent issues in relation to this study are discussed in sections 2.1 to 2.3; consumer channel choice, adoption of Self-Service Technologies, and contemporary consumption behaviour. This paper explores the value of this literature for the study of multi-channel consumer behaviour and attempts to synthesise the relevant themes from these bodies of literature, as discussed in section 2.4 and section 5.

### *2.1 Consumer channel choice*

In the past 10 to 15 years, the range of retail service channels available for consumers has increased dramatically. New channels, such as internet, direct mail, interactive telephone systems, and interactive TV have become available for shopping as an alternative to traditional retail stores. Understanding what leads consumers to use one channel rather than another has become increasingly important for channel design and management (Black et al., 2002). Thus, research has been conducted to find out what drives consumers in their choice of a particular channel. How do they cope with the array of choices they encounter on a daily basis in contemporary society?

In the investigation of consumers' choice of channel for financial services, four categories of influencing factors have been found: consumer characteristics (e.g. confidence and lifestyle); product characteristics (e.g. complexity and price); channel characteristics (e.g. personal contact and convenience); and organizational factors (e.g. size and longevity) (Black et al., 2002). The influence of product characteristics on consumer channel choice has been found to vary across product categories. For example, Chiang et al. (2004) argue that the ease of finding information through a particular channel is the most influential attribute for buying books, whereas the post-purchase service is most important for flowers, and the ability to compare products is most important for food items.

One of the consumer characteristics that influences channel choice is consumer risk profiles. Consumer risk profiles are determined by both their perception of risk and their acceptance of risk. After making purchases through one channel, whether

online or offline, risk-averse consumers tend to be more loyal customers than risk-neutral consumers because they are less prone to switch from one channel to another (Gupta et al., 2003). One of the main channel characteristics that drive consumer channel choice is perceived transaction costs. Consumers are willing to trade their time and effort only if they perceive value in the exchange. Perceived value includes the pleasure that consumers derive from shopping. According to Reardon and McCorkle (2002), the main trade-offs consumers consider when choosing a distribution channel are time versus money, and time versus psychological benefits (e.g. a pleasurable or social experience).

An example of organisational factors that influence a consumer's choice of channel is the existence of a customer-centric approach by an organisation, rather than a channel-focused approach. Businesses need to reflect on the factors that drive consumers to use a particular channel, and to strategically respond to those factors, rather than trying to push its customers towards using a certain channel. On average, businesses with a multi-channel strategy are better suited to cater to consumers' channel preferences than businesses that focus on a single channel (Schoenbachler and Gordon, 2002).

The literature on consumer channel choice points to various characteristics of products, channels, consumers and organisations that influence a consumer's choice of channel. This adds up to a complex mix of positive and negative influences that consumers need to balance in order to make channel decision.

## *2.2 Adoption of Self-Service Technologies*

Within Consumer Research, a specialized area in the marketing literature, internet is considered to be a Self-Service Technology (SST). The adoption of e-commerce, or e-services, is thus examined and discussed in the context of the adoption of other SSTs, such as cash machines, voice-mail systems and airline ticketing machines. The literature on this topic explains that people are willing to use a new SST if it matches with their attitudes towards technology in general, and towards technology-based self-service options in particular (Bobbitt and Dabholkar, 2001). This match influences their intentions to use the technology. Several internal variables, specific for individual consumers, have been found to be a predictor of SST usage, such as technology anxiety (Meuter et al., 2003) and personal capacity and willingness (Walker et al., 2002). In addition to these internal variables, also external variables,

specific for the circumstances of the consumption, influence consumer attitudes and intentions. Examples of such external variables are perceived risks associated with technology-based self-service (e.g. losing time, money and/or convenience) (Forsythe and Shi, 2003; Lee and Tan, 2003), factors associated with the product category (e.g. price, complexity and involvement) (Bobbitt and Dabholkar, 2001), organizational reputation, and relative advantage (Ruyter et al., 2001). Relative advantage is the extent to which e-services are perceived to be superior to alternative channel-choices that are available. Factors that determine relative advantage are time saving, convenience, and customer empowerment.

Apart from attitudes and intentions, the eventual consumer behaviour, or the actual use of an SST, is also co-dependent on situational variables and perceived behavioural control (Bobbitt and Dabholkar, 2001). Situational variables are contextual, that is, particular to a specific place and time, and have an effect on current behaviour (for example, time constraints or limited access to the internet). Situational factors can cause consumers to behave in a manner that is inconsistent with their attitudes and their pre-formed intentions. Perceived behavioural control is defined as the perceived ease or difficulty of performing the behaviour of interest (Bobbitt and Dabholkar, 2001). The provision of more personal control to consumers has been found to reduce their perceived risk, enhance the perceived value of the SST, and induce greater intention to adopt an innovative technology (Lee and Allaway, 2002). Thus, more perceived behavioural control has a positive influence on the decision to use the online channel for shopping.

In relation to the use of e-services in a multi-channel context, one of the key points to take from the literature on the adoption of SSTs is that consumers may use specific channels according to the circumstances of their consumption. A positive attitude towards technology and SST and an intention to use them do not necessarily lead to actual usage of the online channel. This is co-dependent of situational variables (e.g. time constraints). The result is that consumers may not be consistent in their choice of technologies across several consumption processes.

### *2.3 Contemporary consumption behaviour*

The marketing literature on consumer behaviour in contemporary post-industrialized society, describes consumers as active and empowered participants in a services-driven marketplace. This literature explains how both technological and socio-

economic developments have fundamentally shaped the contemporary society. The internet has boosted the availability of information and the ability of consumers to utilise this information. As a result, consumers have become more empowered in their interactions with businesses. Consumers are challenging the traditional informational asymmetries between them and service professionals (Laing et al., 2002). De-traditionalism and an emerging consumerism have facilitated the increasing ability and willingness of consumers to use the available information sources in negotiating the terms for interactions with service providers (Laing and Hogg, 2003).

Together, these developments have changed the way in which consumers and businesses communicate. The service encounter that was traditionally characterised as a dyadic interaction between a customer and a service provider is now set in a broader network of interactions with other providers and consumers. The service encounter has thus become embedded in the parallel consumer interactions that are typical for contemporary consumption processes. These processes encompass multiple interactions and experiences with other consumers and providers, that occur alongside and independent of the formal interaction with the primary service provider (Laing and Hogg, 2003). It is important to note that the parallel interactions not only occur during information search, rather they are an integral part of the overall service experience.

Consumption nowadays has become a sophisticated and complex process (Szmigin, 2003). Consumers are generally well informed and confident. If they take an interest in a certain product, service or business, they know how to find the information they need. They also initiate and change relationships with businesses according to their needs, expectations and experiences. Shaped by changing consumer expectations and advancing technologies, businesses are under pressure to improve their competitive positions by increasing their focus on the consumer and delivering optimal customer services. Contemporary consumers are increasingly expecting control of transactions and choice in the service setting (Rust and Kannan, 2003).

From the perspective of the service provider, the various ways in which consumers make use of their service offerings may seem unpredictable, contradictory, or even erratic. This complex consumer behaviour can be explained through the acknowledgement that consumers are enacting different roles based on their functional responsibilities (for example being a parent, professional, friend, or lover) or their emotional states (for example rational vs. irrational, or risk-seeking vs.



security-seeking). These roles can be self-driven, or directed by social norms and expectations (Szmigin, 2003). The literature on contemporary consumption points out that contemporary consumers have many faces. Their consumption behaviour is fragmented and volatile (Gabriel and Lang, 1995). Consumers in the post-industrial society are free to consume in a variety of ways in different situations (Szmigin, 2003).

#### *2.4 Summary of relevant points from the literature*

The literature discussed in this section has been used in the study reported here to progressively enhance the understanding of consumer movements between online and offline channels. The literature on consumer channel choice was used to identify factors that influence consumer decision making on whether to use a particular channel. The literature on the adoption of SSTs offered a broader perspective by looking at these channel choices in a multi-channel context. And finally, the literature on contemporary consumption supported the further investigation of channel choices during the course of consumption processes from a consumer perspective.

Most studies described in the literature are large-scale, quantitative studies. They focus on the relationship between specific influencing factors and the eventual channel choice. The existing approaches offer a limited view of the trade offs consumers need to make between the various influencing factors. The aim of the study reported in this paper was to perform a more holistic, qualitative examination of the complexity and dynamics of the overall process of consumer channel choice. In the three discussed bodies of existing marketing literature, no qualitative study on the use of e-services in a multi-channel context has been described yet.

### **3. Research approach**

The study presented in this paper examined consumer behaviour in the domain of leisure travel in a multi-channel context, instead of focusing on the use of the online channel in isolation. By referring to the consumption process which encompasses communications across both online and offline channels, a better understanding of the key issues around online communication can be developed. The study observed consumption processes from the start to the finish, and to investigate consumer behaviour in situations of free choice. Consumption processes are conducted in

stages: information search, deliberation, decision, purchase, and sometimes dissonance (Assael, 1995). Dissonance refers to the contact consumers may have with a business because of an extra query, a problem, or a conflict that arises after the actual purchase. A consumption process does not only include the actual tangible consumption or use of a product or service, it also includes the activities wherein individuals or groups select, decide and purchase products and services (Gabbott and Hogg, 1998). An essential part of this process is the selection of the channels a consumer wishes to use. Consumer behaviour does not only address the consumption of goods and services, but of information too (Goldsmith, 2000). Consumers generally spend a lot of their time searching and deliberating information from numerous sources before they decide whether or not to purchase a product or service through a particular channel. The search and deliberation stages are integral parts of the consumption process (Klein and Ford, 2003).

The study reported here examined the channel choices consumers make to meet their needs and the rationale for these choices when there are several channels at their disposal. To observe consumer behaviour during the course of complete consumption processes and from a consumer's perspective, an in-depth, qualitative study was conducted. This approach allowed for a detailed investigation into the behaviour of a small sample of consumers, as opposed to large-scale studies reported in the literature (e.g. Chiang et al., 2004; Gupta et al., 2003; Walker et al., 2002) that focus on a specific aspect in the consumption behaviour only. Leisure-travel preparations were chosen as the domain of investigation, because they often involve the search for and purchase of several services that are connected to one trip or holiday (e.g. flight, hotel, hire car). From the perspective of the consumer, the preparations for these services are inter-related. All these preparations are part of the same consumption experience. Another reason for choosing leisure travel as the domain for investigation was that the services in this domain are generally available through several channels, and consumers are relatively free to make their own choices on which channels to use.

To investigate how the participants in the study made their channel choices, and how they moved between online and offline channels in relation to leisure travel preparations, accounts of their recent consumption behaviour were collected. In total, 28 participants were interviewed at their homes throughout the United Kingdom. To

recruit participants, a combination of snowball sampling (Atkinson and Flint, 2001) and quota sampling (Kitchenham and Pfleeger, 2002) was used. In 8 different regions of the UK contacts of the researcher were asked to recruit 2-3 candidates. To make sure that the sample was balanced on demographics and experience, the researcher selected the participants from the suggested pool of candidates in accordance with a set of predefined criteria, or quota. To minimise bias, candidates working in e-commerce design, travel businesses or academic research were excluded, as were candidates that were close friends or members of the same household. The final sample of participants had a spread in demographics (13 males and 15 females; 5 singles, 15 couples, and 8 families; ages 20-69; living in urban, suburban and rural locations), internet experience (1-10 years access; 10 irregular, 8 moderate and 10 frequent users) and travel experience (1-6 times per year; both package and independent travellers).

During the data gathering, post-hoc self-reports about leisure travel preparations were elicited through semi-structured interviews and diaries. In the first round of interviews, all 28 participants were asked to report on their preparations for leisure travel during the year prior to the interview. This period allowed for a time frame recent enough for reliable recall and long enough to include infrequent events (Keaveny, 1995). The elicitation techniques used in these interviews were Critical Incident Technique (Flanagan, 1954) and laddering (Rugg and McGeorge, 2002). Within a period of 6 months after the first interview, 20 participants had returned one or more diaries and were interviewed for a second time. In this second round of interviews, card sorting (Rugg and McGeorge, 1999) and laddering interviews were used as elicitation techniques. This three-staged process of interviews and diaries allowed participants to report on their travel-related consumption behaviour over a period of 1.5 years. The interviews were recorded and transcribed, and the diaries were copied to an electronic format. The main technique for the analysis was content analysis, using the Nvivo software to code and sort the data (DeNardo and Levers, 2003).

In the interviews and diaries, the participants reported on 3 to 10 different trips each. These trips ranged from short domestic trips (a day out or a weekend break) to longer holidays abroad (one to a few weeks). In total, 143 valid reports on travel preparations were collected. To process the fragmented reports in the interview transcripts and

allow for a structured and systematic analysis, each account by a participant about the preparations for a specific trip was compiled into a one-page 'travel story'. A travel story is a standardized reconstruction of the reported travel preparations, based on the accounts given by a participant. An example of a travel story is included in the appendix of this paper. Each travel story consists of a diagram and a narrative description. The diagram is a matrix with the stages of the consumption process (search, deliberation, decision, purchase, dissonance) and the available channels (internet, high street, telephone, mail order). The text of the narrative description is compiled from the interview transcripts and diary notes. As the compilation of the travel story is an interpretive activity on account of the researcher, the travel stories were validated by the participants during the second round of interviews (Eldridge and Newman, 1996).

During the data analysis, the diagrams in the travel stories provided the basis for a quantitative comparison across participants of their accounts on travel preparations. The transcripts of the laddering interviews from the first and third stage of the data elicitation provided the basis for a qualitative investigation of the reported channel choices.

#### **4. Reported consumer behaviour**

The data elicited through interviews and diaries was coded and clustered in order to identify patterns of channel choices in the observed consumption behaviour. The themes that emerged from this process are discussed in relation to two main categories: patterns of channel usage (section 4.1), and communication and channel choice (section 4.2).

##### *4.1 Patterns of channel usage*

The participants' channel choices regarding leisure travel preparations in a multi-channel environment showed a few general trends: channels were often used in combination (section 4.1.1), multi-channel use resulted in triangulation and empowerment (section 4.1.2), the use of the web decreased during the consumption process (section 4.1.3), and the use of the telephone increased during the consumption process (section 1.4.4).

#### 4.1.1 Channels are often used in combination

Although many participants expressed a high appreciation of using the internet, the consumption processes observed through the travel stories showed that the traditional, offline channels were also used frequently. In fact, in the majority of the travel stories a combination of channels was used for the travel preparations. Out of the total of 143 travel stories, 90 reported a combination of two or more channels.

Figure 1 gives an overview of the specific channels that were used in the travel stories. In the multi-channel travel stories, a combination of internet and phone was most frequently reported (34 times), followed by a combination of internet, phone and mail order (27 times) and, in third place, a combination of internet and high street (14 times).

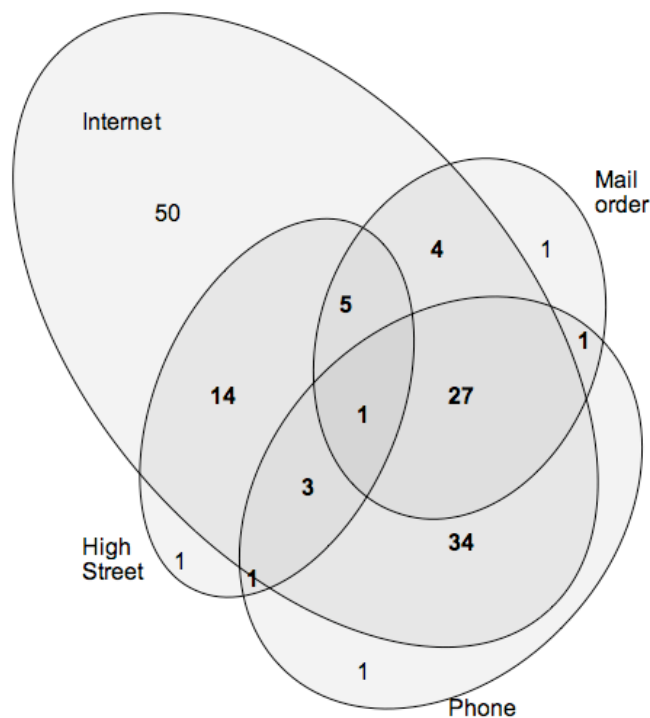


Figure 1 – overview of the channels used for travel preparations

The following quote illustrates the accounts participants gave about combining channels during travel preparations:

For our two weeks holiday in the summer, our main holiday, we tend to look on the internet a lot to find places, but we don't tend to book online because my wife would rather book through a travel agent's. We usually go with Thompson's Family. We've been with them before and they're really good with children, so we tend to get the brochures from them. I think my wife just goes in and gets them. You can order online, but we tend not to because we've found that they have special days at the travel agent where you get, say, £100 off a Thompson's holiday for a certain weekend, and so we usually do it then. (Participant 19)

This participant described how he and his wife used a combination of internet, brochures and a high street travel agent to book the family summer holiday. In his explanation of their channel choices in subsequent stages of the consumption process, he refers to a number of perceived influencing factors known from the literature, as discussed in section 2.1 and 2.2: convenience, perceived risk, prior conditions, special needs, and transaction costs. This illustrates that channel choices are often based on a trade-off between several influencing factors.

In almost all travel stories the internet was used as one of the channels, at least in some stage of the consumption process. Participants explained their choice for using the internet mostly in relation to the convenience and control it offered them.

The preparations for leisure travel can entail booking single or multiple services. For example, just booking a flight or a train ticket, or booking a wide-range of services such as several flights, hotels, hire car, and tickets to an event. To validate whether multi-channel use occurred both in case of single- and multi-service consumption, the occurrence of single- versus multi-service consumption was examined against the occurrence of single- versus multi-channel use. No simple relation was found between single-service consumption processes and single-channel use; multi-channel use also occurred in single-service consumption processes.

#### *4.1.2 Multi-channel use offers triangulation and empowerment*

In the interviews, participants explained that they often use a combination of channels to triangulate information before they decide what to buy and where to buy it:

We went to a high street travel agent to substantiate the info we had found on the websites. They gave us a magazine with holiday options but not much more information. ... We checked the magazine for prices and types of accommodation and found that a lot of the accommodation provides the same facilities. We decided on the dates we wanted to go and then went back to the internet. It turned out that booking flights and accommodation separately was very expensive.  
(Participant 10)

This participant described how her final decision to book at a travel agent was based on comparing the information available from internet and brochures. She decided to go for the best offer she could get. Another participant described a similar triangulation process. In this case his final channel choice was based on the quality of the available information. The internet seemed to offer him the best overview of what he was looking for:

Last year in the summer we went to Ireland with some friends, so we wanted to book a cottage to stay together. I got onto one or two sites and found one that seemed to have quite a lot of cottages on. Initially I'd asked for a brochure from another site, and then I found this site and it seemed to have quite a big range. I compared the two and there seemed to be much more on this website, and there was a better choice. In the end I just used the Internet. (Participant 12)

The reason for both participants to use several channels in parallel in the early stages of the consumption process was to be able to triangulate the information. Their reasons to choose a specific channel in the later stages of the process were different: transaction costs and the quality of information.

Table 1 gives an overview of the occurrence of parallel channel use. For this purpose, each instance in the travel stories where a participant mentioned the use of more than one channel during a specific stage of the consumption process was counted. The numbers in the table show that parallel channel use occurs throughout the consumption process, and mostly in the deliberation and decision stages.

<b>Stages of consumption process</b>	<b>Occurrence of parallel use</b>
Search	24
Deliberation	35
Decision	31
Purchase	10
Dissonance	4

*Table 1 – Stages of the consumption process wherein parallel channel use occurs*

Some participants expressed motivations for parallel channel use that went beyond triangulation of information across channels: they used the information they had obtained through the internet to make sure they would get exactly what they wanted out of their negotiations with a service provider. The following quote illustrates this motivation:

Last year when we booked with the travel agent to go to the Maldives, what I did then was actually do all the research on the Internet. I knew where I wanted to go. So I went through the Internet to get the absolute best price I could do. I used the Internet to find the best company, and phoned the company up to try and get the best price out of them. Then I went to my travel agent with the best price and said, this is what you've got to match and they matched it, because they prefer to. (Participant 23)

This participant described how the information from the internet empowered her to negotiate a competitive offer from her local travel agent. She described a similar process for her previous holidays. Another participant also explained how his online

research strengthened him in his negotiations with a travel agent. Not so much in terms of price, but in terms of control over the process and its outcome:

Earlier this year I booked a train to Salzburg. Eventually I booked the train by going into the travel office. But I first found all the information I needed through the internet. By looking at all the adjoining trains, I feel empowered with enough information to go into the travel centre and say exactly what I want, without them giving me a package which maybe is not what I want. (Participant 1)

By explaining that triangulation of information and empowered negotiations with businesses were important motivations for their multi-channel use, the participants illustrated central characteristics of contemporary consumption behaviour (Laing and Hogg, 2003; Rust and Kannan, 2003; Szmigin, 2003).

#### *4.1.3 Web use decreases during the consumption process*

As Table 2 shows, the number of occurrences of internet use decreases during the course of the consumption process. In all stages, except for the dissonance stage, the internet is the most popular channel, but from the search stage to the deliberation, decision and purchase stages the internet usage reduces, while the use of telephone and high street increases towards the purchase stage. Similar to the internet use, the use of mail order also decreases during the course of the consumption process.

<b>CHANNEL vs. STAGE</b>	<b>Search</b>	<b>Deliberation</b>	<b>Decision</b>	<b>Purchase</b>	<b>Dissonance</b>	<b>Total</b>
<b>Internet</b>	209	205	181	155	8	758
<b>Telephone</b>	11	33	53	63	19	179
<b>Mail order</b>	30	23	12	11	0	76
<b>High street</b>	10	11	19	18	3	61
Total	260	272	265	247	30	1074

*Table 2 – Channels used per stage in the consumption process*

A substantial percentage of channel switches are forced upon consumers because of major obstacles in the design or the technical performance of the e-services (e.g. if electronic forms do not work properly or are too slow), but this study has found that many channel switches cannot be explained by these types of circumstances. For the most part the participants explained their channel switches as being voluntary, and not forced upon them. Out of the 90 multi-channel travel stories, 58 reported voluntary channel switches.



Many participants expressed that they find the internet useful for broad information searches and triangulation of cheap deals, but that they often chose to use other channels to complete the last stages of the consumption process. The following quotes illustrate the explanations that participants gave for their voluntary channel switches:

For the hotel I did a lot of browsing. I usually find that the information you get online about hotels is better than what you get from travel agents. There are a couple of websites that I normally go to when I am looking for hotels. I browse until I have all the information that I want, but I never book hotels online. I look at the information, and then I call them. I prefer to make that last step a more personal step, so I can ask a few more questions which are not answered on the website.  
(Participant 1)

This participant explained his preference for personal contact with a hotel before he booked a room. This gives him pleasure and a sense of control over the quality he is going to get. It minimises the risks he perceives in the transaction. For other product categories, such as hire cars and airline tickets, he frequently books online without any need for personal contact. This indicates that product/service category is an influencing factor too.

Another participant described that he often uses the telephone because talking to somebody enables him to negotiate for the best offer:

So I phone up, but first I will have checked it online, to see roughly what's possible. Then I phone up and just say 'look I want to go on this day, at this time, I think there are some deals like this, what can you do, and is there something better'. (Participant 15)

The accounts by the participants point out that they particularly enjoy the use of the internet in the early stages of the consumption process. In the later stages they may choose to voluntarily switch to other channels. Not necessarily because of problems with the online channel, but because they appreciate the control it offers them over the process and outcome of the consumption process.

#### *4.1.4 Telephone use increases during the consumption process*

As Table 2 also shows, the telephone usage increases during the course of the consumption process. In the search stage, telephone use accounts for only about 5% of all the channel uses, whereas in the purchase stage, this telephone use is 25% and in the dissonance stage 60%. In the interviews and diaries, many participants mentioned a switch from internet or mail order to phone in the later stages of the consumption process. As discussed in the previous section, although channel switches

are frequently triggered by problems in the design or technical performance of e-services, the majority of the reported channel switches were voluntary.

To investigate when and how often participants switched between channels during the course of the consumption process, every instance where a participant reported to have ceased the use of a particular channel and started the use of another was registered (Table 3). This shows that most channel switches were reported in the purchase stage.

<b>Stages of consumption process</b>	<b>Occurrence of channel switch</b>
Search	0
Deliberation	16
Decision	27
Purchase	40
Dissonance	21

*Table 6 – Stages of the consumption process wherein channel switches occur (No channel switches were found in the search stage because switches were only recorded between stages, and not within a stage.)*

Table 4 shows an overview of the direction of the channel switches that were reported in the travel stories. Overall, the internet was the channel that lost the most users during the course of the consumption process, whereas the telephone gained the most users. The switch that occurred most often in the travel stories was a switch from internet to telephone.

<b>DIRECTION OF SWITCH</b>	<b>...to telephone</b>	<b>...to high street</b>	<b>...to internet</b>	<b>...to mail order</b>	
<b>From internet...</b>	64	18	-	1	83
<b>From mail order...</b>	7	0	4	-	11
<b>From high street...</b>	2	-	4	0	6
<b>From telephone...</b>	-	1	4	1	6
	73	19	12	2	106

*Table 4 – Direction of movements between channels*

In the interviews, participants explained that personal contact via telephone in the later stages of the consumption process gave them a better sense of control over the outcome of the consumption process. They stated to appreciate this for specific products (e.g. more important for cottages than for flights) or for specific situations (e.g. more important for honeymoon than for family visit).

Summarising the patterns of channel usage as described in the sections 4.1.1 to 4.1.4, it can be concluded that the participants reported on various perceived influencing factors such as perceived risk, personal contact and transaction costs to explain their channel choices. The influencing factors identified during the study are in line with the literature on adoption of SSTs and consumer channel choice discussed in sections 2.1 and 2.2. The reports by the participants often involved a complex mix of various factors, in which some seemed to dominate others. In many cases the explanations offered by participants were situation-specific and inconsistent with other reports on similar situations. This fragmented character of consumer behaviour confirms the profile of the contemporary consumer. This profile characterises contemporary consumers as well-informed, empowered consumers, who like to be in control (Szmigin, 2003). They engage in parallel interactions with businesses (Laing and Hogg, 2003), triangulate information from several sources, negotiate to get best the offer, and prefer to have freedom of choice (Rust and Kannan, 2003). This dynamic profile of consumer behaviour matches with the multi-channel use reported by the participants in this study.

A study on consumer cross-shopping patterns in retail environments (e.g. outlet stores, discounters, mail-order retailers) also found that consumers are not replacing one retail format for another when new formats emerge (Morganosky, 1997). On average consumers seem to be spending the same amount of time deliberating a purchase as before (Klein and Ford, 2003). They are using the time they gain of more efficient online search to access a broader number of sources and channels within the same time frame. This illustrates that consumers tend to use new ways for search and purchase as a complement to existing ways.

#### *4.2 Communication and channel choice*

The findings related to communication and channel choice indicate that consumer channel choice is often determined by a wish to establish contact with the service provider. Personal contact enhances the feeling of control during a consumption process (section 4.2.1). The need for control and personal contact is situation-dependent (section 4.2.2). Personal contact can be conducted through email, high street and telephone (section 4.2.3).

#### *4.2.1 Personal contact enhances feeling of control*

In many voluntary multi-channel travel stories participants were quite specific about their preference for personal contact as a voluntary driver in their channel choice. They expressed, for example, a wish to find answers to specific queries, or a wish for reassurance about their choices and expectations, even though no major obstacles had occurred while using the online channel:

We booked the tickets online and we phoned up on Monday to confirm it and make sure about it. Basically we knew everything should be okay, but I think I just wanted to be absolutely sure. I don't remember if we received a confirmation by email. That may have been the reason why we phoned them. It was at the weekend. It's not a large travel agent that is 24/7, it was one of the smaller ones. (Participant 13)

This quote illustrates that this participant did not actually need to contact the business after booking her tickets online, but she preferred to do so, to be assured that everything went well with the booking. Her explanation was a mixture of personal confidence, and perceived risk of dealing with a small organisation. Another participant described a situation wherein personal contact was also not an absolute necessity, but something she preferred, in order to deal with the situation as soon as possible, rather than wait for an email from the travel agent:

I emailed them about the problem, but they didn't respond quick enough. I waited a few days and then rang them up. I just wanted to get it off my chest and have it arranged immediately. It kept sticking in my mind while I was at work, so I thought if I don't ring now, I won't get it off my chest. Everything was settled over the phone. (Participant 17)

These quotes indicate that these participants are deliberately seeking control over when and how to contact a business. It is the consumer's choice to book online, phone up, or wait for email. Participants often explained that the usage of the phone offers quick and reassuring contact.

#### *4.2.2 Need for control and personal contact are situation-dependent*

Depending on the particular situation, or circumstances of the consumption process, participants expressed different attitudes and opinions about the use of the telephone for personal contact. For example, a participant expressed that for domestic trips he generally prefers to use the phone, whereas for foreign trips he prefers to use internet and email. Influencing factors for these channel choices were time and costs. However, when the preparations for a foreign trip were getting complicated, he did use the phone to finalize his travel arrangements. In this case the complexity of the

situation and confidence in his own judgement seemed to be the most important. The following quote illustrates this trade-off between the perceived influencing factors:

I suppose I have a slight preference, when it's in Britain and the phone number is there, to phone because I feel I'll get a much more instant answer. And then I can go on, if that's no good, and I try something else quickly, rather than having to wait a day or something to get a reply on the email, or two days, because not all these places look every day.

(...)

For last year's skiing, I wanted to go on the train, but there was no train that went all the way, and I had to get a bus at the end. I had to get onto the website, and it was very hard to work out which bus it was that I wanted, and what the times were, so in the end I got the phone number of the internet and phoned them. It was just too difficult in working it out, and it was all in French. ... So in the end, as I said, I phoned. I wanted to find out where the bus station was relative to the train station and the easiest way of doing that was just to talk rather than hunting and hunting on the Internet. (Participant 12)

Another participant reported that over the years she has built up so much confidence in the online channel that she no longer perceives a need for personal contact:

I learned how to use the internet. I think initially, the lack of human element is off-putting, but now I almost prefer it when I am trying to get something done. Before, I wanted to speak with somebody, wanted to be assured it happened, so I would phone and check. Whereas now it annoys me when if I have to phone to check something. I think that has obviously built up over time.

Because I would not have said that 3 or 5 years ago. (Participant 2)

According to the travel stories elicited from this participant she does however seem to use her mobile phone quite often for practical reasons; for example to arrange future travel preparations during her daily commute to work. The apparent contradictions in the explanations these participants gave for the observed variety in their consumption behaviour illustrates the 'fragmented' nature of contemporary consumption behaviour (Gabriel and Lang, 1995; Szmigin, 2003), as discussed in section 2.3. The circumstances of a consumption situation may lead consumers to act inconsistently with their intended channel choice.

#### *4.2.3 Personal contact over email can bridge web and phone*

Some participants reported on situations where email offered them a means of personal contact similar to the phone:

We did do some emailing, just to see if they've got availability, and then emailing about when we were coming, asking about the dog and the fact that I don't eat meat, and we asked about menus and things like that. Just general things, really. They obviously sent emails back with the information and gave us their landmark, the two monkey trees in front of the house. So, it was like having a bit of a telephone chat, but with the email. (Participant 13)

Other participants stressed that by using email they could get a combination of personal contact and ‘written’ confirmation of details. The use of email seemed to offer an additional value over the telephone:

It’s a bit impersonal. But at least with a travel agent, you’re talking to a human being, not a machine. You imagine that there’s someone at the other end of the email. The other thing that’s really handy is you can check the email again, to confirm the flight times and the computer can then look up an airport and give you that information. (Participant 5)

The findings in the sections on communication and channel choice (4.2.1 – 4.2.3) show that participants actively seek control over the process and outcome of the consumption process. In their channel choices they attempt to gain as much control as possible over the process and outcome of the consumption process. The findings also show that the participants can be inconsistent in their channel choices and their explanations for choices that they make. When asked, some participants stated quite strong preferences, but their behaviour was not always consistent with these preferences in every situation. They cherish their freedom of choice. Their preference for being in control and making up their own minds on when and how to contact a service provider seems to be the most consistent characteristic of contemporary consumer channel choice.

## **5. Summary and discussion of the findings**

The findings from the study indicate that although the participants are increasingly using the internet for activities they previously conducted through face-to-face communication, they frequently report using traditional offline channels in combination with the internet. In most travel stories multiple channels were used during the course of the consumption process. The participants reported both on voluntary parallel channel usage and voluntary channel switching in different stages of the consumption process. Rather than one major decision that defines a complete consumption process, consumer channel choice seemed to be a continuous process that spans every stage of the consumption process. Throughout the consumption process new channel choices are made and movements between channels occur. These movements were often not an effect of problems in technical performance or design of the e-services. In the explanations the participants gave of their voluntary parallel channel use and channel switches, many of the influencing factors known

from the literature on the adoption of SSTs and consumer channel choice were mentioned, such as perceived risk (Forsythe and Shi, 2003), product /service category (Chiang et al., 2004), perceived behavioural control (Bobbitt and Dabholkar, 2001), transaction costs (Reardon and McCorkle, 2002) and quality of customer services (Schoenbachler and Gordon, 2002).

In many cases the reported explanations for the observed consumption behaviour indicated a complex mix of perceived influencing factors. The participants seemed to negotiate a complex and dynamic trade off between the factors that influenced their channel choices. Some factors dominated others, and this varied between the travel stories. This variety in the reported channel choices cannot be explained by just identifying the individual influencing factors that are at play. The participants are making different trade-offs between the influencing factors, depending on the circumstances of a particular consumption process. The literature on the adoption of SSTs (e.g. Bobbitt and Dabholkar, 2001) and the literature on contemporary consumption (e.g. Szmigin, 2003; Gabriel and Lang, 1995) offered a useful perspective from which to explore this fragmented nature of consumer decision-making.

For the most part, the literature on contemporary consumption was used to further investigate the rationale for the reported channel movements. This literature describes how contemporary consumers expect freedom of choice and control over the process and outcome of consumption processes (Rust and Kannan, 2003). Consumers tend to engage in parallel interactions with several businesses to triangulate information and offerings (Morganosky, 1997). The dynamics of consumption processes are shaped by the active participation of consumers (Laing et al., 2002). This explains that the participants in the study appreciate the internet for the convenience and control it offers them, and also that they keep using offline channels if they feel that it offers them additional control. The combination of channels available offers them the freedom to choose when and how they want to use a specific channel. Being able to move from one channel to the other during any stage of the consumption process enhances their freedom of choice. They are happy to have various channels available to them in case of situations where they either need to use them (e.g. when time is running out because they are late with booking) or prefer to use them (e.g. if they want reassurance through personal contact). In many travel stories participants

reported to have switched from the internet to the phone in the later stages of the consumption process. It is apparent from their explanations that they expected to have more control over the negotiations by engaging in direct contact. The elements of control that were mentioned most often were controlling the timing of the consumption process, controlling the costs of the purchase and minimizing the perceived risks.

This study has considered the entire consumption process: from search to dissonance. In doing so, it has broadened the traditional HCI focus to include not only consumer interaction with the online channel, but also interactions and communications through offline channels during the course of a consumption process. This broad focus has enabled the elicitation of data on the multi-channel use of the participants, and particularly on their movements between channels. The methodology used, in-depth interviews and diary studies, supported the elicitation of this rich data. The analysis of the reported complex and dynamic consumer behaviour was mainly qualitative, focused on developing an understanding of the rationale for the consumer behaviour. The literature from marketing and consumer research was used as the perspective for the analysis of the reported behaviour. To the best knowledge of the authors, there has been no such precedence in other HCI studies. The contribution of the study to the HCI discipline is that it shows how the broad focus on complete consumption processes, combined with the qualitative research approach and use of the proposed marketing literature can offer a suitable basis to investigate the motivations that underlie consumer decision making in situations of abundant channel choice.

Another important contribution of the study presented in this paper is that it has focused on the investigation of voluntary multi-channel use. Voluntary multi-channel use has, to date, not been the focus of much HCI research. The findings from this study show that voluntary multi-channel use occurs throughout the consumption process, and that the need to be in control and to actively participate in the service setting was a central motivation for the consumption behaviour of its participants. Because of the qualitative nature and the small sample of participants in the study, its findings cannot be generalised to the wider population. The objective of the study has been to explore the occurrence of and rationale for multi-channel use and voluntary consumer movement between online and offline channels. Validation of the findings would require a quantitative study on a much larger scale.



The next stage in this research will further analyse the channel characteristics that either stimulated or inhibited participants to use a channel in a particular situation. Identifying the strengths and weaknesses of the online channel in the context of multi-channel environments may lead to strategic suggestions for the improvement of existing and future e-services. Another issue for further analysis is the inter-relationships among the various perceived influencing factors that have been identified in the study.

## **6. Implications and directions for future research**

Based on the findings of the study, improvements to e-services can be explored. For instance, most existing e-services don't specifically support multi-channel use. The channel design is often based on the assumption that consumers complete a purchase immediately after the search and deliberation stage, and that they do this through one channel. Options to facilitate triangulation processes, wherein consumers move between channels, may be very helpful to consumers. Instead of competing with other channels, e-services could focus on supporting multi-channel use by facilitating the movement of consumers among channels. They could also better accommodate fragmented consumption behaviour by allowing a variety of usages. To be successful, e-services need to offer contemporary consumers optimal freedom of choice, so they can use any channel they wish in every stage of the consumption process, easily combine channels, and easily move between channels. Future improvement on these aspects may contribute to a stronger position for e-services as a valid option for channel choice in the later stages of the consumption process.

Another key issue identified in this study is that current e-services are not very effective in dealing with situations of dissonance and individual queries. Further investigation of solutions in the form of direct communication, personal support and service would be of benefit to consumers. A better facilitation of the context of personal contact by the online channel is needed to allow for more successful completion of online consumption processes. Future research that elaborates on these communication aspects in the context of the overall multi-channel consumption process should explore more integrated cross-channel solutions. Together with better facilities for multi-channel use, these improvements will lead to more successful online completion of consumption processes by consumers.

## **7. Acknowledgements:**

This research is being supported by the Open University's Research Development Fund (2003-2006). We thank Dr. Trevor Collins, Open University, Knowledge Media Institute, for his kind support and advice.

## **8. References**

- Assael, H., 1995. *Consumer Behavior and Marketing Action*. South-Western College Publishing.
- Assael, H., 2005. A demographic and psychographic profile of heavy internet users and users by type of internet usage. *Journal of advertising research*, 93-123.
- Atkinson, R. and Flint, J., 2001. Accessing hidden and hard-to-reach populations: snowball research strategies. *Social Research Update* (33).
- Black, N. J., Lockett, A., Ennew, C., Winklhofer, H. and McKechnie, S., 2002. Modelling consumer choice of distribution channel: an illustration from financial services. *International Journal of Bank Marketing* 20 (4), 161-173.
- Blakely, R., 2005. Survival of the fattest: e-tail's evolution. In: website Times Online ([www.timesonline.co.uk/article/0,,9075-1426946,00.html](http://www.timesonline.co.uk/article/0,,9075-1426946,00.html)).
- Bobbitt, L. M. and Dabholkar, P. A., 2001. Integrating attitudinal theories to understand and predict use of technology-based self-service. The internet as an illustration. *International Journal of Service Industry Management* 12 (5), 423-450.
- Chiang, W.-y. K., Zhang, D. and Zhou, L., 2004. Predicting and explaining patronage behavior toward web and traditional stores using neural networks: a comparative analysis with logistic regression. *Decision Support Systems*, 18.
- DeNardo, A. M. and Levers, L. L., 2003. Using Nvivo to analyze qualitative data. California University of Pennsylvania and Duquesne University.
- Eldridge, M. and Newman, W., 1996. Agenda Benders: Modelling the disruptions caused by technology failures in the workplace. In: *Proc. CHI 1996*, Vancouver, 219-220.
- Flanagan, J. C., 1954. The critical incident technique. *Psychological Bulletin* 15, 327-358.
- Forsythe, S. M. and Shi, B., 2003. Consumer patronage and risk perceptions in Internet shopping. *Journal of Business Research* 56 (11), 867-875.
- Gabbott, M. and Hogg, 1998. *Consuming Services*. John Wiley.
- Gabriel, Y. and Lang, T., 1995. *The unmanageable Consumer*. Sage Publications Ltd, London.
- Goldsmith, R. E., 2000. E-Tailing vs. Retailing. Using Attitudes to predict Online Buying Behavior. *Quarterly Journal of Electronic Commerce* 1 (3), 245-253.
- Gupta, A., Su, B.-c. and Walter, Z., 2003. Risk profile and consumer shopping behavior in electronic and traditional channels. *Decision Support Systems* 38 (2004), 347-367.
- Keaveny, S. M., 1995. Customer switching in service industries: an exploratory study. *Journal of Marketing* 59 (april 1995), 71-82.

- Kitchenham, B. and Pfleeger, S. L., 2002. Principles of survey research part 5: Populations and samples. *Software Engineering Notes* 27 (5), 17-20.
- Klein, L. R. and Ford, G. T., 2003. Consumer search for information in the digital age: an empirical study of prepurchase search for automobiles. *Journal of Interactive Marketing* 17 (3), 29-49.
- Laing, A. and Hogg, G., 2003. Re-conceptualising the Professional Service Encounter: Information Empowered Consumers and the Virtual Parallel Service Encounter. In: *ESRC Cultures of Consumption Programme Working Paper*, no. 3.
- Laing, A., Lewis, B., Foxall, G. and Hogg, G., 2002. Predicting a Diverse Future: Directions and Issues in the Marketing of Services. *European Journal of Marketing* 36 (4), 479-494.
- Lee, J. and Allaway, A., 2002. Effects of personal control on adoption of self-service technology innovations. *Journal of Services Marketing* 16 (6), 553-572.
- Lee, K. S. and Tan, S. J., 2003. E-retailing versus physical retailing. A theoretical model and empirical test of consumer choice. *Journal of Business Research* 56 (11), 877-885.
- Lipsman, A., 2006. Online holiday spending boosts e-commerce to record. Annual sales over \$143 billion. In: website ComScore ([www.comscore.com](http://www.comscore.com)).
- Meuter, M. L., Ostrom, A. L., Bitner, M. J. and Roundtree, R., 2003. The influence of technology anxiety on consumer use and experiences with self-service technologies. *Journal of Business Research* 56 (11), 899-906.
- Minocha, S., Dawson, L., Millard, N. and Roberts, D., 2004. A model of customer's behaviour with (B2C) e-commerce. In: 18th British HCI Group Annual Conference, Design for life, Leeds, UK, 4.
- Morganosky, M. A., 1997. Retail market structure change: implications for retailers and consumers. *International Journal of Retail & Distribution Management* 25 (8), 269-274.
- Mulpuru, S., Johnson, C. A. and Tesch, B., 2006. 2005 US eCommerce: The year in review. An overview of annual and Q4 US online retail sales. In: website Forrester ([www.forrester.com/Research/Document/Excerpt/0,7211,38809,00.html](http://www.forrester.com/Research/Document/Excerpt/0,7211,38809,00.html)).
- Reardon, J. and McCorkle, D. E., 2002. A consumer model for channel switching behavior. *International Journal of Retail & Distribution Management* 30 (4), 179-185.
- Rugg, G. and McGeorge, P., 1999. The concept sorting techniques. In: *Encyclopedia of Library and Information Science*, Vol. 65, supplement 28 Marcel Dekker Inc, New York, pp. 43-71.
- Rugg, G. and McGeorge, P., 2002. Eliciting Hierarchical Knowledge Structures: Laddering. In: *Encyclopedia of Library and Information Science*, Vol. 71, supplement 34 Marcel Dekker Inc, New York, pp. 81-124.
- Rust, R. T. and Kannan, P. K., 2003. E-Service: a new paradigm for business in the electronic environment. *Communications of the ACM* 46 (6), 37-42.
- Ruyter, K. d., Wetzels, M. and Kleijnen, M., 2001. Customer adoption of e-service: an experimental study. *International Journal of Service Industry Management* 12 (2), 184-207.
- Schoenbachler, D. D. and Gordon, G. L., 2002. Multi-channel shopping: understanding what drives channel choice. *Journal of Consumer Marketing* 19 (1), 42-53.

- Shostack, G. L., 1985. Planning the service encounter. In: The service encounter (Ed, Czepiel, J. A. S., M R and Suprenant, C F) Lexington Books, Shostack, G L (1985) Planning the Service Encounter in Czepiel, J A;Lexington, MA.
- Szmigin, I., 2003. Understanding the customer. Sage Publications.
- Walker, R. H., Craig-Lees, M., Hecker, R. and Francis, H., 2002. Technology-enabled service delivery. International Journal of Service Industry Management 13 (1), 91-106.

## 8. Appendix – example of travel story

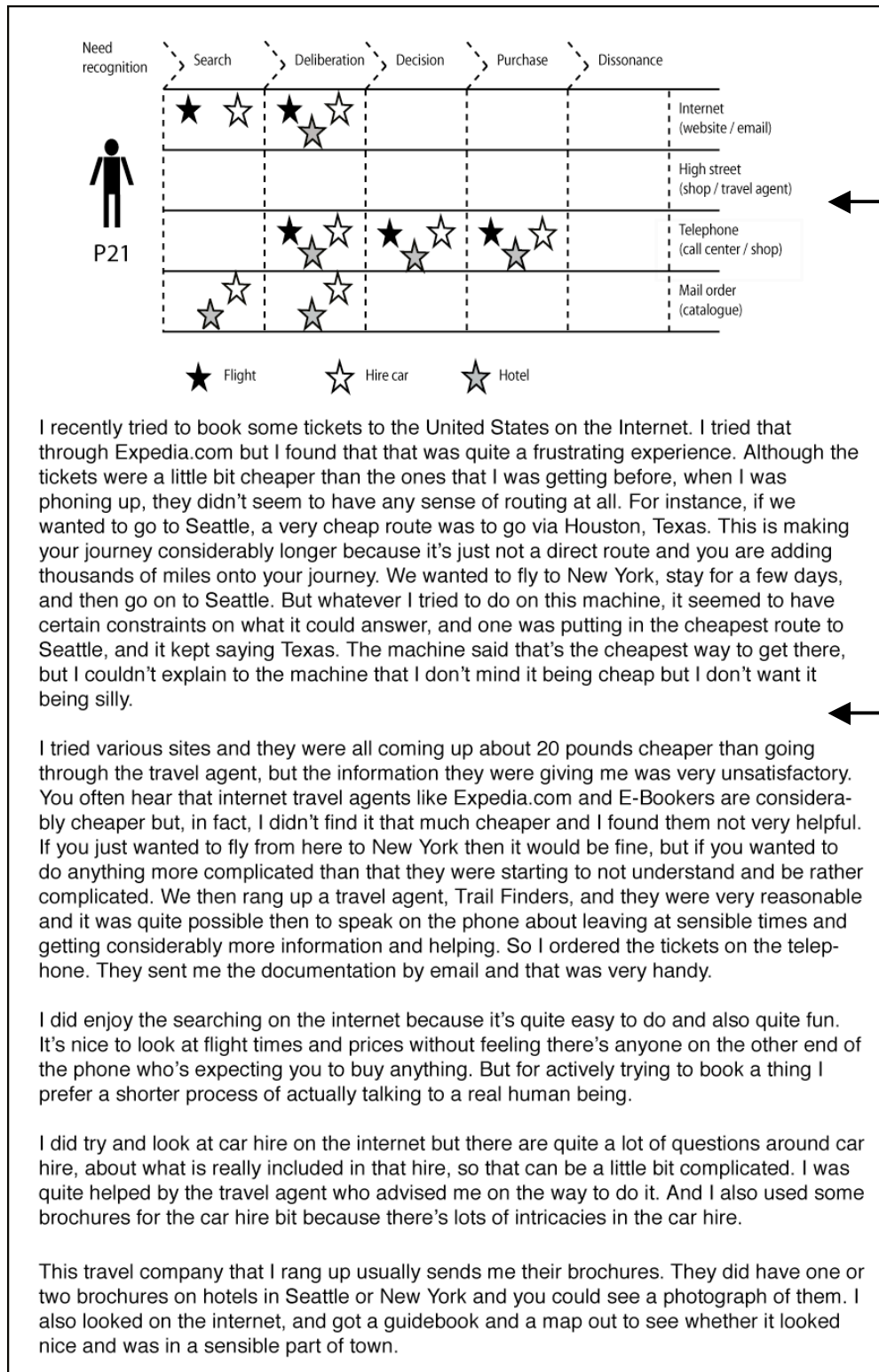


Diagram that shows which channels were used in which stages of the consumption process

Narrative description compiled from the accounts given by the participant in interviews and diary