Toward a Model of Customer Experience

A Thesis Submitted for the Degree of Doctor of Philosophy

By

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November 2010

ABSTRACT

Retaining high-value and profitable customers is a major strategic objective for many companies. In mature mobile phone markets where growth has slowed, the defection of customers from one network to another has intensified and is strongly fuelled by poor Customer Experience. Trends in the service economy suggest that experience can be exploited as a means of supplying the basis of a new economic offering, ignited in part by the shift that is taking place in the analysis of people's interaction with digital products. In this light, the research describes a strategic approach to the use of Information Systems as a means of improving Customer Experience. Using Action Research in a mobile telecommunications operator, a Customer Experience Monitoring and Action Response model (CEMAR) is developed that evaluates disparate customer data, residing across many systems, builds experience profiles and suggests appropriate contextual actions where experience is poor. The model provides value in identifying issues, understanding them in the context of the overall Customer Experience (over time) and dealing with them appropriately. The novelty of the approach is the synthesis of data analysis with an enhanced understanding of Customer Experience which is developed implicitly, in real-time and in advance of any instigation by the customer.

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ACKNOWLEDGEMENTS

- All achievements can be said to be the product of collective endeavours. This thesis is no exception. I am convinced that many of the people who have been kind, giving, inspiring, supportive on the journey will not realise the extent to which they have play a large part in making this happen.

- I would like to express my sincere gratitude to my supervisor Professor Mark Lycett for his time, scholarly advice and patience through-out my studies.

- I would like to thank Dr Steve Love for his encouragement, humour and providing the opportunity for us to collaborate.

- Heart felt thanks go to Mohammed Hassouna for his kind academic support and friendship.

- Special thanks are extended to Cesar Acuna and Angel Cortes Maya from Rey Juan Carlos University in Spain, for their time, patience, skill and support in the development of the prototype solution.

- The financial assistance from the Royal Academy of Engineering is gratefully acknowledged, and the support of Dr Imren Markes in promoting the industry in academia scheme.

- A big thank you to all at Telco.

- I would like to thank Professor Eddie Obeng for his friendly provoking and challenging me to think!

- Thank you to my parents Alexander & Rebecca Anaman for instilling the notion “education has no end”.

- Thank you to family & friends for their enduring belief.

- Most of all thank you to my wife Helen, for her love and patience along the journey, and her insightful contributions to the final thesis.

15th May 2002 to Forever - This thesis is dedicated to Helen

DECLARATION

The following papers have been published as a result of the research conducted for this thesis.

Anaman M, Lycett M, Love S (2008). Enhancing Customer Experience within the Mobile Telecommunications Industry. *In 16th European Conference on Information Systems* (Golden W, Acton T, Conboy K, van der Heijden H, Tuunainen VK eds.), 874-888, Galway, Ireland. (ISBN 978-0-9553159-2-3)

Anaman M., (2009). Chapter 6: *A Mobile Telecommunications Case Study: Employing an Action Research Approach* pp. 101-129. In Handbook of Mobile Technology Research Methods (Love S., Editor), (ISBN: 978-1-60692-767-0)

Anaman M., (2009). Royal Academy of Engineering, *Fellowship in Academia End of Year Report*, submitted to Dr Imren Markes.

Love, S., Hunter, P. and Anaman, M., 2009. *Accommodating Real User and Organisational Requirements in the Human Centered Design Process: A Case Study from the Mobile Phone Industry*. Human Centered Design, , 758-764.

Anaman M. and Lycett M., (2010). Toward a Model of Customer Experience. An Action Research Study within a Mobile Telecommunications Company. *In 12th International Conference on Enterprise Information Systems , Funchal, Madiera – Portugal*, INSTICC Press, (ISBN: 978-989-8425-05-8, 5 S).

Chapter 1: Introduction

1.1 Background to the Problem

Organisations competing for the same customers and broadly offering the same products and services have differing levels of success in the market place. Published statistics indicate that 85% of business leaders propose that differentiation by price, product and services is no longer a sustainable business strategy (Shaw & Ivens, 2002). A significant percentage of those leaders (71%) stated a belief that Customer Experience is the new battleground in achieving differentiation. The same survey found 44% of customers' experiences to be bland and uneventful. This view is echoed by others who suggest that engaging with customers emotionally, through the brand experience, often provides the best opportunity for differentiation (Crosby & Johnson, 2007). A shift is also taking place in the analysis of people's interactions with digital products – moving from evaluating performance to researching experience and it is suggested that this is due in part to the increased relevance digital devices have to issues of lifestyle (Light, 2006).

Customer experience comes from a customer's interaction with an organisation and its products and services – it is not a passive concept. As a consequence, this has led some to see experience as a distinct economic offering (Pine & Gilmore, 1998). Figure 1-1, provides a depiction of the evolution of economic offerings, contrasted by the degree of differentiation and type of pricing that tends to characterise these offerings.

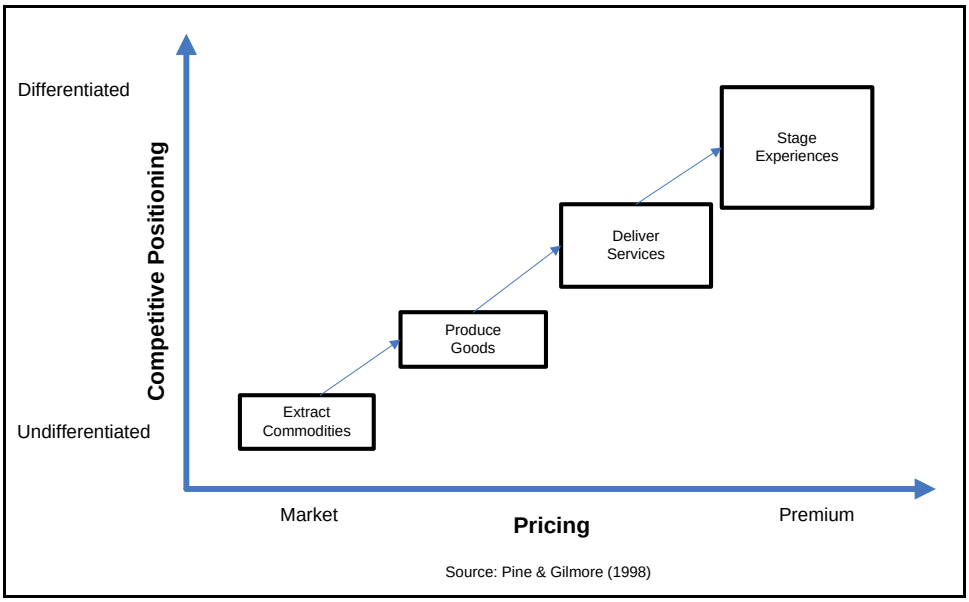

Figure 1-1 – The Progress of Economic Value – (adapted from Pine & Gilmore, 1998)

Pine and Gilmore (1998) suggest that typically economists have positioned experiences in with services. In recent times this fourth economic offering appears real due to the way in which consumers seem to desire experiences and more businesses are responding by explicitly designing and promoting them. What seems clear is that the transition from selling and delivering experiences to orchestrating and managing experiences will be very difficult for companies to undertake, in the same way the economic shift occurred from the industrial to the service economy.

Table 1-1 - Economic Distinctions (adapted from Pine and Gilmore, 1998)

Economic Offering	Commodities	Goods	Services	Experiences
Economy	Agrarian	Industrial	Service	Experience
Economic Function	Extract	Make	Deliver	Stage
Nature of Offering	Fungible	Tangible	Intangible	Memorable
Key Attribute	Natural	Standardised	Customized	Personal
Method of Supply	Stored in bulk	Inventoried after production	Delivered on demand	Revealed over a duration
Seller	Trader	Manufacturer	Provider	Stager
Buyer	Market	User	Client	Guest
Factors of Demand	Characteristics	Features	Benefits	Sensations

Table 1-1, looks in more detail at the differences between the economic offerings, highlighting economic distinctions, such as the nature of experience offerings being memorable, and how the method or supply of experience offerings is described as being revealed over time, present interesting new ways of looking at experiences through the eyes of the customer. Hassenzahl and Tractinsky (2006) suggest that there is a research gap in this area and a lack of empirical research, which is impeding theoretical advancement and restricts our understanding of experience.

The mass adoption of mobile devices in the UK based on adults aged fifteen and over, at the time of the research stood at 92% of households (OFCOM, 2010). Any attempt, therefore, to understand and improve Customer Experience, would have a significant impact for individuals, as well as organisations.

1.2 Approaches to the Study

There are a number of approaches that could be adopted in the pursuit of improving the Customer Experience. Some organisations, whilst they are aware of the need to create value for their customers in the form of experiences, view managing experiences simply as providing entertainment or being engagingly creative with their customers (Berry, Carbone & Haeckel, 2002). Some organisations collect and quantify data on experience, but don't circulate the findings, whilst others do the measuring and distributing but fail to make anyone responsible for putting the information to use (Meyer & Schwager, 2007). These seemingly light touch approaches appear superficial and do not bring about significant and enduring change.

Many approaches oriented at understanding Customer Experience are based on gathering explicit data related to experience (most commonly gathered through customer surveys) (Reichheld, 2003). This often means that the organisation seeking to improve the situation, are dealing with these matters reactively, and with little time to develop considered and timely responses. These approaches are

also reliant on a relatively small sample size of customers to form their impressions of what their entire customer base is experiencing.

Other approaches tend to hinge on organisations seeking to emulate the activities of competitors who appear to have discovered a new way of making their customers happy. Whilst this approach is occasionally successful in the short term, organisations fail to really understand what is happening within their own business operation and, as the idea did not originate from within the company, they miss subtle points in the adoption, which often does not provide the same impact as the originator. A limited number of approaches adopt a more human centred focus, emphasising the role of frontline employee. These approaches have tended to explore the issues of how employees classify customers and enact specific behavioural strategies (Bettencourt & Gwinner, 1996).

Despite these attempts, a research gap that remains, in translating strategy on addressing Customer Experience to pro-active operation. Most organisations employ the use of external customer survey to try to gauge overall company and individual customer measures. However these methods are rely on organisation obtaining a "truthful" answer from customers, plus the logistical exercise to continued polling customer is significant (Reichheld, 2006). Technology now allows organisations to capture and store vast amounts of data, find patterns and trends in these datasets and provide a summation that leads to appropriate action (Witten & Frank, 2005). Instead of a reliance on survey data, a focus on data the organisation holds or has access to within their information systems and that provides an implicit view of the quality of an individual customer's experience would be a fruitful endeavour. Adopting this type of approach of utilising data and information that already resides within the organisation allows for the creation of individual customer representations of experience, and could be use to complement external survey, providing a richer and more detailed view. Combining this with a view of how frontline employees can be equipped and empowered to use this information during interactions with customers is the approach adopted by this study.

With this in mind, the approach seeks first to understand Customer Experience. A comprehensive view of the differing definitions and facets of Customer Experience is provided, which covers functional and more human distinctions, incorporates degrees of participation and immersion in experience, and provides a measurement scale for ascertaining whether experiences are good or bad. Through this review, one is able to conclude that experience is a unique phenomenon which if represented effectively, has the potential to provide insightful indications of future behaviour. This view is endorsed by the literature which supports the link between experience, satisfaction and loyalty. A synthesis of the literature suggests that poor experiences lead to less loyal customers and good experiences lead to greater degrees of loyalty.

The research seeks to demonstrate that aggregating this data and studying it over a period of time can form a profile of a customer's experience, explaining whether they are like likely stay with the company or leave. If the customer profile indicates a poor experience, this information can then be used to proactively respond back to customers in a personal and understanding way, providing contextual proposals for making the situation better and creating a knowledgeable dialogue with the customer. This service recovery intervention should occur in real-time and as soon as poor experiences are noted to prevent customers building up negative impressions of the service and the company, that then become hard or even impossible to change at the end of a customer contract.

1.3 Aims and Objectives

The aim of this research study is attempt to develop a framework for understanding, monitoring and evaluating customer experiences within organisations. The research aims to consider practical solutions for customer experience improvement, leading to increased customer retention if possible.

The objectives of the research are to:

- Conduct a review of the state of the art in Customer Experience, in order to develop a general understanding of the associated challenges and issues.
- Synthesise the literature in order to try and develop a framework for improving practice related to Customer Experience.
- Undertake an Action Research study within a telecommunications organisation to test the framework, involving multiple research iterations.
- Evaluate the framework, in order to assess its value in practice and contribution to theory.

1.4 Method of Research

The study adopts an Action Research approach, as it is one of the few valid research approaches that researchers can employ, incorporating both rigor and relevance, to the study of systems development, (Baskerville & Wood-Harper, 1998). Additionally, given the complex problem outlined and due to a need to develop an enhanced understanding of the problem, these situations have been described as a domain of ideal use for Action Research. The method is also sited as having significant potential to create space for organisational learning (Dickens & Watkins, 1999).

Action research has been described as an iterative process involving researcher and practitioners acting together on a particular cycle of activities, including problem diagnosis, action intervention and reflective learning, (Avison, Baskerville & Myers, 2001). The work embraced a Canonical style of Action Research expanding on the above definition in specify 5 phases: diagnosing; action planning; action taking; evaluating; and specifying learning (Susman & Evered, 1978)

The research makes note of the criticism aimed at the poor application of Action Research and adopts the principles and associated criteria as described by Davison, Martinsons et al. (2004). This ensured the Action Research was

transparent and conformed to the standards of sound academic research. This addresses many problems such as; lack of the impartiality of the researcher; lack of rigour; action research being little more than consulting; the action researcher being bound to the context within the study, (Baskerville & Wood-Harper, 1998).

Observing the phenomena through a real case study with the author as both researcher and agent of change, the research design consists of two actions research cycles conducted in the Canonical style of Action Research. This iterative nature of the study was designed to ensure the theoretical content was grounded (comprehensively evaluated through action) and made significant advances in solving the problem.

This first cycle was designed around the generation of a Customer Experience Model and the subsequent testing through quantitative analysis of churn data for 6,500 and 8,000 customers to ascertain the correlations between experience indicators and churn. A qualitative survey of 100 Telco customers in the form of retail exit questionnaires was undertaken to validate the appropriateness of the experience categories chosen.

For the Second Action Research Cycle, a prototype was developed, honing the learning and thoughts from the first cycle. The aim was to assess whether it was possible to develop a realistic information technology solution, incorporating the experience model and the concepts of service recovery. Service recovery in this sense relates providing a quick and appropriate response to poor experience. Based on the good teamwork on the First Action Research Cycle, the same team were selected to be involved in cycle two, which provided a level of consistent evaluation, and reduced the learning curve that would have occurred with the addition of new participants. The team provided an ongoing evaluation of the prototype during its development and the cycle included 5 in-depth interviews with senior managers at Telco, to validate the approach and understand obstacles to implementation.

The research organisation, Telco, is a mobile telecommunications company with network operations in several countries servicing millions of customers. The research was conducted in the context of the UK business, which has core areas covering communications (voice and video calling etc.), media and entertainment (television, music, sport etc.) and information services (wireless Web, news etc.). Supported by the traditional key directorates, namely Sales and Retail, Marketing, Customer Services, Technical, Finance, Logistics and Human Resources, Telco has a significant contact centre operations and several hundred retails points of presence. Telco is not one of the established incumbent operators in the UK Market and therefore has a greater focus on establishing an increased profitable share of the market. The organisation is relatively small with a higher customer to employee ratio than its competitors. There is a "can do" culture, but the organisation is often hampered by a lack of maturity in the quality of operation of its business process and the quality of learning from previous mistakes, which are characteristics which tend to characterise young marketing/technology companies.

1.5 Research Outline

In addressing the aims and objectives of this study, the thesis is structured as follows. The discussion in Chapter 2 provides the context in which the study is set. The chapter presents an overview of the importance of Customer Experience in relation to customer loyalty and retention and examines the key facets of Customer Experience that are detailed in the literature. A review of the literature in respect of the telecommunication market is conducted, presenting the backdrop for a discussion of the key issues and challenges organisations face in attempting to improve customer experiences. Building on suggestions for improvement, the chapter culminates in the articulation of a Customer Experience Framework. The framework synthesises theories related to the creation of customer experience profiles, which are derived from data obtained through the interactions customers have with the products, services and the organisation, across a variety of touch-points. This information enables organisations to be pro-active in responding to instances of poor customer experience.

Chapter 3 provides an overview of the Action Research approach and places it within the context of philosophical methodological approaches available in academic research. Definitions, characteristics and the different forms of Action Research are critically reviewed, providing a comprehensive presentation of the method. The chapter proceeds to review Canonical Action Research specifically, examining its virtues and limitations and highlights guidelines for conducting sound Action Research. Deliberations on the research approach, in conjunction with the aims and objectives of the study, provide significant input into the research design. The research design itself distils the activities required to conduct two formal iterations of Canonical Action Research, detailing data collection and evaluation strategies. A description of the case setting is provided.

Chapter 4 is the first of two Action Research cycles, and attempts to make the Customer Experience Framework partially operational, through the development of a model designed to articulate the relationship between experience and churn. The chapter describes activities where the researcher and the organisation acted collaboratively through the five Canonical Action Research phases: Diagnosing; Action Planning; Action Taking; Evaluation; Specifying Learning. The formal Action Research process provides the rigour required to confidently assert academic reflections and the action progressed within the organisational setting provides practical validation. The later sections of the chapter present considerations for academia and practice.

Chapter 5, the second of the two Action Research cycles, attempts to complete the "operationalisation" of the Customer Experience Framework, through the development of a prototype solution. The chapter proceeds through the formal Action Research process, firstly incorporating the learning and reflection output from Action Research Cycle One (Chapter 4). Whilst incorporating theory on service recovery, the chapter assesses emerging theoretical considerations on the subjects of customer value and on the timing of recovery interventions. Considerations for academia and practice are once again reflected upon.

Chapter 6 provides a comprehensive discussion of the overall findings, with additional feedback and commentary from five Senior Managers, selected due to their positional authority within the organisation and the desire to see improvements in customer's experiences. The chapter contrasts this feedback against the Customer Experience Framework, making note of arguments of support and contradiction. The chapter proceeds to document ideas, challenges and obstacles to implementation suggested by the Senior Managers. Considerations for academia and practice at a generic level are discussed, illustrating the reach of the work outside of the specific telecommunications domain. The chapter concludes with an assessment of how well the overall research process adhered to the principles of good Action Research.

In concluding the discussion on the study, Chapter 7 provides a summary of the thesis, presenting the major contributions to academia and to practice. The chapter recognises and documents the limitations of the work and highlights opportunities and areas for future research.

Chapter 2: Customer Experience

2.1 Introduction

Trends in the service economy suggest that experience is a key innovation in today's business arena (Voss & Fellow, 2004). Experiences are now part of all businesses, not just for leisure and entertainment. The use of Customer Experience to create value has been called the experience economy (Pine & Gilmore, 1998), where innovative companies are building portfolios of experiences to support their products and services and to build brands. Experiences create strong emotional ties that are powerful tools for creating brand equity and differentiation. Voss and Fellow (2004) write that in an environment where we have ever more sophisticated customers, those businesses that deliver memorable customer experiences consistently, create superior value and competitive advantage. This statement suggests that the converse may also be true, where organisations not delivering memorable or even good customer experiences will fail to create competitive advantages that convince customers to stay with them. Placing focus on customers' experiences helps companies create and keep loyal customers who become advocates and revenue-generating customers for years by integrating the voice of the customer into their businesses (Responsetek, 2010).

The business environment depicted above is apparent in the telecommunications industry, where mobile penetration has reached a saturation point in many markets, and has led operators to realize that retaining existing customers is of increasing importance. The typical focus points of retention have been those of increasing both customer loyalty and customer value (Kim, Park et al. 2004; Reinartz & Kumar, 2002). Consequently an improved ability to understand the "DNA" of Customer Experience would provide a useful springboard for

monitoring it more closely and developing solutions that ultimately lead to improved customer loyalty (and subsequently better business performance).

This chapter begins by presenting why Customer Experience is of interest to the mobile telecommunications industry, with Section 2.2 contrasting traditional and alternative definitions of Customer Experience, examining the linkage between retention, loyalty and churn, and illustrating that improving Customer Experience has a significantly strong business case. Section 2.3 discusses different facets to Customer Experience, highlighting the importance of functional and emotional cue/indicators of Customer Experience, and introducing the notion of touch points where customers receive their experiences. This section also reviews ways of measuring customer experiences and the generation of customer experience profiles. Section 2.4 looks specifically at Customer Experience in the telecommunications industry. Section 2.5 highlights the issues and challenges for improving the Customer Experience and discusses the positive and negative aspects of both explicit indicators such as customer feedback from customer surveys, in contrast to more implicit indicators, which tend to represent data that mobile telecommunications organisations already have access to. Organisational challenges are discussed, together with the role of technology in understanding experiences. Section 2.6 provides a review of the literature on service recovery and explains how this aspect is a crucial part of the improving the customer experience process. Section 2.7 provides a summary of the chapter.

2.2 Customer Experience and its Importance

2.2.1 Definitions of Customer Experience

A customer's experience can be characterised as the expectation gap between the level of customer experience the customer thinks they should be getting (built up by marketing promises and other experiences) and the level they receive (Millard, 2006). Responstek (2010) accords with this view and describes customer

experience management as "the practice of continuously closing the gap between your company's customer promise and the delivered customer experience". One note of caution however, would be that this is contingent on the customer having well-formed performance expectations.

Meyer and Schwager (2007) describe Customer Experience as the internal and subjective responses customers have to any direct of indirect contact with a company. Direct contact occurs in the course of purchasing and use, while indirect contact most often involves unplanned encounters with representation of a company's products, services or brands and takes the form of word-of mouth recommendations or criticisms, advertising, news, reports, and reviews.

Experience itself is a broad term that can refer to any sensation or knowledge acquisition resulting from person's participation in an activity (Gupta & Vajic, 2000). We experience things all the time, whether we want to or not. Carbone and Haeckel (1994) define experience as the take-away impression formed by people's encounters with products, services and businesses, which is a perception produced when humans consolidate sensory information. Using a more theatrical definition, Pine and Gilmore (1998) consider an experience as being created when a company intentionally uses services as the stage, and goods as the props, to engage individual customers in a way that makes a memorable event. However this definition does not account for the experiences received when a company's actions are unintentional. The definition also down plays the more mundane experiences we all receive that may not be particularly memorable on their own or at the time, but when joined up with other experiences to form an overall feeling or view.

A wider definition cited by Gupta and Vajic (2000), suggests that an experience involves learning during a period of time, when a customer interacts with different elements of a context, created by the service provider. These authors together with Gronroos (2008), Prahalad and Ramaswamy (2004) and Vargo, Maglio et al. (2008) accord with the view that experiences are co-created between customer and

service providers, as the context and the activities performed reinforce each other to unique experiences.

A deeper understanding of experience is important in explaining the differences between products, services and experiences and, in order to suggest approaches that are likely to be successful in enhancing experiences. Gupta and Vajic (2000) suggest that experience is an emergent phenomenon and is the outcome of participation in a set of activities in a social context and therefore needs to be studied in the social context in which it occurs.

All the definitions of experience have a number of key things at their core:

- It's a real and sensory phenomenon for customers
- It has an impact on how customers feel, think and impacts the actions and choice they make next.
- The extent to which an experience is good or bad is based on the desired versus received experience.

Pine and Gilmore (1998) suggest that one way to critically assess experiences is across two dimensions. The first corresponds to customer participation. At one end of the spectrum lies passive participation in which customers do not affect performance at all and at the other end lies active participation, in which customers play key roles in creating the performance or event that yields the experience. The second dimension describes the connection with the event or performance. At one end of the spectrum lies immersion, where customers are lost in the experience. The other end is absorption which the authors suggests an interest with a relative degree of detachment. The dimensions, when contrasted, produce four broad categories.

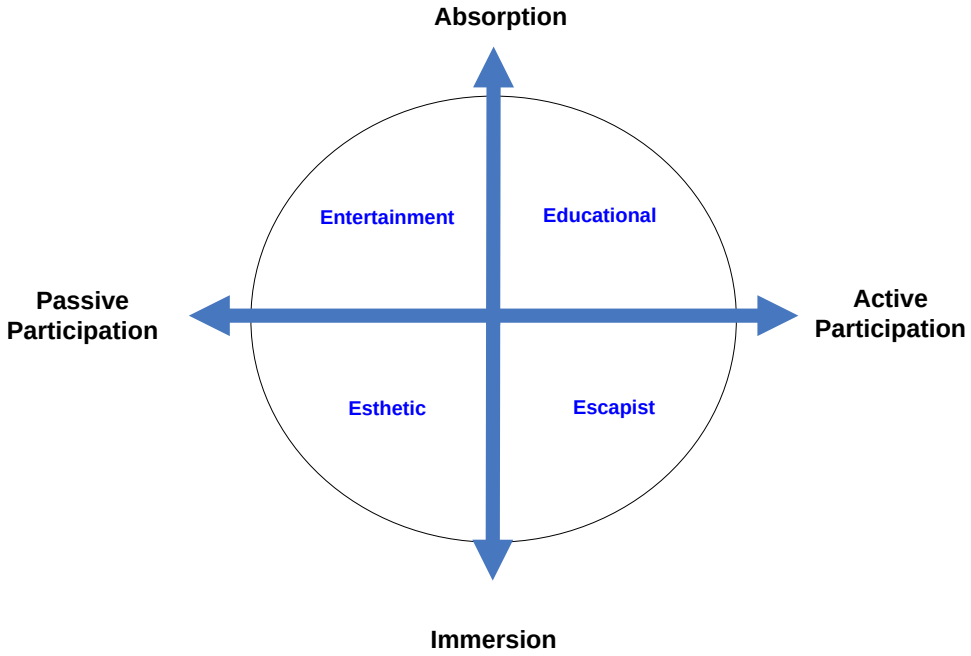

Figure 2-1 - The Four Realms of an Experience (adapted from Pine & Gilmore, 1998)

Escapist experiences are characterised by active participation and complete immersion in the event / offering, such as activity on social networking sites, gaming or perhaps video calling. Educational experiences such as attending a lecture, have the same degree of participation, but customers tend to be more conscious of what they are doing and more absorbed than immersed. For entertainment experiences customers tend to be in more passive and less immersed states, where as Pine and Gilmore (1998) describe esthetic experiences, as being where customers are immersed in an activity, but they themselves have little or no effect on it, such as visiting a natural tourist attraction or a museum. The authors argue that generally the richest experiences encompass aspects of all four realms.

2.2.2 Links to Customer Satisfaction & Loyalty

Across the literature customer satisfaction tends to be used interchangeably with Customer Experience and there is a clear association between the two terms. Meyer and Schwager (2007) argue that customer satisfaction is represented by the gap between customers' expectations and their subsequent experiences. This representation of satisfaction as a state of mind, at a point in time, arrived at due to previous experiences received along a journey is a useful way of describing the relationship between the two terms. In the context of the study, it also helps to think of satisfaction or dissatisfaction as a mind state arrived at just before a customer needs to take action or make a decision. Prior to this, the customer receives many difference experiences, with the aggregate of all these experiences being explained by customer satisfaction or dissatisfaction, or indeed ambivalence.

In support of this view Meyer and Schwager (2007) suggest that to understand how to achieve satisfaction, a company must deconstruct its overall experience into component experiences. They suggest probing and monitoring the full range of "unvarnished" realities of their prior experiences, and then the expectations those have conjured up (warm or harsh), must be monitored and probed.

A significant amount of work has examined the bearing of customer satisfaction and Customer Experience on loyalty (Zeithaml, Bolton et al. 2006); Turel & Serenko 2006), demonstrating that perceived quality and perceived value are the key factors affecting a customer's satisfaction with mobile services. Though satisfaction may positively influence loyalty, however, it is not always a sufficient condition. Although loyal customers are most typically satisfied, satisfaction does not universally translate into loyalty (Oliver, 1999). Companies can fall into a 'satisfaction trap' as research indicates that 60 – 80% of customers who claim to be satisfied or very satisfied will defect (Reichheld, 1996). Consequently organisations often seek to 'enforce' loyalty by introducing barriers to switching between providers (Jones, Mothersbaugh & Beatty, 2002; Seo, Ranganathan &

Babad, 2008). Typically these barriers involve switching costs, the attractiveness of alternatives and interpersonal relationships and emotional bonds with the company. More recently, work has demonstrated the impact that improving the Customer Experience has on customer loyalty (see Johnston & Michel, 2008) with some going so far as to say that customer experience management is perhaps the most important ingredient in building customer loyalty (Crosby & Johnson, 2007).

In summarising the linkage between experience, loyalty and profit, the literature (e.g. Johnston & Michel, 2008) suggest that customers having continued good experience will have a higher propensity to remain loyal and due to the lower cost structure of retaining existing customers, an organisation's profits will increase. Conversely, customers having a poor experience will have a tendency to be less loyal and therefore leave the organisation or "churn", thereby reducing revenues and profits.

2.2.3 Value of Customer Experience to the Business

Though it is easy to suggest that increased loyalty leads to increased profits, a closer examination of why this is the case is necessary. In stark monetary terms (Reichheld, 1996) puts forward figures indicating that the net present value in profit that results from a 5% increase in customer retention varies between 25 and 95%. In additional to the revenue benefits from retaining customers, Hart, Heskett et al. (1990) put forward the view that it can cost a business up to five times more to recruit new customers than to retain current customers. Therefore this combination of increased revenue from retaining customers and the lower costs to serve existing customer in broad terms suggest that retention provides significantly more profit than the acquisition of new customers.

It would be inaccurate however to suggest that all existing customers present that same profit margin. Reichheld (1996), provides evidence to suggest that the top 10% of customers are often worth 5 to 10 times as much in potential life time profits as the bottom 10%. So it is important that organisations do not strive to

retain every single customer or retain them at any cost. Whilst it would be a laudable aim to try and convert all customers into a high margin bracket, the harsh reality is that the immediate attention of organisations must be to focus more effort and resources on the higher value customers. There is a counter argument however that suggests that higher value customers become high value, due to the disproportional effort and resources invested in them by organisations, however a lack of detail on this in the literature suggests that high margin customers, achieving their margin status by focus and attention on customer, may be applicable in only a minority of cases.

There is an additional note of caution on the indiscriminate use of funds to improve Customer Experience, "...a lot of money is wasted in organizations every year in the name of quality improvement. From adding costly service features that are unimportant to customers, to spending training unwisely, it is quite common for organizations to throw money away..." (Zeithaml, Parasuraman et al., 1990, p.8). Therefore it is important to gain a more detailed understanding or experience and assess which aspects provide the stronger links to value in the eyes of the customer and therefore retention for the organizations.

In reviewing Customer Experience and its importance, it appears that the business case for retaining customer is compelling, although initial companies should focus on higher value customers and think carefully when deconstructing experiences to determine which elements customer value the most. The relationship between experience and loyalty suggests a positive correlation, further supporting the belief in improving Customer Experience to assist in the retention of customers. The converse also appears to be true, in that poor experiences may prompt customers to leave and move on. In order to understand experience in more detail, the following section examines some of the key facets of Customer Experience.

2.3 The Facets of Customer Experience

2.3.1 Functional and Emotional Cues

There are a multitude of different ways customer experience can be analysed. (Berry, Carbone & Haeckel, 2002), suggest that an organisations first step toward managing the total Customer Experience is recognising the clues it is sending to customers. Managing customer experience consequently means "orchestrating all the customer experience 'clues' that are given off by products and services that customers detect in the buying process" (Berry, Carbone & Haeckel, 2002), p.85). These clues are discerned as anything that can be perceived or sensed or recognised by its absence. The composite of all clues comprise the customer's total experience and they can be subdivided into categories as bulleted below (Carbone & Haeckel, 1994).

- Functional – Rational / objective clues that relate to the operation of the good or service (e.g., can I download this music video?)
- Emotional (Mechanics) – Clues emitted by things (e.g. is this a welcoming and friendly store?)
- Emotional – (Humanics) – Clues emitted by people (e.g. is this person sympathetic to my issues?).

Emotional clues are just as important to the Customer Experience and work synergistically with functional clues (Berry, Carbone & Haeckel, 2002), a view supported by Shaw (2005) who suggests that sensory experience is vital when looking at the entire Customer Experience. Consequently companies must manage the emotional component of Customer Experience with the same rigour with which they manage the product and service functionality. The way to begin that effort is by observing customers and talking to them about their experiences in order to gain a deeper understanding of the clues they are processing during their encounters with the company. The humanic aspect of experience is backed

up by (Voss & Fellow, 2004) who summarises the key driving forces behind experience by stating that experiences provide an opportunity to engage people and their emotions.

2.3.2 Customer Corridor, Peaks and Aggregate Experiences

In recent times organisations have increasingly become aware of the need to create value for their customers in the form of experiences (Berry, Carbone & Haeckel, 2002) but managing experiences is much more complex than providing some sort of entertainment or engaging customers in a creative way. To carry out a well conceived strategy of managing the customer experience, organisations must gain an understanding of the customer's journey, from the expectations they may have at the start, to the assessments they are likely to make when it's over (Berry, Carbone & Haeckel, 2002).

Responsetek (2010) emphasises the interaction aspect of Customer Experience, suggesting that it is created through various company touch points, described as all direct and indirect interactions with the customers. Examples of direct interaction touch points include: retail store conversations; contact with contact centre agents; direct mail; websites for transactional or support activities. Indirect interaction touch points may include: Billboard and TV advertising; Service and Handset usage. (Reichheld, 1996) puts forward the concept of a 'customer corridor' that captures the essence of a series of interactions.

This work presents the view of a customer entering at one end of the corridor with door ways representing interactions with the customer. For telecommunications, for example, the journey may start with a visit to store, moving on to the acceptance of a contract with the company and then, some weeks down the line, the arrival of a bill. This interaction could continue through calls to customer services until eventually the decision door of whether to stay or go arrives. The author suggests the customer corridor has a second set of doorways, made up of

the major changes in a customer private life. Events such as career moves, relocations, marriages, deaths, births are often occasions for delivering extra value to a customer.

Understandably, the preference for the development of this sequence is for the interactions to be positive and both the average interaction and the deviations from the average (peaks) are important in shaping a customer's overall experience (Verhoef, Antonides & de Hoog, 2004) in relation to services. Other research notes the importance of the last interaction over and above prior interactions (Ariely & Carmon, 2000; Hansen & Danaher, 1999), and with users beliefs and attitudes changing during the course of their usage. Therefore there is a need to continually track and manage the customer perceptions of the Customer Experience (Bhattacherjee & Premkumar, 2004).

The previous sections have focused mainly on individual clues, however people tend to organise the individual clues or indicators they receive into a set of impressions (or mini experiences). These impressions, some functional, some emotional can be subtle, subliminal or very overt and obvious. They may be happenstance or carefully designed, but it is impressions collectively that become the overall experience (Carbone & Haeckel, 1994). One point of interest would therefore be to seek to determine if composite or aggregate experiences provide a better indication of future behaviour than individual experience items.

2.3.3 Measuring Customer Experiences

Studies of experiential outcomes of computer use have tended to investigate a number of primarily task-related phenomena such as perceived ease of use, perceived usefulness and user acceptance of computer systems, however traditional usability approaches are too limited and must be extended to include users' hedonic experiences and encompass enjoyment (Lin, Gregor & Ewing, 2008). This is also a concern that emotional responses or the elicitation of

emotion is not considered an antecedent to technology service quality, given that service quality is an antecedent to customer satisfaction and enjoyment is critical in terms of customer satisfaction / loyalty.

Table 2-1, provides a summary of the refined scales illustrating constructs and variables seen as important in developing a scale to measure the enjoyment of web experiences. The main sub dimensions of enjoyment are said to be engagement, positive affect and fulfilment. The answers were to relate to a 7-point Likert scale ranging from strongly agree to strongly disagree.

Table 2-1 - Variables in Study of Enjoyment (adapted from Lin et al, 2008)

CONSTRUCT	VARIABLE DESCRIPTION
Engagement (Focused Attention)	I was deeply engrossed; I was absorbed intently; My attention was focused; I concentrated fully.
Positive Affect	I felt happy; I felt pleased; I felt satisfied; I felt contented.
Fulfilment	Fulfilling; Rewarding; Useful; Worthwhile

There is an argument to suggest that ascribing a value to different customer experiences is hugely subjective. Traditional questionnaires often use the 5 or 7-point Likert. However in consideration of conception of loyalty and retention, Reichheld's Net Promoter Scoring System (Reichheld, 1996) provides considerable utility (Payne, Storbacka & Frow, 2008). The system divides every company's customers into three categories: Promoters, Passives, and Detractors. By asking how likely is it that you would recommend an organisation to a friend or colleague, customers respond on a 0-to-10 point rating scale which is categorised as follows:

- Promoters (score 9-10) are loyal enthusiasts who will keep buying and refer others, fuelling growth.
- Passives (score 7-8) are satisfied but unenthusiastic customers who are vulnerable to competitive offerings.
- Detractors (score 0-6) are unhappy customers who can damage your brand and impede growth through negative word-of-mouth.

The 0 -10 scale has more variance and discriminates better than 1 – 5 or 1 – 7 scales and also starting at 0 instead of 1 reduces possible confusion among respondents which pole indicates the bottom of the scale. The Net Promoter Score (NPS) is calculated by taking the percentage of customers who are Promoters and subtracting the percentage who are Detractors. Based on his research, (Reichheld, 1996) contends that these clusters provide a simple, intuitive scheme that accurately predicts customer behaviour. The scale allows companies to divide customers into groups that require different attention and different responses.

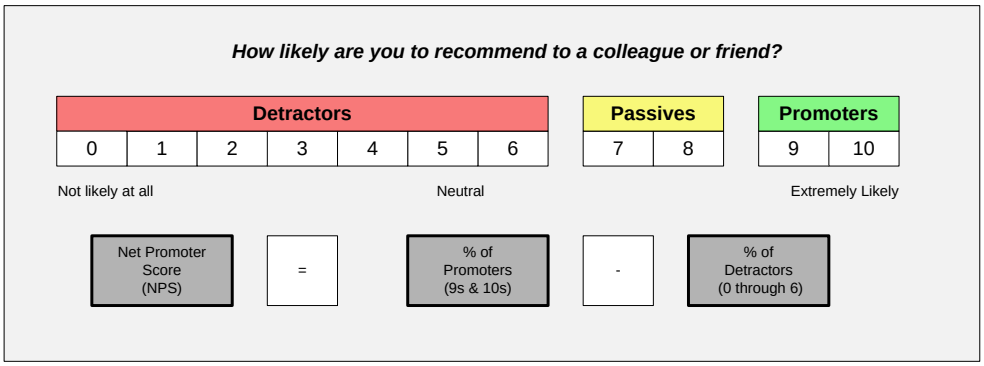

Figure 2-2 - Scoring System (source: www.netpromoter.com)

2.3.4 Experience Profiles

Occasionally a single event is so powerful that is leads to a customer defecting to the competition all on its own (e.g. "your employee was extremely rude to me"), however in most cases a series of events leads to the customer deciding to seek better value elsewhere (Reichheld, 1996). Modelling experience and loyalty on aggregate levels and the use of customer index measures, such as the European Customer Satisfaction Index, are becoming increasing common as indicators of business performance in different industries (Cassel & Eklöf, 2001). Applying these concepts to experience is suggested as a way of ascertaining whether the whole experience is greater than the sum of the individual experience items. By combining this concept of aggregate experience with the view of experience changing over time and the net promoter scale of measuring experience, it may possible to chart the experience journey of a customer.

Mathematical treatments determining the slope of the curve and the standard deviation of the monthly customer experience scores can be employed to provide a summary view of what is happening. Over a specified period of time and in very simplistic terms, experiences can either improve, get worse or stay the same. It is also possible to identify variant of these 3 broad themes. One way is to study the extent to which these improvements or degradation happen. These summary views can be characterised as profiles or experience states that convey the essence of that particular customers experience over that particular time period. For example a rapidly degrading experience profile could look like the figure below.

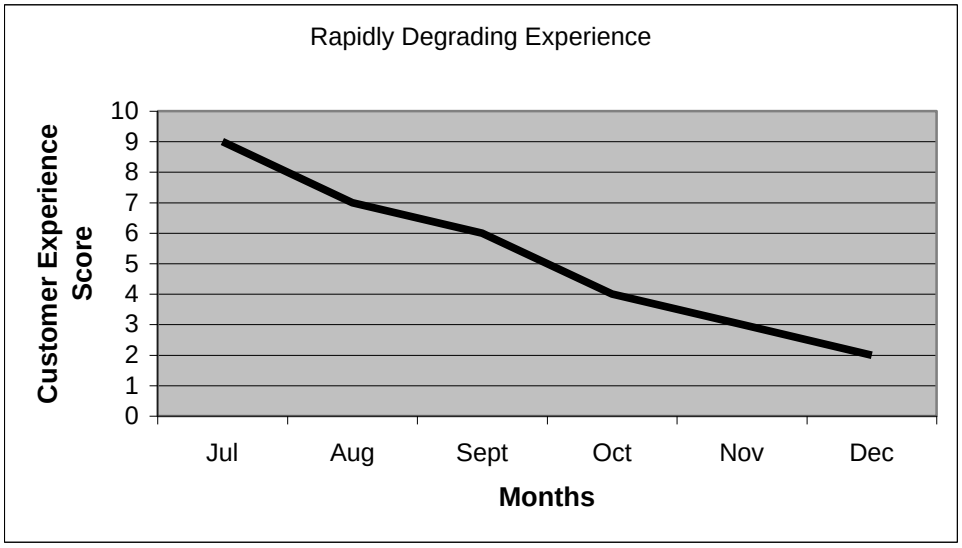

Figure 2-3 - Rapidly Degrading Experience Profile

These profiles can be used to categorise the customer base of an organisation, if the relevant information was supplied. Further examples of experience profiles can be found in the appendices.

A natural extension from a systems information perspective would be to ascertain whether the production of these curves could be automated and made available for further analysis. If then thresholds are applied to certain scope / gradient values or certain standard deviation values, organisations would have the ability to ensure

alerts are in place to monitor when these thresholds are breached and to develop a business response to situations that they deemed required action. The data and rules aspect of this thinking lends itself very well to information systems development as a facilitator for monitoring experiences and being able to provide a rapid response when things are deemed not to be going well.

2.3.5 Flow Experiences

Despite being vague, elusive and ephemeral, experience is a strange phenomenon, readily adopted by the human – computer interaction community / practitioners and researchers alike (Hassenzahl & Tractinsky, 2006). Referring back to the 4 realms of customer experience description (Pine & Gilmore, 1998), one critique of this approach is that the Absorption / Immersion continuum is not as distinct as it could be. One suggestion would be to make the Absorption tag an antonym of Immersion, which would perhaps allow the model to describe both good and bad experiences. Changing absorption for detachment helps identify more clearly the types of products and services available from a mobile operator.

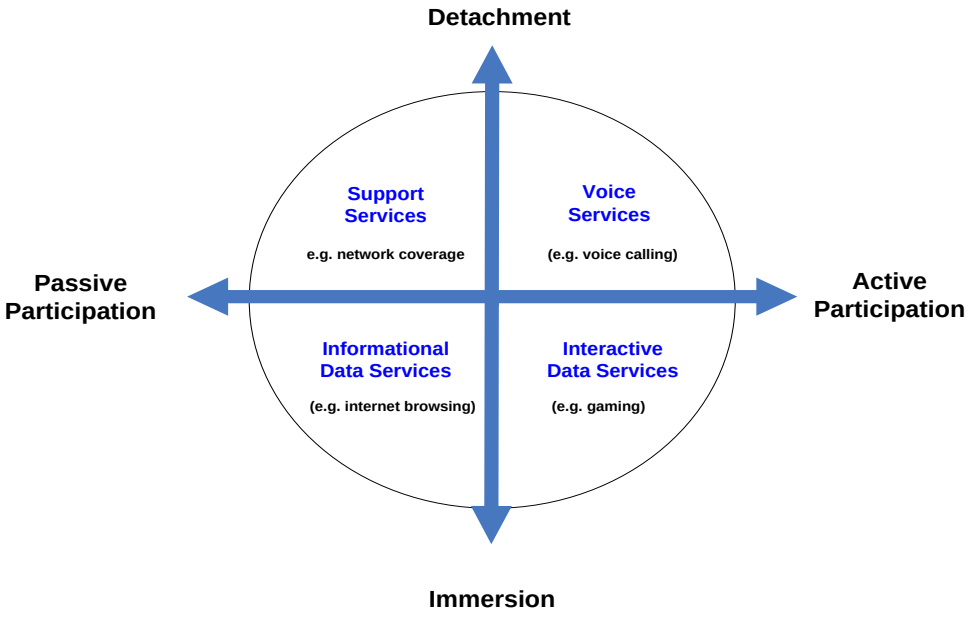

Figure 2-4 - The Four Realms of an Experience (further adapted from Pine & Gilmore, 1998)

The areas defined as support services could cover elements such as network and handset performance and customer services. There is evidence that this is a worthy area of study as the net promoter score for Telecommunications is described as being one of the poorest performing industries and always have a NPS score which is less than 0 (i.e. there are more detractors than promoters in the industry.)

For products and services in the areas described by the authors as "escapist" or in the adapted version made more relevant for the mobile telecommunication "interactive data services", where active participation is high and immersion is high, customers receiving these experiences could be said to be experiencing "flow". To date the information systems literature has tended to focus on flow theory and studies of human-computer interaction as a framework for modelling enjoyment, user satisfaction, engagement and other related states of involvement with computer software (Novak, Hoffman & Yung, 2000; Pace, 2004; Finneran & Zhang, 2003; Khalifa & Liu, 2007).

Flow theory provides a useful description of how customers / users feel when they encounter very good experiences. These experiences are characterised by the users feeling a distorted sense of time during the experience, a loss of self-consciousness, clarity of goals and feedback, a good balance between the challenges of the activity and the skills to meet the challenges, and an autotelic feeling where the activity is the reward, not the end state. These characteristics help describe a state where the customer is in a heightened state of pleasure/enjoyment. This view dovetails with literature arguing that value is derived in use and is therefore differentiated and heterogeneous (Gronroos 2008; Prahalad and Ramaswany 2004; Vargo, Maglio et al. 2008). The co-creation of personalised experiences suggest that customers are not prepared to accept experiences fabricated by companies and increasingly want to shape those experiences themselves, both individually and with experts or other customers (Prahalad & Ramaswamy, 2004). This description mirrors the escapist quadrant within the realms of customer experience diagram (Pine & Gilmore, 1998).

(Khaslavsky & Shedroff, 1999) suggest that companies need to know their audience, search for the aspirational and immerse themselves in examples of seductive design, allowing them to serve as inspiration for more. The authors also describe how extraordinary products seduce the casual user, as well as the paying customer and software is no exception. These authors talk of emotional bonds that can be created, but suggest that with the exception of computer games, software is generally absent from the lists of seductive products. The authors suspect that developers simply don't understand the mechanics of seduction in the same way designers of video games, industrial products, and fashion understand them. The authors suggest seduction involves a promise and a connection with the audience or user's goals and emotions. They go on to say seductive products go beyond the obvious and efficient, being not only original but more of everything than they need to be. Whether elaborate or simple, seductive objects need to promise to be more than what is expected of them.

One would probably only spend significant time and resources striving for customer flow experience improvements if the organisations were able to provide a consistently good experience in the "support services" quadrant. If however "support services" were providing an excellent experience, focusing on the escapist an interactive quadrant could continue to make your most loyal customers even more loyal.

This study, however, focuses on the basic satisfiers (support services). The mobile industry faces more elementary challenges in comparison to ensuring customers experience flow in their interaction with products and services. The suggestion here is that once basic level needs have been satisfied, organisations can consider higher order experience improvements. This strategy is backed up by (Negroponte, 1995) view of digital and IT products. He suggests that even where computers are omnipresent the current interface is primitive, clumsy at best, and hardly something with which you might wish to curl up in bed. Although this is changing as a result of easier to use touch-screen devices, with Apple's Iphones and Ipads currently dominating in this area. Less is sometimes more, taking for

example the use of the home video camera, which you first get it you are likely to pan and zoom a great deal, exercising simultaneously all the degree of freedom you just discovered. The result is a manic jerky home video, usually embarrassing to show. Later, with the benefit of time, you use these new degrees of freedom more adroitly and sparingly.

We have to ask ourselves the question, is this what is happening when people think about the mobile industry? People automatically focus on features and services, however the core base experience is less than perfect. Companies need to focus on consumer innovation – developing creative solutions to consumer problems – rather than technical innovation as we move forward into the 21st Century (Burke, 2002).

2.4 Customer Experience in the Telecommunications Industry

2.4.1 Specific Work

Customer experience and satisfaction discussions within the telecommunications industry tend to reference the J.D.Power Surveys, for example, (J.D. Power & Associates, 2008). Alternative sources such as YouGov surveys (YouGov, 2010) seem to focus on similar experience categories. J. D. Power and Associates are a global marketing information firm that conduct independent and unbiased surveys of customer satisfaction, product quality and buyer behaviour. The company is a business unit of the Information and Media Group of McGraw-Hill, as is headquartered in Thousand Oaks, California. In the UK mobile telecommunications market, their survey and reports are widely seen as the barometer for assessing what rating a company has and how it is performing against other players in the market.

The widespread adoption of the J.D. Power framework within the UK Mobile market provided support for utilising the framework as a starting point. The J.D. Power categories are:

- Image
- Offerings & promotions
- Call quality / coverage
- Cost
- Handset
- Customer Service
- Billing

In order to assess the suitability of these categories as a foundation for the decomposition into experience items or cues, a further review of the customer experience literature focusing specifically on the mobile telecommunications industry, would help ascertain if there are any areas of congruence with other work in the field. If after reviewing the literature, it was deemed that the J.D. power categories were robust and relevant, then the additional factor of the JD Power framework being supported and utilised by UK mobile operators would make future engagement and collaboration much easier.

Table 2-2, compares the J. D. Power survey with the prevailing experience literature, and provides a synthesis of the literature with respect to whether correlations are found between churn and the respective experience item. The green/yes squares indicate where that particular paper concludes that there is a link between the experience category and satisfaction / churn. The red /no squares indicate where that particular paper did not conclude that there was a link. The grey/not applicable square illustrates where there was not mention of the experience category in that paper.

Table 2-2 – Summary of Key Mobile Telecommunications Papers Linking Experience Items to Satisfaction and Churn

Author	Cost	Handset	Coverage	Customer Services	Products & Services	Billing	Image	Human/ Emotion
J.D. Power & Associates (2008)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A
Kim, et al. (2004)	Yes	No	Yes	Yes	Yes	N/A	N/A	Yes
Ahn et al. (2006)	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A
Gerpott et al. (2001)	Yes	N/A	Yes	No	Yes	N/A	Yes	N/A
Seo et al. (2008)	N/A	N/A	Yes	N/A	N/A	N/A	N/A	N/A
Turel and Serenko (2006)	Yes	N/A	Yes	No	N/A	N/A	N/A	N/A

In considering the impact of handsets and experience and loyalty, (Kim, Park & Jeong, 2004) concluded that handsets did not have a impact on satisfaction, however this view differs from the J.D, Power position and the conclusions of (Ahn, Han & Lee, 2006), who conclude that handset considerations directly impact churn.

Regarding customer services, (Gerpott, Rams & Schindler, 2001) did not substantiate previous research that customer care is an important factor in satisfaction and retention. In explaining this deviation the authors postulate that customer care may represent a hygiene factor for telecommunications, whereby if customer care is poor, it will contribute to dissatisfaction, however if it is good it will not improve satisfaction. In considering customer complaints, (Turel & Serenko, 2006) concluded that whilst a negative association was established between customer complaints and customer satisfaction, this did not appear to translate through to re-purchase likelihood. One suggestion was that these results were affected by demographics of the sample data, which were skewed to younger customers. It appears that younger customers have a higher tolerance threshold when involved in the complaints process.

An alternative approach to adopting JD Power categories would be to conduct primary research to establish relevant experiences constructs. The concept of an experience audit is proposed by (Berry, Carbone & Haeckel, 2002), who

suggested documenting customer experiences by using hidden cameras, conducting in depth interviews with customers and employees to establish how people on both sides of the transaction feel. (Meyer & Schwager, 2007), also talk of obtaining the right information by tracking experience and collecting data in a persistent, periodic and pulsed (one off, or special purpose driven) manner. Aspects of this data resides in customer management systems, that store information based on the interaction of customers with the organisation.

The experience categories mentioned, appear to be valid experience categories to consider. There are strong links between the categories and loyalty and retention. In addition there is a good relationship with JD Power categories and the notion of support service for mobile products mentioned earlier. However the literature is a little scarce on the human and emotional aspects of Customer Experience, so this would appear to be an area for further investigation.

Consumers are using smart products to take more control of their lives (McKenna, 1995). Smarter and more sophisticated products mean that the concept of getting the basics right is never more relevant than now. Whilst flow experiences are what companies should ultimately be aiming for, poor experiences with the core aspects of a product or service, reduced the likelihood of flow experiences (Pace, 2004). This, combined with a low net promoter score for the telecommunications industry, suggest a focus on the basic core elements should be the prime focus when considering improving the Customer Experience in the mobile telecommunications industry.

2.5 Issues and Challenges

When considering the seemingly compelling case for improving the customer's experience, there are a number of factors that prevent organisations from pursuing this more aggressively. Meyer and Schwager (2007) suggest that Customer Experience is being neglected for 3 key reasons:

- Too much money already lavished on Customer Relationship Management (CRM) and not understanding how this differs from Customer Experience Management (CEM). They describe the difference starkly in that CRM captures what a company knows about particular customers, whereas customer experience data captures customers' subjective thoughts.

Table 2-3 below contrasts the key differences between CRM and CEM in terms of their subject matter, timing, monitoring, audience and purpose.

Table 2-3 – CEM vs. CRM (adapted from Meyer and Schwager, 2007)

	What is captured and distributed	When	How monitored	Who uses the information	Relevance to future performance
CEM	What a customer thinks about a company	At points of customer interaction: "touch points"	Observational studies, voice of the customer research, internal data that provides clues to experience	All levels of the organisation in order to create	Leading: locates places to add offerings in the gap between expectation and experience
CRM	Captures an d distributes what a company knows about a customer	After there is a record of a customer interaction	Automated sales tracking, and some interaction history	Typically Customer facing groups	Lagging: Drives cross selling by bundling products in demand with ones that aren't

- Some managers who have risen through non customer facing functions, regard managing the customer experience as solely the responsibility of sales, marketing and customer services.
- There is a fear of what the data may reveal, for example a worry if they can afford what the customers are asking for. Additionally executives hesitate to act on the findings, because experience data is more ambiguous than customers purchasing actions.

In addition to these, there are other areas that would help accelerate organisations' progress on Customer Experience. Considerations include: explicit versus implicit experience measures; a close review of the organizational context and an examination of the role that technology can play.

2.5.1 Explicit vs. Implicit Measure

When faced with measuring Customer Experience a choice arises with regard to explicitly asking customers about their experiences or trying to infer experiences implicitly. For the UK mobile industry, explicit measurement is problematic due to the logistical scale of this endeavour. Faced with millions of customers, the logistical effort along with the cost of continually conducting surveys when new products appear, tariffs change or with competitor activity, is sizable. In addition organisations employing explicit methods rely on the recollection of events by customers, and which are often overly positive (in a "rose tinted" manner) or they can be remembered more negatively than the reality at the time. There is also the concern that many consumers are suffering from survey fatigue where continued requests from operators for information can be counter productive.

Reichheld (1996) suggests that as tools for predicting whether customers will purchase more of the company's products or services (which he suggests is a good surrogate for determining whether a company is providing a good experience or not) explicit satisfaction surveys are grossly imperfect. Further limitations of traditional surveys suggested by Reichheld (2006) include:

- The wrong customers respond – often it is customers that are bored, lonely or compulsive that answer.
- Too many surveys are marketing campaigns in disguise, which can destroy the credibility of satisfaction surveys.
- Standard vanilla solutions which do not necessarily meet companies' unique needs.

Surveys can confuse transactions with relationships – where the questions relate to a specific transaction or the quality of the relationship.

Light (2006), in discussing methods of enquiring into experience, suggests that people are not good at pinpointing and describing their experience to order,

however well they may be able to make an anecdote of them in less formal contexts. It seems that an interviewee's best intentions are affected by many social and cognitive effects such as post hoc rationalisation (Spreng, Harrell & Mackoy, 1995; Light, 2006).

These challenges directed the research and the development of an implicit and more proactive approach.

2.5.2 Organisational View

Millard (2006) suggests that enhanced customer experience requires a company-wide commitment to creating a customer relationship that is not as easy as just putting in technology. Technology alone will not create conditions for change to occur. It requires a new approach to organising the Customer Experience, the redevelopment of legacy processes and systems, a revision of management methods and approaches, a rethink of measures of success and approaches to training. Millard (2006) goes on to say that the best companies generally don't deliver excellent customer experiences by accident. They harness the power of their people, their culture, their management, their end to end processes and their systems to design and deliver the "wow" factor. The literature offers broad additional support for this broad argument. For example:

- Customer experience encompasses every aspect of a company's offering: the product and service; the quality of customer care; advertising, packaging; ease of use; reliability. However, Meyer & Schwager (2007), argue that few of the people responsible for the elements above have given sustained thought to how their separate decisions shape Customer Experience.

- Dunnhumby (2010) also contends that "there is a disconnection between departments – most notably acquisition and retention – resulting in inappropriate offers that undermine brand value and disenfranchise the

customer. A global view of the customer will enable the creation of relevant communications that reflect customers' current and actual needs".

- Meyer and Schwager (2007) state that Customer Experience will not improve until it becomes a priority and an organisation's work processes, systems, people and structure change to reflect that. The authors go on to explain how every function can play their role. In the Marketing Department there is a need to capture the tastes and standards of every one of its targeted market segments, circulate that knowledge within the company, and then tailor all consumer communications accordingly.

Service Operations Departments must ensure that processes, skills and practices are attuned to every touch point. In Product development they need to do more than specify need features. For example, design experiences after observing how customers use products and services, figuring out why certain things may frustrate customers. Ideally the department will identify customer behaviour that runs counter to a company's expectation and uncover needs that haven't been identified. Organisations it seems, need to develop communication, awareness and training strategies that support customer experience management for all areas of the business. Additionally if organisations are committed to inducing a culture change around Customer Experience, these strategies need to be supported by an remuneration, rewards and incentive structure than underpins it.

The role of customer contact personnel during service recovery is expected to be a key factor in determining overall satisfaction. Past research has found that complainants who were satisfied with the recovery response have higher repurchase intentions than those who were satisfied and did not complain (Spreng, Harrell & Mackoy, 1995). This view of service recovery as an opportunity, as a competitive weapon is compelling. However organisations must take this activity seriously. Ineffective service recovery efforts have the potential of increasing

dissatisfaction, when you consider that overall half or all efforts to respond to customer complaints actually reinforce negative reactions to service (Hart, Heskett & Sasser, 1990). The interesting next leap on the service recovery journey is if organisations can do this pro-actively, before the customers complain, this would elevate the experience of recovery to new levels.

2.5.3 The Role of Technology

Nauck, Ruta et al., (2006), suggest that customers should be at the heart of most businesses, and the use of customer analytics to segment customers; predict customer actions; understand customer views is an extremely important area for large businesses. Mobile operators are quite unique amongst other organisations in that they can see how customers are using the service. Their operation requires a lot of effort in providing and maintaining services, which leads to regular customer interaction on a large scale and the generation of a significant amount of useful customer experience data.

Whilst building on the advantages of using implicit data to generate experience profiles, Nauck, Ruta et al. (2006) suggest that barriers to the effective use and application of this information are typically bad data and lack of expertise. They suggest a move from outdated legacy systems and the fact that data gathering is usually done without subsequent analysis in mind. Data fusion across different legacy systems can be extremely difficult and often requires a big effort in data cleansing and pre-processing. One way forward would be to move to a central corporate data model on top of which modern CRM solutions can operate. They suggest a lack of analytics expertise can be addressed by using highly automated intelligent tools, but with an intuitive interface. They suggest that business users are domain experts, not data analysis experts. Therefore they need tools that support them and allow them to focus on their jobs.

Organisations aspiring to give customers what they want can use technology to elicit relevant information and become a mass customiser (Pine II, Peppers &

Rogers, 1995). Enabling one to one marketing that elicits information from each customer about his or her specific needs and preferences, supports the move to mass customerisation. This binds producer and consumers together in a learning relationship, where individual customers teach the company more and more about their experience and preferences, giving the company an immense competitive advantage in attempting to retain that customer.

Existing detailed customer transaction information can be supplemented with consumer lifestyle and attitudinal research to refine understanding and segmentation. Responsetek (2010) backs up this focus of defining customer experience management as:

"The practice of capturing customer experience information, whenever and wherever it occurs, delivering the information to the right people in the organisation continuously in real time, and facilitating tracking and implementation of business improvements based on the information."

Meyer and Schwager (2007) suggest that many organisations place the responsibility for collecting and assessing customer experience data within a single IT supported customer facing function, which saves money, shields customers from lots of uncoordinated and annoying solicitations and permits direction comparison of customers on the basis of their location and choice of product. However, Meyer and Schwager (2007) maintain that it is important that overall accountability for the design, delivery and creation of superior customer experiences should be cross functional. With the single IT supported customer facing function collected data approach, it may unintentionally provide excuses for those more distant from the customer for not understanding. Technology departments can support the use of implicit data on experience by ensuring that information technology assets are developed to make accessible systems that can collect, analyse and distribute customer experience management data, integrating the information with that generated by Customer Relationship Management

(CRM). This would provide a good foundation for service recovery in a real-time operational setting.

2.6 Real-Time Operations and Service Recovery

When combining the customer experience literature with information systems to capture and analyse the implicit data, the organisation is presented with the capability to make a step change in monitoring and improving customer experiences. In today's fast moving business environment it is important to act as quickly as possible and with the recent concepts of real-time marketing, organisations can really be on the front foot. Technology facilitated conversations and service allows companies to cut through the marketing chaos and establish binding relationships with their customers (McKenna, 1995).

Despite efforts and precautions organisations may take to avoid issues or incidents during service delivery, problems at some point are certain to occur. As an alternative to switching costs, the study proposes that "rewards" for customers do not necessarily need to take the form of financial incentives. Service recovery where possible attempts to solve problems at the service encounter before customers complain or before they leave the service encounter dissatisfied (Michel, 2001).

In their framework of the service recovery process, (Miller, Craighead et al. (2000) categorise the critical elements of the recovery process as either psychological or tangible. Common tangible elements of a service recovery system include completing the primary service, re-performing the service, exchanging the product or refunding the cost (Lewis & McCann, 2004).

Thinking about a humanistic response to service recovery, the two most recommended psychological techniques are providing an apology for the failure and showing empathy towards the customer (Seawright et al., 2008; Miller, Craighead & Karwan, 2000; Johnston & Fern, 1999; Bell & Zemke, 1987).

Practically dealing with the issue is at the core of such approaches and linking actions with poor profiles is a key outgrowth of the model.

Importantly, there is a an emerging realization both by practitioners and in the academic literature alike that service recovery is not just about recovering the dissatisfied customer to regain satisfaction and loyalty, but should also help drive improvement through the organisation. These improvements could lead to cost savings through the removal of ineffective processes, resulting in fewer failures in the future, and thus with fewer dissatisfied customers (Johnston & Michel, 2008).

The service recovery approach to improving experiences also aligns with the co-creation of value. Gronroos (2008) purports that as interactions between companies and their customers form an integral part of a service, the market offering from the company is extended to include facets of these interactions. Service recovery has been found to be even more important than the original service failure that led to the service recovery interaction (Spreng, Harrell & Mackoy, 1995). Firms can use failures to identify experience problems, reduce customer defections and increase loyalty and positive word of mouth. If organisations are able to react in a real time manner and reduce the elapsed time between the organisation's response and a customer's experience issue, this increases the probability of a favourable response from the customer which may encourage them to remain loyal or in fact purchase additional products and services (Gessner & Volonino, 2005).

In summary, it seems that an enhanced understanding of Customer Experience can be beneficial for pro-action and service recovery. Figure 2-5 below attempts to synthesis the Customer Experience literature into a connected framework. In doing this, the framework puts forward service recovery as the culmination of efforts it to understand and improve customer experiences in a profitable manner. The figure illustrates the decomposition of functional and humanic categories into implicit data items (or cues) that are mapped back to data elements that tend to existing within organisation's information systems. These items can then be

aggregated and analysed overtime, creating a profile that would give an indication as to whether the customer is likely to stay or leave. The propensity for customers to stay or leave is categorised into promoter, passive and detractor groups. The experience items / cues are experienced by customers at touch-points, during their interactions with the services and the organisation. Each customer can be analysed in terms of the margin contribution provided for the use of the products and services. The margin contribution then helps determine whether the organisation is more or less committed to retaining this customer. The intersection of customer value and experience profile then provides the context for service recovery if applicable.

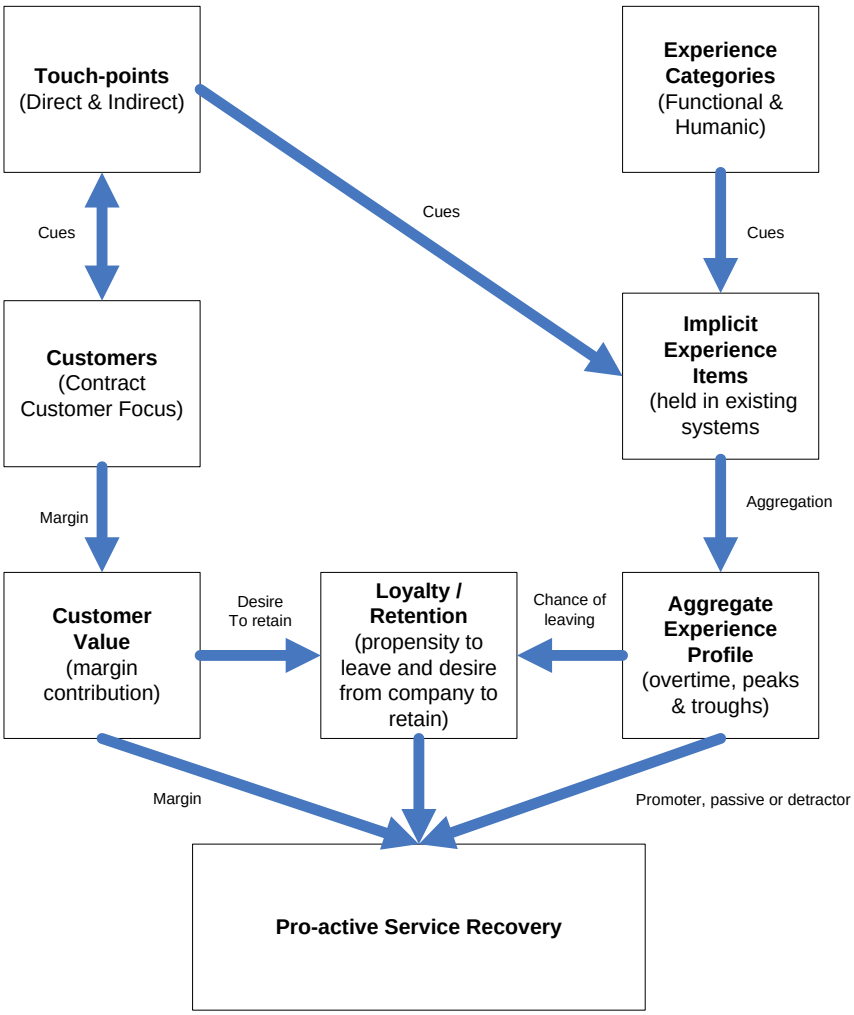

Figure 2-5 – Customer Experience Framework

2.7 Summary

The team were able to conclude that experience is a unique phenomenon which has the potential to result in behavioural change. This view is endorsed by support for the link between experience, satisfaction and loyalty. A synthesis of the literature suggests that poor experiences lead to less loyal customers and good experiences lead to greater degrees of loyalty. In additional poor experience with basic aspects of a service, ones that are normally taken for granted, impact heavily of the customers experience and ultimately their ability to have more fulfilling, hedonistic experiences, which are also characterised by flow. Within the mobile telecommunications industry most customers feel that experiences can radically improve, and therefore the focus initially should be on the basic and fundamental elements of the service offering, before attention can be paid in future to the higher plains of great experiences. It is postulated that measures of experience can be inferred for the data that organisations and to a greater degree mobile telecommunication organisation have within their information systems infrastructure.

It is also put forward that aggregating this data and studying it over a period of time can help form a profile of a customer's experience, explaining whether they are like likely stay with the company or leave. This information can then be used to proactively respond back to customers in a humanic and understanding way, providing options of the potential remedies that may make the situation better. This service recovery intervention should occur in real-time and during a customer's contract cycle, to prevent customers who happen to be having a poor experience building up negative impressions of the service and the company, that then become hard or even impossible to change at the end of a customer's contract. The focus now moves onto to testing many of these statements in practice, via a rigorous methodological process.

Chapter 3: Research Methodology

3.1 Introduction

Combining the aims and objectives of the study with the desire of the organisation to develop a solution to the problem of improving customers' experiences, the researcher and the organisation adopted a pragmatic world view, with Action Research at the centre of the research effort. Action Research enabled the research and the organisation to work collaboratively, building and testing theory along the journey towards an improvement in the situation. An explanation of the different types of Action Research guidelines for conducting good Action Research, were all explored. The direct relevance of the output of Action Research to both practitioners and academics made an appropriate approach for this study. The research design and its mix of qualitative and quantitative data collection methods are documented, together with a more detailed outline of the case. The limitations of Action Research were noted and the research design was constructed in such a way that the aims of academic rigour and practical relevance were adhered to. The chapter strives to demonstrate that concern for the research process was as important as the improvement contributions themselves.

The chapter is structured as follows. Section 3.2 reviews the research framework and highlights the philosophical and strategic considerations. Section 3.3 provides a detailed description of the research framework describing the different philosophical worldviews, the strategies of inquiry and the generic research techniques available. This provides important background for Section 3.4 which defines Action Research, and its different forms paying particular attention to Canonical Action Research. The section also suggests limitations and guidelines for conducting good Action Research. Section 3.5 provides more detail on the organisational setting, and the environmental features of the organisation under

observation. Section 3.6 looks deeper at the phases of the two iterative Canonical Action Research, reviewing specifically the elements of each cycle, the data to be collected, how it will be analysed and evaluated. Finally section 3.7 provides a summary of the importance of a strong methodological framework.

3.2 Research Approach

At the heart of this study lies an interest in information and information systems - the effective analysis, design, delivery and use of information for organisations and societies using information technology (Avison & Fitzgerald, 2002). The most fundamental set of assumptions adopted by a professional community that allows its members to share similar perceptions and engage in commonly shared practices is called a paradigm (Hirschheim & Klein, 1989). The authors suggest that as developers conducting enquires as part of systems design and having to intervene in the social world as part of systems implementation, it is natural to distinguish between two types of related assumptions. Those linked to the way in which systems developers acquire the knowledge needed to design the system (epistemological assumptions) and those that relate to their view of the social and technical world (ontological assumptions). The authors suggest that in studies of systems developments these views are largely subconscious and deeply rooted common-sense beliefs and background knowledge, which serve as implicit theories of action.

Reviewing and documenting these assumptions allows the researcher to gain a better understanding of the conceptual foundations of these beliefs and a recognition of alternatives and their strengths, so that they can be employed creatively in seeking solutions. The same position applied to understanding the relative weaknesses of alternative paradigmatic assumptions.

Informing the decision on the overall research approach to be adopted, and considering and incorporating assumptions and philosophical grounding, an overview is put forward by (Creswell, 2009). This overview documents world

view assumptions the researcher can bring to a study; the process of enquiry (strategy) and the specific methods of data collection, analysis and interpretation. Figure 3-1 provides an overview of these research components.

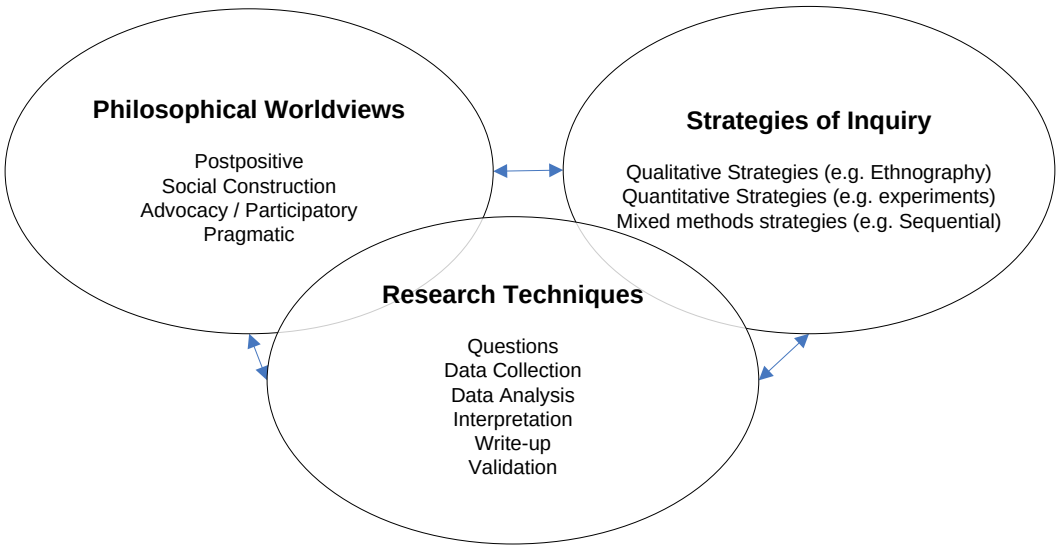

Figure 3-1 - A framework for research (adapted from Creswell 2009)

The framework attempts to illustrate the interconnected nature of the key areas. The philosophical worldview and strategies of inquiry combined can be said to amount to the research methodology and directs the higher level approach. The research techniques provide detailed input into the research design describing the intricacies of the research operation.

3.2.1 Philosophical World Views

Philosophical worldviews (ideas, paradigms, epistemologies, ontologies) influence the practice of research and need to be identified. Building on the work of Hirschheim and Klein (1989), Creswell (2009) lays out four different worldviews:

- Positivist assumptions, often called the scientific method, hold a deterministic philosophy, where causes determine effects of outcomes. A reductionist approach is adopted, where concepts are decomposed into small parts to test, such as the variables that comprise hypotheses. Knowledge is based on the observation and measurement of the objective reality that exists in the world. Post-positivism represents the thinking after positivism, and in part challenges the notion of the absolute truth of knowledge when studying the actions and behaviour of people.

- Constructivist assumptions, often combined with interpretivism, contend that people develop subjective meanings from their experiences. These meanings are contextual and varied, which leads the researcher to look at the complexity of views, rather than narrow meanings of a few ideas. Rather than starting with a theory, (as in post positivism), theory tends to be generated or developed inductively.

- Advocacy / participatory assumptions are a response to the post positivist view and its lack of a political component in its understanding of the world. Issues such as empowerment, suppression and inequality are thought to impact the research area, so the researcher often proceeds collaboratively so as not to marginalise participants as a result of the study and fully take on board their views.

- With pragmatism there is a concern with what works, and solutions to problems. Instead of a pure focus on the method, researchers tend to emphasise the research problem and use all approaches available to understand and derive knowledge about the problem. Knowledge is viewed as being both constructed and based on the reality of the world we experience and live in.

When reviewing real world situations within an organizational setting it is not inconceivable to think that all these paradigms can explain varied phenomenon to a greater or lesser extent. In many ways the pragmatist view adopts this position and lends itself to the study of Customer Experience in the corporate world.

3.2.2 Strategies of Inquiry

There are three broad ranges of strategies of inquiry available to information systems research, each having their own ideological view of the world, with strengths and limitations depending on the setting. One way of looking at the various approaches to research, is to categorise them as either: Qualitative; Quantitative; and Mixed Methods (described as such, as it incorporates elements of both qualitative and quantitative approaches). Qualitative research tends to focus on exploring and understanding the interpretation of individuals and groups to social and human problems, typically involving emerging questions with data collected in the participant's setting. Quantitative research tends to test objective theories by examining the relationship between variables, typically involving numeric data that can be statistically analysed. Mixed methods tend to employ both qualitative and quantitative methods, but more than simply collecting and analysing both kinds of data. It attempts to combine the approaches so that the overall strength of the study is greater than either qualitative or quantitative research alone (Creswell, 2009). With this is mind a mixed method design would support triangulation requirements that could help Telco and the researcher appraise the situation.

Table 3-1 depicts quantitative and qualitative inquiries on a spectrum of knowledge generation. At the extremes there are rigid laboratory scientific knowledge at one end, and anecdotal observations at the other (Galliers, Markus & Newell, 2007). This provides a helpful taxonomy of the approaches and contrasts them with their suitability against the object of the study.

Table 3-1 - Information Systems Research - An Outline Taxonomy (adapted from Galliers et al, 2007)

	More Positivist Approaches			More Interpretive Approaches				
Object of Study	Laboratory Experiment	Field Experiment	Survey	Action Research	Case Study	Forecasts / Futures Research	Simulation	Reviews
Society	x	x	xxx	xx	xx	xxx	xx	xxx
Organisations / Groups	xx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Individuals	xxx	xxx	xx	xx	xx	xx	xxx	xxx
Technology	xxx	xxx	xx	xxx	x	xxx	xxx	xx
Methodology	x	x	xxx	xxx	xxx	x	xxx	xxx

(Increasing numbers of xs, denotes increasing suitability of the approach for the respective object of the study)

In order to gain some insight into what constitutes appropriate research in the field of information systems, it is advisable to consider the nature of information systems themselves and then look at what we hope to gain from undertaking research in the area (Galliers & Land, 1987). This tact is in response to tendencies in information systems research where empirical research approaches, more suited to the spheres of natural sciences, are advanced at the expense of less conventional approaches that still provide significant contributions in the pursuit of knowledge and learning.

Due to the desire of the organisation to uncover practical approaches to improving the Customer Experience, as noted earlier, a pragmatic worldview forms the overall philosophical umbrella for the study, allowing it to be adopted as the overarching philosophical view. Having studied the strategies of enquiry, the research adopted a mixed method line of attack, which could be said to support efforts to triangulate data from quantitative and qualitative sources. This approach has gained support from (Johnson & Onwuegbuzie, 2004), who suggests that pragmatism is an attractive philosophical partner for mixed methods research.

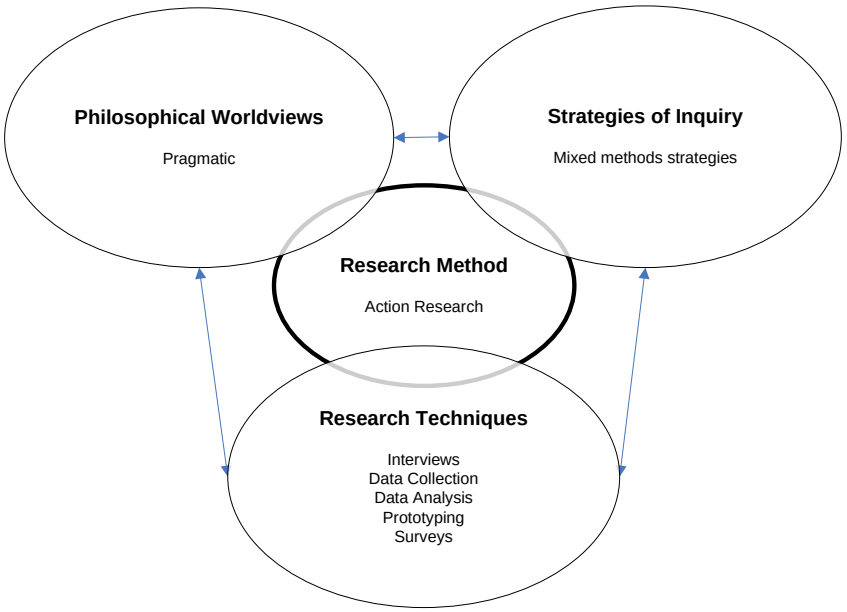

Figure 3-2 – Research Design Framework for this Study (adapted from Creswell, 2009)

The figure above, attempts to summarise the thinking so far on the research approach. The main objective of the study was to gain a deeper understanding of the key aspects of Customer Experience for mobile users and propose solutions for improvement. There was a need to do this in a controlled and systematic manner. These factors combined with the pace of change and the complex nature of organizational environments support the choice of Action Research an appropriate foil that would frame the research design.

Avison, Lau et al (1999) suggest that researchers need to understand the ill-structured fuzzy world of complex organisations, suggesting that action research methods may be better suited to this, as these approaches deal with the people dimension. People are what make organisations so complex and different, and people are far different in nature from data and processes, where conventional systems analysis approaches have been applied and gain credence. The failure to include human factors may explain some of the dissatisfaction with conventional information systems development methodologies, as they do not address real organisations (Avison, Lau & Myers et al., 1999).

3.3 Action Research

3.3.1 Definitions and Characteristics

In analysing the genesis of Action Research, (Foster, 1972) states that the concept emerged of a researcher immersing themselves in a human situation and following it along whatever path it takes as it unfolds through time. In recent times, Information Systems researchers have been drawn to and encouraged to consider Action Research as a relevant research approach among the array of approaches and methodologies available (McKay & Marshall, 2001). Action Research has many features, which would tend to suggest it is very well suited to the study of information systems, including the fact that information systems reflect scenarios, impacted by human behaviour, by the organisational setting and by the social setting the system sits within.

Action research can be described as an iterative process involving researcher and practitioners acting together on a particular cycle of activities, including problem diagnosis, action intervention and reflective learning, (Avison, Baskerville & Myers, 2001).

> *"Action research takes is cues – its questions, puzzles and problems - from the perceptions of practitioners within particular, local practice contexts. It builds descriptions and theories within the practice context itself, and tests them through intervention experiments – that is, through experiments that bear the double burden of testing hypotheses and effecting some desirable change in the situation"* (Argyris & Schon, 1989 p612-613).

In support of this, Dickens and Watkins (1999) suggest that Action Research remains an umbrella term for a shower of activities intended to foster change on the group, at an organisational and societal level. They continue that most Action Research varies in the emphasis placed on different classifications of Action Research: Participatory action researchers focus on participation and

empowerment; teacher action researchers rely on data to transform individual behaviour; while organisational action researchers focus on research and data driven decision making. Table 3-2 attempts to group some key characteristics.

Table 3-2 - Characteristics of Action Research

Characteristics	Gummesson (2000)	Checkland & Howell(1998)	Eden & Huxham (1996)	McKay & Marshall (2001)	Susman & Evered (1978)	Coughlan & Coghlan (2002)	Baskerville & Wood-Harper (1996)	Avison et al (1999)
Action researchers take action	X				X	X	X	X
AR involves contribution and problem solving cycles	X	X	X	X	X	X	X	X
AR is interactive	X	X		X	X		X	X
AR recognises complexity	X	X		X	X		X	X
AR is essentially about change	X	X	X					
AR is not to be judged by positive science	X	X					X	
Provides a recovery research process		X	X					
Merges the roles of researchers & participants		X		X	X		X	
Tools & techniques need to link to research design.			X	X				
Triangulation is used of possible			X					
Forms a basis for generalising			X					
Participation is strongly encouraged.					X		X	

To summarise, by using a very simple review of the frequency with which key concepts are mentioned or intimated, the key characteristics can be taken as:

- Action researchers take action.
- AR involves two goals: solve a problem and contribute to science.
- AR is interactive.
- AR aims at developing holistic understanding during a project recognising complexity.
- AR is fundamentally about change.
- Merging of the role of researcher and participants.

3.3.2 Forms of Action Research

A useful way of defining the broad term Action Research is to look at types or forms of Action Research. In support of this, (Dickens & Watkins, 1999) suggest that Action Research remains an umbrella term for a collection of activities intended to foster change on the group, organisational and societal level. They continue that most Action Research varies in the emphasis placed on different elements of the action research process. Participatory action researchers focus on participation and empowerment, teacher action researchers rely on data to transform individual behaviour, while organisational action researchers focus on research and data driven decision making (Dickens & Watkins, 1999).

Action research can be categorised by the following four main types (Avison et al., 1999):

- *Change and Reflection:* Chisholm and Elden (1993), suggest that there are signs of increased interdependence in organisations' environment, and this phenomenon makes it more difficult to develop neat, clearly bounded research designs that are formulated in advance and implemented as per a pre-conceived plan. The pace of change appears to have increased and together with the complexity that stems from interdependency, this leads to a more turbulent environment for action and research. There also appears to be a growing expectation from systems members for real involvement and participation. Chisholm and Elden (1993), suggest that system change involves much more than building a better mouse trap and having other systems copy it. Rather, organisational and system change involves complex social processes that require sustained strategic interventions to bring about change.

- *Conflict resolution*: In the information systems arena Avison and Fitzgerald (1999) cite a number of areas where Action Research has made telling contributions. One particular area was Scandinavian research, whereby

efforts intended to empower trade unions and strengthen the bargaining positions of users in systems development.

- *Participatory:* Greenwood et al (1993), purport that discussions on participatory action research generally fail to distinguish two important dimensions: the participatory intent of the research process and the degrees of participation actually achieved by a particular project. They argue that it is difficult in advance to mandate that a particular research process will become a fully developed participatory action research project. Participation is a process that must be generated, starting with participatory intent and then continue building in participatory processes, within the limits set by the participants and the conditions. The view of participation as something that can be imposed is both naïve and morally suspect (Greenwood, Whyte & Harkavy, 1993).

- *Action Learning:* (Coughlan & Coghlan, 2002), emphasise the creation of knowledge or theory in their definition of Action Research. Action research overcomes deficiencies often associated with traditional research topics and methods, in so much as it has broad relevance to practitioners, it is applicable to unstructured and integrative issues and in its contribution to theory. In particular its relevance to practitioners and its applicability to integrative issues will serve this project very well.

There are constructive aspects of all the forms mentioned that would support research in a commercial environment focused on the delivery of practical solutions. The essential aims of Action Research, that all the forms maintain are to improve and involve (Dickens & Watkins, 1999). Improvements through Action Research are said to be more effective, when participants engage in self-reflection while they are critically reflecting on the objective problem. The validity of the theory can be judged by the simple criterion of whether it leads to improvement and change within the context. It must both solve a practical problem and generate knowledge. The goal of involvement is no less important than improvement.

Dickens and Watkins (1999) suggest the Lewinian approach states that participants in the environment or project are best suited to collaborate and develop hypotheses since they are grounded in the context. This matches the aims of the Telco and how these anticipated the study progressing.

3.3.3 Canonical Action research

Action research is also purported to be well suited to the study of technology in its human context, and is unique in that it is interventionist (Baskerville & Wood-Harper, 1996). The quality of allowing the researcher to test a working hypothesis or assertion about the problem area and assess the changes in the real world setting was of value to the researchers and the study organisation. In particular its relevance to practitioners and its applicability to integrative issues will be beneficial to the study.

Figure 3-3, adapted from Baskerville & Wood-Harper (1998) analyses the characteristics of different action research forms, suggesting four types of characteristics that help provide a distinction between Canonical Action Research and other forms of Action Research.

	Process Model			Structure		Typical Involvement			Primary Goals			
	Iterative	Reflective	Linear	Rigorous	Fluid	Collaborative	Facilitative	Experiment	Organisational Development	System Design	Scientific Knowledge	Training
Canonical Action Research	•			•		•			*		*	
Information Systems Prototyping	•			•		+	+			•		
Soft Systems	•				•		•		*	*		
Action Science		•			•		•		*		*	
Participant Observation		•			•			•			•	
Action Learning		•			•			•				•
Multiview			•			+	+	+		•		
ETHICS			•	•			•		*	*		
Clinical Field Work			•	•	•		•		*		*	
Process Consultation			•	•				•	•			

Key: . Signifies a dominant characteristic, + (or) signifies characteristics that will dominate in different studies, * (and) signifies characteristics that may occur together in the same study.

Figure 3-3 – Characteristics Analysis of Action Research Forms (adapted from Baskerville and Wood-Harper 1998)

- Process Model: The three distinct process models are the extent to which the process of discovery is iterative: involving repeating sequences of events; reflective: focus more on theoretical contributions in contrast with the problem diagnosis; linear: involve a sequence of events with no iteration. Canonical Action Research tends to follow the more iterative process.

- Structure: The two forms of guidance are a rigorous structure with steps carried out in sequence or in a cycle. Whereas fluid structure defines activities very loosely, allowing for substantial simultaneous activity. Canonical Action Research tends to favour a more rigorous structure.

- Research involvement: The researcher tends to be involved in their studies in a variety of different ways. The involvement ranges from the collaborative, where the researcher is a equal co-worker with the practitioners, to the facilitative where although the researcher works in co-operation practitioners the tasks of there parties are quite distinct. Here the burden for solving the problem rests with the practitioner. Finally expert involvement see the researcher as just that, the expert. Here the burden for solving the problem rests more with the researcher. Canonical Action Researchers tends more to the collaborative involvement mode, where problem solving burden tends to be shared.

- Primary goals: These tends to be organisational development with a view to improving the social interaction amongst people in the organisation. Secondly systems design, which aims to create or modify usually computer based information systems. Thirdly the goal of scientific knowledge is to contribute in a generalisable way to the understanding of the problem. Finally for training goals, the emphasis is individual learning. Canonical research tends to favour the organisational development and scientific goals aspects more than the systems design and training aims.

These canonical aspects of process, structure, research involvement and primary goals made this form of action research a good fit for the study and the team embraced the five phases of (1) diagnosing; (2) action planning; (3) action taking; (4) evaluating and (5) specifying learning (Davison, Martinsons et al. 2004; Susman & Evered, 1978). These phases are usually taken to be one cycle of activities that address the problem area.

** denotes the start of the first and subsequent iterations*

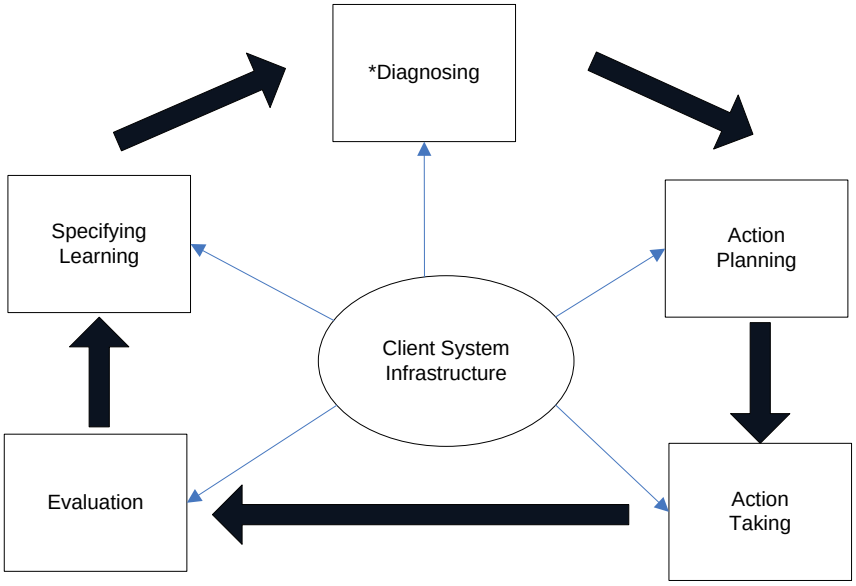

Figure 3-4 - Typical Action Research Mode - Source: (Susman 1983)

Baskerville & Wood-Harper, (1998), provide more detail on the phases:

- Diagnosing corresponds to the identification of the primary problems that are the root causes of the organisation's desire to change, providing theoretical assumptions about the nature of the organisation and the problem environment.
- Action planning deals with the researcher and practitioners collaboratively actions that should relive or improve the primary problems. The theoretical conclusions guide this phase resulting in a plan that establishes a target for change and the approach to change.
- Action taking concerns implementing the planned actions. Once again with researcher and practitioner working hand in hand in order to ensure that the intervention changes the organisation.
- Evaluation - after the actions are completed, the researcher and practitioners evaluate the outcomes, gauging whether the effects relieves or will lead to the resolution of the problems. This phase involves critically assessments to ensure the noted successes are a result of the

intervention and that for unsuccessful outcomes, the next Action Research interaction bears this in mind, and adjusting hypotheses were required.

- Specifying learning formally notes the knowledge gained in respect of the organisation, the academic research community and for input into future Action Research interactions.

In support of the principle of the cyclical process model, (Argyris, Putnam et al. (1985) state that action researchers must consciously and deliberately enact the Action Research Cycles, testing their own assumptions and subjecting their assumptions to public testing. By explicitly stating the goal to be achieved and questioning participants to understand their perspectives and views, action researchers will go some way to ensure the presentation of the research is a valid, rather than a biased version.

3.3.4 Limitations / Critique of Action Research

The validity of Action Research, as a mode of enquiry that will lead to defensible and potentially transferable results, is often challenged. Critics maintain that the characteristics of Action Research do not include replicability, which is often the source of the challenge. Some believe that the research lacks rigour, is often text bound, and therefore difficult to determine the cause of a particular effect, which could be due to environment, researcher or methodology. This also leads to charges of the Action Research being branded as consulting masquerading as research, with the research lacking the required impartiality. Baskerville & Wood-Harper, (1996), surmise that these problems are valid, but are general problems with research in social science, rather than problems particular to Action Research.

- Lack of impartiality of the researcher: In support of the researcher impartiality statement, Coghlan (2001) suggests a challenge facing manager-researchers is that they need to combine their action research role with their regular organisational roles and this role duality can create

potential conflicts. To counter this it is suggested that researchers need to manage the political dynamics, which involves balancing the organisation's formal justification of what it wants in the project with their own tactical personal justification for the project. It would also help if the researcher were to adopt a multi-stakeholder perspective.

- Scientific community believing the research lacks rigour: To counter this, Avison et al. (1999) suggest researchers should be explicit about their approach, clarifying their research aim, theory, and method at the outset and all the way through its application, as well as at the time of its publication. They suggest that the action researcher can assist this clarification process through diaries and concept maps, while giving full consideration to the audience being addressed. Explicit criteria should be defined before performing the research in order to later judge its outcome. Ways to manage alterations in this criteria as part of the process of problem diagnosis, action intervention and reflective learning should also be considered.

- Action research being branded as consulting masquerading as research: To counter this it is suggested that all the connecting phenomena must be carefully observed and documented. The phenomena should be discussed to gauge what impact they have had on the observed results. Ensuring iterative cycles of intervention and analysis are performed, with the researchers being open to findings.

- Action Research is context bound, and therefore difficult to determine the cause of a particular effect, which could be due to environment, researcher or methodology. Again to counter this, a serious organised process of Action Research can be made to yield defensible generalisations. The aim in Action Research should be to enact a process, based on a declared in advance methodology. The process should be "recoverable", that is to make clear to observers the thought processes and models which enabled

> the team to make their interpretations and draw their conclusions, for anyone interested in subjecting the research to critical scrutiny. This kind of consideration has been neglected in action research literature.

Action Research however must be careful not to aspire to the same claim of validity as that associated with natural science (Checkland & Holwell, 2007). Achieving credibility, consensus and coherence does not make a truth claim as strong as that derived from replicability of results independent of time, place and researcher. Action researchers must pay careful attention to the claim of validity relevant to their research into phenomena not "homogenous through time". Ensuring the research is well planned, organised and sequential helps to counteract this problem.

In a defence on the more qualitative nature of the action research method, (Strauss & Corbin, 1998, P.5-6) suggest that:

> *"it is not that the researchers do not want to pin down things analytically, but the urge to avoid uncertainty and get quick closure on one's research is tempered with the realisation that phenomena are complex and their meanings are not easily fathomed or just taken for granted……they are sceptical of established theories, however enticing they might seem, unless these are eventually are grounded through active interplay with the data"*

Greenwood, Whyte et al. (1993) suggest participatory aspects of Action Research are purposefully multidisciplinary and eclectic, adopting theories and methods from what ever source the participants jointly believe to be relevant. The authors suggest this may make orthodox social researchers uncomfortable. The authors argue that the researcher should seek the simplest possible model, not merely the simplest model. They maintain that social reality is itself a complex, multi-causal web of forces and that eclectic models are the simplest models that we can apply. Greenwood, Whyte et al (1993, P. 178) state rather disparagingly that:

> *"….Nothing less will do, no matter how much social researchers would wish to simplify things for their own convenience or sense of security……The procrustean bed of many orthodox social researchers will not do here."*

3.3.5 Guidelines for Good Action Research

The limitations outlined above provide valid criticism if Action Research is conducted badly. Building on the responses to the limitations in Section 3.3.4 and to counter such criticism Baskerville and Wood-Harper (1996), suggest a number of quality guidelines that researchers should review prior to the adoption of Action Research. These are summarised below:

- Is Action Research appropriate for the domain?
- Has a formal research agreement being established?
- Is there a theoretical foundation for the problem?
- Is there a plan for the methodological collection of data?
- Will input gained from subjects be fed into the cyclical process?
- Are iterations planned?
- Is the output intended to have large generalisation claims?

Incorporating these important questions and providing a prescriptive associated set of criteria, Davison, Martinsons et al. (2004), provide a more recent set of principles for Canonical Action Research, which is adopted for the study and reviewed in more detail in Chapter 6.

Table 3-3 – Principles for Canonical Action Research (adapted from Davison, 2004)

	Principle	Criteria
1	Researcher-Client Agreement	• 1a) Did both the researcher and the client agree that CAR was appropriate for the organizational situation? • 1b) Was the focus of the research project specified clearly and explicitly? • 1c) Did the client make an explicit commitment to the project? • 1d) Were roles and responsibilities specified explicitly? • 1e) Were the project objectives and evaluation measures specified explicitly • 1f) Were the data collection and analysis methods specified explicitly?
2	Cyclical Process Model (CPM)	• 2a) Did the project follow the CPM or justify any deviation from it? • 2b) Did the research conduct an independent diagnosis of the organizational situation • 2c) Were the planned actions based explicitly on the results of the diagnosis • 2d) were the planned actions implemented and evaluation? • 2e) Did the researcher reflect on the outcomes of the intervention? • 2f) Was the reflection followed by an explicit decision on whether or not to proceed through an additional process cycle? • 2g) Were both the exit of the researcher and the conclusion of the project due to either the conclusion being met, or some other clear justification?
3	Theory	• 3a) Were the project activities guided by a theory or set of theories? • 3b) Was the domain under investigation relevant and significant to the interests of the researcher's community of peers as well as the client? • 3c) Was a theoretically based model used to derive the causes of the observed problem? • 3d) Did the planned intervention follow from this theoretically based model? • 3e) Was the guiding theory, or any other theory used to evaluate the outcomes of the intervention?
4	Change through Action	• 4a) Were both the researcher and client motivated to improve the situation? • 4b) Were the problem and its hypothesized cause(s) specified as a result of the diagnosis? • 4c) Were the planned actions designed to address the hypothesized causes. • 4d) Did the client approve the planned actions before they were implemented? • 4e) Was the organisation situation assessed comprehensively both before and after the intervention? • 4f) Were the timing and nature of the actions taken clearly and completely documented?
5	Learning through reflection	• 5a) Did the research provide progress reports to the client and organizational members? • 5b) Did both the researcher and the client reflect upon the outcomes of the project? • 5c) Were the research activities and outcomes reported clearly and completely? • 5d) Were the results considered in terms of implications for further action in this situation? • 5e) Were the results considered in terms of implications for action to be taken in related research domains? • 5f) Were the results considered in terms of implications for the research community (general knowledge, informing/re-informing theory? • 5g) Were the results considered in terms of the general applicability of CAR?

Davison (2010), has given more recent thought to the principle of theory, suggesting opinion is divided on whether theory should be "imposed" on the phenomenon of interest or should emerge as the diagnosis proceeds.

Checkland and Holwell (1998), suggest that researchers need to be open to changing their understanding of the situation and their methodology for studying

the area of concern. The authors go on to say that without being open to these potential changes, it is difficult to see how the output of action research can be more than anecdotal. They go on to say that it is the neglect of these principles that leave Action Research vulnerable to positivist critics resolutely hanging on to hypothesis testing as a way of researching social phenomena.

3.3.6 Customer Experience and Action Research

The key objective of this dissertation is that the output should have direct relevance to non academic (private and public sector organisations) and academic audiences. It is felt in order to do this qualitative research should be one of the approaches adopted. A particular strength of qualitative methods is their value in explaining what goes on in organisations (Avison et al., 1999). Action Research it appears is appropriate when the research question relates to describing an unfolding series of actions over time in a given group, community or organisation (Coughlan & Coghlan, 2002).

The relevance of the Customer Experience and technology study area to Action Research can be stated in a number of ways. Firstly the interplay of customers, store staff, competitors, observers etc, is a social phenomenon, suggesting a qualitative approach. Secondly that complexity of the situation suggests a soft systems approach. Thirdly, while we have a hypothesis that the planned changes will improve the Customer Experience, both practitioners and researchers are open and planning for the "truth" to emerge and will introduce other changes based, based on the outcome of the early changes.

Coughlan & Coghlan, (2002), emphasise the creation on knowledge or theory in their definition of Action Research. They suggest that Action Research overcomes deficiencies often associated with traditional research topics and methods, in so much as it has broad relevance to practitioners, and it is applicable to unstructured and integrative issues while still making valuable contributions to theory. In

particular its relevance to practitioners and its applicability to integrative issues served this study very well.

The economic, competitive, behavioural, political and organisational impacts on the study cannot be underestimated, and a method that can easily incorporate qualitative aspects, like Action Research, helps draw out these different aspects and provides a useful backdrop to the analysis of the results. In fact a particular strength of qualitative methods such as Action Research is their value in explaining what goes on in organisations (Avison et al., 1999).

Finally an important determinant of the methodology choice is what is available to the researcher and the preferences of the organisation. Convincing an organisation to take part in a study can be a challenge, so if they tend to prefer more action oriented approaches, researchers need to seize the opportunity. Most of the time a good compromise can be reached that meets the needs of both researcher and the organisation.

3.4 The Organisation Setting

The research organisation, Telco, is a mobile telecommunications company with network operations in several countries servicing millions of customers. The research was conducted in the context of the UK business, which has core areas covering communications (voice and video calling etc.), media and entertainment (television, music, sport etc.) and information services (wireless Web, news etc.). The organisation is supported by traditional directorates, namely Sales and Retail, Marketing, Customer Services, Technical, Finance, Logistics and Human Resources. Telco also has a significant contact centre operations abroad and several hundred retail points of presence across the country.

Mobile voice revenue growth has slowed significantly with the UK market achieving just 1.6% in 2008, compared to an average of 7.7% annual growth over the previous five years (OFCOM, 2008). During Q3 of 2008, the researcher and

Telco formally decided to take action on what could be done, following visibility of the UK voice subscriber growth figures and the publishing of the UK mobile customer satisfaction survey by the external organisation J.D. Power and Associates, which was critical of Telco's customer satisfaction performance.

Customers within the telecommunication industry are often segmented into different groups, based for example on gender, age, location, socio-demographic grouping, and profit contribution. One main differentiator between customers concerns contracts versus pay as you go (PAYG). With contracts, customers have a periodic agreement (typically 12 months, 18 months or 24 months) and the customer is locked into monthly payments until the contract expires. If the customer wanted to leave before the end of the contract, the customer is legally bound to honour the financial payment until the end. With PAYG, a customer purchases the handset (which is typically more expensive than if acquired under contract) and then buys vouchers of air time, but there is no continuing financial obligation to the mobile operator. The study chose to focus on contract customers, as there tends to be more customer details collected and logged with contract customers, plus there customers were more likely to be more responsive to poor experiences, due to the ongoing financial commitment.

For a considerable amount of time Telco had been keen to reduce the percentage of customers that were voluntarily leaving their network (or churning to use an industry expression) and strongly believe that improving the experience its customers receive would be a significant factor in improving this situation. As a result senior management viewed that tackling customer satisfaction (and therefore customer experience) was important in the fight to win and retain customers. At the outset of this study, the annual churn percentage for Telco was 44% per annum, where as the industry average was thought to be 25%. This clearly was impacting Telco's ability to increase market share and maximise its profit levels. Telco believed that taking part in the study would provide insights and would support the quest to reduce churn. For the researcher, providing practical grounding for the researcher's PhD was a key benefit and this also

enabled the university to demonstrate knowledge transfer in action, (a university objective), and help develop the relationship between the organisations and the fostering of opportunities for future work partnerships.

3.5 Research Design

3.5.1 Action Research Cycles and Data Collection

Figure 3-5 summarises all the data collection activities, which are documented against the phases of the Canonical Action Research phases in the two Action Research cycles. The diagram illustrates the linkage between the Action Research Cycles One and Two, where the conclusion of the specified learning phases feed into the diagnosing phase of Cycle Two. This ensures that Cycle Two builds on and employs any emergent theory generated in Cycle One.

The evaluation phase in Cycle One is focused on reviewing the relationships between the experience constructs and whether the customer subsequently went on to leave the organisation (churn). The proposition is that customers possessing experience indicators that point to poor experience will have a higher propensity to churn than customers possessing experience indicators pointing to good experiences. Although it is not possible to isolate the model from other factors that may impact a customer's propensity to churn, the relative view will provide an indication of whether, with the data available and the experience constructs identified, there is a relationship that supports the experience model.

For Action Research Cycle Two, the evaluation is more of a process in that the assessment evolves during all the research phases and is largely qualitative in nature. Due to the intended collaborative nature of the solution development, it was important that feedback was received at multiple points during the evolution of the prototype. The team at Telco, where most of the feedback was received

from, had representation of the different areas of the business and represented the front-line areas, which was the intended target of the prototype.

Additionally it was important to gain an evaluation of whether the entire framework could be implemented in totality, and through this evaluation drive out any obstacles to successful implementation. To establish this, five in depth semi structured interviews were conducted, with senior managers in Telco, to assess the overall viability of the solution and to examine obstacles. The directors were responsible and accountable for the business performance of Telco in the area of Customer Experience, so were well placed to provide opinions and contributions.

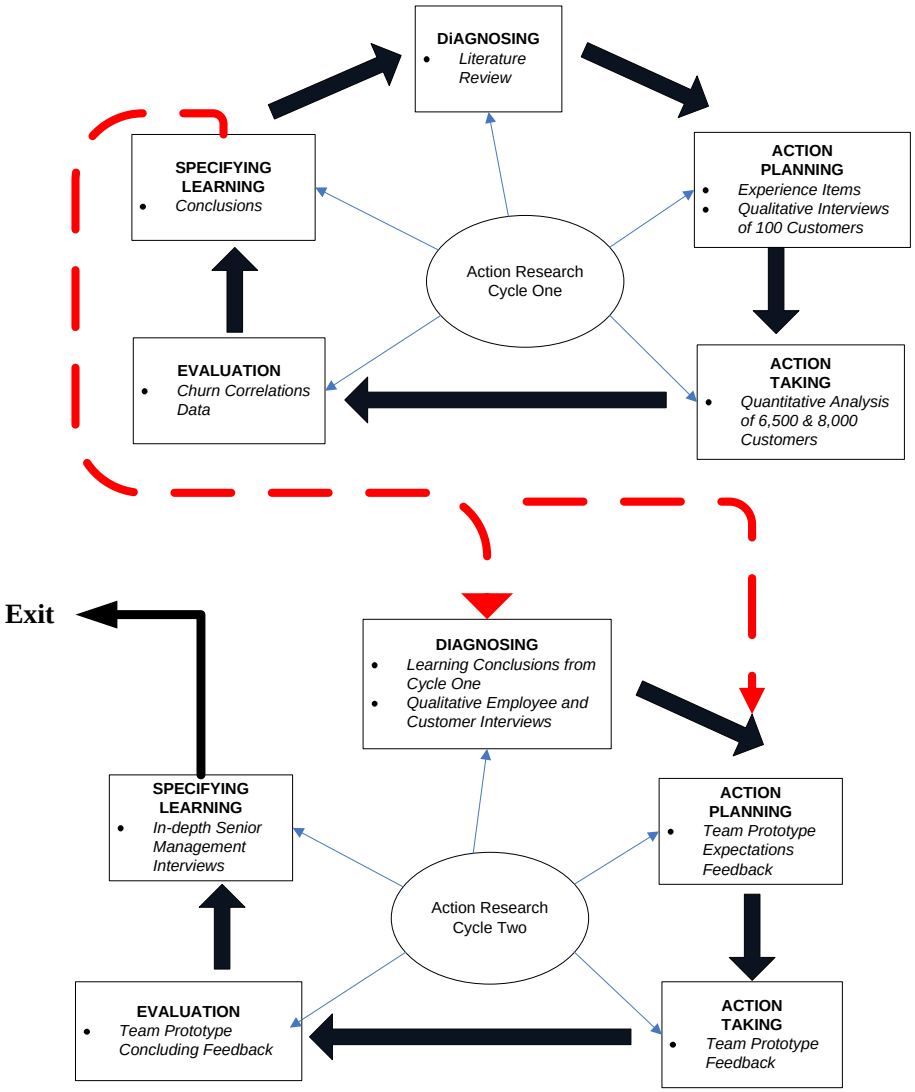

Figure 3-5 – Data collection at each Action Research Stage

3.5.2 Data Collection

Four main data collection techniques were employed during the study. These were observational, questionnaires, quantitative data analysis and interviews, the combination of which aligned to the mixed methods approach within the Action Research framework. The use of different data sources and applying different techniques can be said to triangulate or ground theory. Grounding of action knowledge has been described as presenting good reasons for the theory, so other people can accept it as valid (Agerfalk, 2004), who proceeds to identify three grounding processes: (1) Internal grounding which includes reconstructing and articulating assumptions that might tacitly be taken for granted; (2) External grounding which focuses on external relations and can include the use of existing explanatory theories; (3) Empirical grounding on knowledge through application and observations, including assessments of it practicability. The study tends to adopt more of an empirical grounding process. The next paragraphs provide an overview of the generic techniques and conclude with the specific ones selected for the study.

Quantitative Data Analysis

In order to evaluate the linkage between experience items and profiles and profiles with churn, two data sets (containing experience and churn data relating to 6.500 and 8,000 customers) are statistically assessed, based on propositions regarding the relationships between the constructs / data. Proposition in this sense tend to be formal statements of predictions derived from evidence from earlier research and theory or simply the result of a hunch (Breakwell, Hammond & Fife-Schaw, 1995). The propositions are tested by manipulating one, or some, of the variables (Preece, Rogers & Sharp, 2002).

The statistical methods and considerations identified are:

- Correlation analysis: determines the extent to which changes in the value of an attribute (churn: whether a customer stays or leaves) are associated with changes in another attribute (experience: the individual or combined

experience of that a customer receives). The correlation coefficient is a measure of the relationship between two attributes or columns of data. The correlation coefficient values can range from -1 to +1. A value near 0 indicates little correlation between attributes; a value near +1 or -1 indicates a high level of correlation. When two attributes have a positive correlation coefficient, an increase in the value of one attribute indicates a likely increase in the value of the second attribute. For a negative correlation coefficient, one attribute shows an increase in value, the other attribute tends to show a decrease.

- Linear regression: The basic goal behind simple linear regression modelling is to find the line of best fit through a two-dimensional plane of paired X and Y values (for example, churn and aggregate experience score). Once this line is found using the least-squared-error criterion, then one can perform various statistical tests to determine how well this line accounts for the observed variance in Y scores (for example how churn differs with different aggregate experience scores. A linear equation $y = mx + b$, has two parameters that must be estimated based on the X and Y data provided, which are the slope (m) and y intercept (b).

- Logistic regression: This is an approach to prediction, like linear regression, however, with logistic regression, the variables are more likely to follow a logistic distribution (i.e. non linear). A chi-square test is used to indicate how well the logistic regression model fits the data.

- Significance Tests: These are employed to show that the statistic is reliable. It doesn't mean the finding is important or that it has any decision-making utility. Significance is a statistical term that tells how sure you are that a difference or relationship exists. To say that a significant difference or relationship exists only tells half the story. We might be very sure that a relationship exists, but is it a strong, moderate, or weak relationship? After finding a significant relationship, it is important to evaluate its strength.

> Significant relationships can be strong or weak. One important concept in significance testing is whether you use a one-tailed or two-tailed test of significance. When your research hypothesis states the direction of the difference or relationship, then you use a one-tailed probability. For example, poor experience scores lead to churn. A two-tailed test is not restricted to one direction (Coolican, 2009). For example there is a relationship between experience and churn (so in additional to the one tail example above, good experiences lead to more customers staying).

Observational

The alternative to laboratory studies is the use of field studies, which situates the participant in their natural real world environment, and allows the experimenter to capture interactions between systems and other people, that would not have occurred in the laboratory (Coolican, 2009). In field studies, the participant interacts in real world conditions of ambient noise, movement, interruptions, and distractions, which are hard to replicate in the laboratory and which enables results to be generalized to the real world, thus promoting external validity.

Questionnaire

Questionnaires are one of the most utilised research techniques for gathering structured information from individuals (Coolican, 2009). Usually questionnaires are constructed for a specific research topic and tend to gather various kinds of data such as current opinion or patterns of behaviour. A questionnaire was specifically designed for the customer exit interviews in Action Research Cycle One and in the diagnosis phase of Action Research Cycle Two in order to collect data from customer and employees. Details about each questionnaire are discussed in Chapter 4 and Chapter 5.

Interviews

For the Senior Management discussions, the researcher planned to use interviews to collect information from the participants. An interview is considered to be a good method for collecting qualitative data. The interview may contain both open-

ended questions and closed questions. There are many types of face-to-face interview techniques ranging from fully structured to unstructured. Coolican (2009) describes various types of interviews: non-directive; informal; semi-structured; structured but open-ended; fully structured. The study focused on structured but open-ended.

- Structured but open-ended interview: The interviewer asks a pre-set of open-ended questions in a predetermined order. This keeps the interviewer focused on gathering data and avoiding a two-way conversation. In this type of interview the interviewer can avoid the looseness and inconsistency that may occur in other types of interviews. However, the respondents can still respond in any way they choose. This type is used for the Senior Management discussions and is reported in Chapter 6.

The detailed data collection information included: Customer data records analysis; Customer interviews; Prototype feedback from Telco; Telco staff interviews; researcher field notes. The specific data collection methods are depicted in the table below, along with the key knowledge generation phases of the study: Literature review; 1st Action Research Cycle (model generation); 2nd Action Research Cycle (Prototype and Loyalty Action Response). The decision to use different data collection methods fit well with both the mixed method approach and the action research methodology and flexibility and adaptability are crucial hallmarks of good practice in these areas. Details of the statistical data analysis, interview questions and transcripts of senior management interviews can be found in the appendices.

Table 3-4 – Data Collections Activities

Literature Review	1st Action Research Iteration	2nd Action Research Iteration
▪ Qualitative review of customer experience and telecommunications literature	▪ Field Notes ▪ Quantitative analysis of 2 customer data sets (6,500 and 8,000 respectively) using correlation analysis, linear and logistics regression and appraised using 2 tailed significance tests. ▪ Questionnaire devised for gathering face to face feedback from 100 Telco & non Telco Customers.	▪ Field notes ▪ Fully structured qualitative interviews of front line staff across 4 locations. ▪ Fully structured interviews of a small sample of customers ▪ Prototype feedback ▪ In-depth structured but open ended qualitative interviews with 5 senior managers.

The multiple data collection activities are intended to supporting the empirical grounding of the knowledge generated. Action research is said to lend itself strongly to such pluralist approaches, which facilitate the production of both theoretical and practical knowledge (Chiasson, Germonprez & Mathiassen, 2009).

3.5.3 Evaluation

The table above shows that various complementary data collection methods were employed in an attempt to triangulate the results and increase the validity of the findings; the intention being that the limitations of different methods would be counteracted by others, producing a stronger end result.

Action Research Cycle One Evaluation

The evaluation criteria for the success of cycle one centre around:

- Data availability – examining which data elements were available or accessible to allow comprehensive analysis to take place.
- Experience and Churn relationship – Analysing whether a relationship between aggregate experience and churn could be established?
- Desire of Telco – Review whether the results would generate enough interest in Telco to continue the study.

The validation of the customer experience concepts were to be arrived at via a process of data triangulation. This process synthesised data from the customer experience literature, the JD Power Survey (both areas previously discussed) and the thoughts from real customers, with the aim of further validating the customer experience items and their relative importance. This triangulation along with iterative discussions and input within the team ensured the interpretation of the results would be grounded, thus providing sound foundations upon which to build a Customer Experience Model.

Table 3-5 – Details of Analysis for Action Research Cycle One

Quantitative Analysis Details	Qualitative Analysis Details
• The analysis is based on two datasets 6,529 customers and 8,145. • The samples contained 50% of customers who churned and 50% who stayed with the operator. • The churn or stay date was the end Dec 2008 • The samples contain customers on 12 or 18 month contracts, with the volumes mirror the split across the entire based (c. 33% and 67% respectively). • The analysis period covered data from month 4 of the new or upgraded contract to months 9 (for 12 month contracts) and from month 9 to month 15 (for 18 month contracts). This was because we wanted to capture the in-life experience. • All other aspects of the data mirror the entire customer population base.	• The survey of real customers involved a 5 minute face to face questionnaire interview with Telco customers as they were entering or leaving Telco retail stores. • This was conducted simultaneously across 4 different geographical locations. • A sample of 94 customers were surveyed, with a 59% to 41% male to female gender split respectively and a spread of age ranges from 18 to 65. • Telco advised that this demographic split was representative of their total customer base.

Action Research Cycle Two Evaluation

The evaluation criteria for the success of cycle two centre on:

- Match to existing systems – Reviewing whether the prototype solution had the same look and feel as existing front-line system and presented useful experience information.

- Front-line and team feedback – Considering if this solution fitted into existing business processes and supported front-line employees in their roles.
- Team feedback – Examining whether the prototype articulation of the Customer Experience Framework has practical utility.
- General understanding of the business case – Assessing the costings for a production solution and determining what the expected return on investment could be..

Formally, prototype evaluations can be conducted in a summative manner, where the design is evaluated after it is complete or nearly complete, or in a formative way, where the evaluation beings early as is continually conducted the development process (Hix & Hartson, 1993).The idea with formative evaluation is that it provides time for modifications to be made to the design, and this approach is sometimes mistakenly thought to be not a rigorous and too informal when compared with summative approaches. However the iterative nature of the development and the close collaborative working environment meant that a formative approach had a greater chance of leading to a prototype that met with Telco's requirements. In addition formative evaluation necessitates the collection of data, which is used to develop an informed view of the work. Generically this can take the form of objective data such as performance bench-marking and testing against pre-defined use cases or subjective data represented by the opinions of key stakeholders. This said, prototyping can serve as vehicle for organisational learning, with the development process serving as a means of exploring the meanings and purposes behind action (Checkland & Holwell, 1998).

3.6 Summary

Chapter 3 ascertained that there are a number of valid theoretical meta-models /world views that can be adopted to form the philosophical core of the research methodology. The demand for practical improvement, both from the researcher and Telco meant that pragmatism was deemed the world view that aligned best

with this desire and best suited the type of organisation Telco had developed into and the environment it operated in. In analysing the research aim, it seemed that the study would benefit from elements of both quantitative and qualitative approaches and therefore a mixed methods approach was adopted. Despite the criticism of Action Research, much of which refers to poor research practice in general, and with the application of sound guidelines for good Action Research conduct, Action Research suited the pragmatic and mixed methods approach and was selected as the method to use.

The study followed a Canonical style of Action Research reviewing carefully the diagnosis, action planning, action taking, evaluation and learning aspects. The research design consisted of the potential for 2 Action Research Cycles. This first cycle was designed around the quantitative analysis of churn data for c. 6,500 and c. 8,000 customers to ascertain linkage between experience indicators and churn. It was also devised to include qualitative output from Telco customers, concerning their attitudes to experience to help provide triangulation and confidence that the correct experience categories and items were being selected. For the Second Action Research Cycle, a prototype was envisaged, to help hone ideas and thoughts from the First cycle and provide a realistic solution in depicting how a solution could be put together. This cycle would have additional validation through feedback captured during interviews with Senior Managers.

Action Research is presented as offering an appropriate and serious alternative to the hypothesis testing approach favoured by natural scientists. Action researchers however must endeavour to ensure the research process is recoverable. The chapter maintains that if the research is well organised, researchers should be confident that the results can stand up to plausibility claims and critical suggestions that the results are merely anecdotal.

Chapter 4: Model Development (Action Research - Cycle One)

4.1 Introduction

The previous chapters have endeavoured to illustrate the link between Customer Experience, satisfaction and customer retention and that much of the experience data lies latent in organisations' information systems. Developing a model that enables organisations to understand experiences, harnessing information that resides within the organisation's information systems, supports organisations in taking appropriate action. Mobile operators initially need to focus on the poor experience being received by customers and that basic "support services" are a key determinate in this. Progressing with these premises as foundations, the study seeks to confirm quantitatively the link between poor experiences and customers switching operators. This quantitative analysis involves the analysis of two real customer data sets, covering 6,500 and 8,000 customers respectively. The robustness of this approach is also triangulated using more qualitative analysis, using data gathered from 100 mobile customers in retail store exit interviews.

This chapter describes the adoption of Action Research in the development of the customer experience prototype and explains the activities undertaken during the five canonical research phases. Section 4.2 describes the problem environment and presents the diagnosis information that lead the research to devise the choose course of action. Section 4.3 illustrates the action planning process, the creation of the model and the selection of the statistical techniques with which to analyse the experience data. Section 4.4 describes the statistical analysis and presents the results in the form of statistical correlations and r-squared tables to indicate the relationships between the experience items and churn and the impact that these

items potentially have on churn. Section 4.5 evaluates this information in the light of the aim and objectives if the study. Section 4.6 reflects on the theoretical and practical learning points. Section 4.7 summarises the key aspects which feed into the Second Action Research Cycle.

4.2 Diagnosing

Against the backdrop of a desire from Telco to look at Customer Experience as a way of improving retention a cross functional team was formed, which included from the researcher and staff from Telco representing Sales and Marketing, Data Analytics, IT and Network Engineering. The various perspectives that came with the functions were as follows. The Sales and Marketing representatives were under considerable pressure to come up with initiatives that did not focus primarily on new customer sales, but instead focused more on retaining existing customers. The network engineering team were keen to assist and contribute as this directorate was often seen as the source of where most of the customer issues originated, due to coverage and other technical problems. The view from the Chief Technology Officer at the time was that "while the network may be the place where many problems originate, Telco's front line sales personnel are obsessed with new acquisition to the detriment of retention, and Telco's handling of issues through customer services widely exacerbates the issues to epic proportions". This may explain why the network and engineering representatives were keen to support the study, and were open to investigating the subject holistically. The positioning of the data analytics team was that they were keen to develop new and improved ways of analysing company data, but they had obtained inconclusive results from working with a third party provider, who they had engaged several months ago to look at the development of a solution that attempted to model customer behaviour. This made them a little sceptical about the study.

Team members were fully empowered members of their directorates, who had influence and decision making authority across the organisation. They did not

however have the authority to commit resources other than themselves to assist with the project, as this was a study / pilot they had no authority to commit funds for systems development. The researcher had worked in a number of successful programme delivery engagements with Telco in the past and so there was a level of trust between the researcher and the Telco team. It was also hugely beneficial to the team that the researcher had a deep understanding of the culture and political environment at Telco. The researcher's experience of Telco was of an organisation that was high on drive, energy and commitment to improvement, but low on structure, process and organisation. So whilst there was a desire and genuine commitment to improve things it was often difficult to align the rest of the organisation coherently to make this happen.

Having discussed the broad desire to address churn (which for Telco stood at 44% per annum, against an industry average of 25%) by looking at the area of Customer Experience, the researcher was invited to present the latest research in the field of Customer Experience with a relevance to Telco and the mobile industry. This covered the key aspects laid out in Chapter 2. Against this backdrop, the team agreed that Telco's existing marketing approach could be enhanced to manage customer retention more effectively. The team proposed that existing cross-sell/up-sell offers (which were very sales focused) could be complemented by an enhanced analysis of customers that were having a poor experience, and therefore have a higher propensity to churn. The team concluded that these experiences were likely to be driven by issues related to handset and devices value for money, call quality and coverage, customer services and issue resolution, as is described in the JD Power Survey literature, (which was the widely accepted measure of customer satisfaction in the UK mobile industry at that point).

In broad terms, an integration of an improved churn model (to account for experience factors) and retention strategies was proposed to allow the Sales and Marketing teams to better propose real-time actions to address retention for customer inbound processes (inbound concerning calls into customer services or

customers walking into retail outlets). It was believed that this would also provide benefits for the outbound marketing processes (outbound concerning situations where Telco initiate the call to the customer for problem solving, issue resolution or retention activities). Consideration was also to be given to how actions are presented and contextualised across different channels (contact centre, retail, handset, Web).

Toward the end of this diagnostic phase, the team concluded that the aim of the study would be to develop a pragmatic approach to indicating the state of a customer's experience i.e. a Customer Experience Monitoring score (CEM score), which would provide benefit to all of Telco customer communications planning, inbound and/or outbound. The team were aligned to the idea that in order to improve Customer Experience, you need to be able to monitor it (Meyer & Schwager, 2007) The focus of the work was to deliver a credible foundation and recommendations for how a customer experience indicator could be built and deployed at Telco. Consideration was also given to how marketing interactions would be presented and contextualised across different channels (contact centre, retail, handset, Web). It was also intended that the results would provide input to forthcoming projects.

These broad aims are distilled into 4 sub objectives:

- Reviewing existing and proposing new internal modelling capability with a view to enhancing the effectiveness of models pertaining to customer retention
- Facilitation cross-functional working as the project is set-up to provide a holistic and cross functionally engineered solution.
- Setting the foundation for intellectual and practical feeds into the future projects
- Consideration of how real-time marketing can/should be deployed in different channels.

The broad aim of proposing a new internal modelling capability was critical in persuading Telco to take part in the study. Whilst Telco admired from a distance the academic theories put forward, they were ultimately interested to see whether new approaches may help then gain more revenue, save costs or improve their understanding of what was happening, in this order. As mentioned, it is often difficult for commercial organisations to give time and resources for potential medium term gains and it was the discussion on the broad aim more than any other that convinced the team and Telco to proceed.

4.3 Action Planning

The construction of an outline plan was undertaken collaboratively, but took more time than expected (approximately 8 weeks). The main reasons for the delay centred around agreeing definitions of terms and deliverables. There was also a long debate centred on whether Telco already possessed a Customer Experience Model in the form of an existing "Engagement Index". Telco described its engagement index as "A customer specific metric that will allow a score to be allocated to each customer according to their level of engagement with the 3 brand. It is NOT the same as satisfaction, advocacy or churn".

From the documentation available, the engagement index model was based on a set of responses that Telco received from a customer survey questions which centred around: advocacy; overall satisfaction and likelihood of renewal; billing; handset; feeling valued; getting value for money; network; trust. The questions were linked to the JD Power survey metrics that illustrated the greatest differentiators of "Loyalists" versus "Switchers". The scores were modelled using behavioural data, with the score for each customer ranging between 1 and 100, with higher numbers indicating a greater amount of engagement. In reviewing the distribution of scores, the mean was 76, with the distribution tightly clustered around this point.

The purpose of that model was described as "primarily to overlay with other models and thereby enhance them providing a greater ability to influence customer behaviour……if we have an indication of how they feel about us…individual treatments can be made for individual customers, depending on their score and how it changes over time". Much of the team debate centred on whether individual treatments could be made for individual customers, as the marketing representative felt that the engagement index was too vague and didn't allow them to take specific customer actions.

Although the team concluded that the Customer Experience Monitoring model and Engagement Index were very similar in the way that they were constructed and the philosophy adopted, the CEM concept differed from Telco's Engagement Index (EI) as follows: (a) The CEM Model seeks to include the impact of customer services; (b) picks up critical experiences as well as degradation in a customer's experience overtime. Also Telco had the chance to see the CEM model as it developed, and view a capability that had the potential to identify areas of poor experience and therefore give Telco a foundation for responding.

These additional aspects were agreed to be important factors as to whether a customer is open to up sell or cross sell offers from 3 and in their decision making on whether to stay with 3. In addition much of the detail surrounding how the engagement model was constructed and how the model worked was not available, as the solution was built by an outside third party company, who did not provide extensive documentation. This did not fill either the customer analytics or the marketing teams with confidence in using the engagement model for company wide purposes. The lack of ability to use the model in anger, made the team more interested in starting a fresh and building a new model.

Table 4-1 – Team Activity Plan

Activity	Description	Owner	Date
1	Review and present back the latest thinking on Customer Experience	Researcher	December
2	Customer Experience Indicator development and build	Joint Team	January
3	Provision of 1 of 2 sample data set for model validation	Data analytics & Researcher	February
4	Provision of 2 of 2 sample data set for model validation	Data analytics & Researcher	February
5	Calculation/estimation of the opportunity/ business case	Marketing & Researcher	March
6	Presentation of results (including retail considerations)	Joint Team	March
7	Pilot deployment/implementation	Joint Team	April
8	Measurement against expectations	Telco	May
9	Roll-out decision and roll-out planning	Telco	June

The activities of concern, and those targeted to be completed for this Action Research Cycle were activities 1 to 4, but Telco were keen to think positively and want to provide visibility of what the future activities (5 to 9) may look like to galvanise support early. The specified deliverables were documented as:

- Documentation detailing the approach, reasoning, logic and explanation of the models used.
- Provision of alternative customer experience/churn triggers, aimed at enhancing the churn propensity forecasts.
- Comparison of existing model version revised model performance characteristics.
- Presentation of how retention focus can be deployed in a practical way through the inbound channels.
- Practical recommendations for how Telco could better interact with customers using inbound real-time solution, via the retail channel.

The researcher requested the following from Telco: (a) Joint ownership for the timeframes, deliverables and benefits realisation; (b) regular attendance at meetings and/or workshops – (limited to no more than 2 hrs per week, due to the work load on Telco employees from other projects); (c) data and information to ensure efficacy of research findings (e.g. business rules/logic; churn model data;

existing retention campaign rules); (d) visible senior management support/sponsorship.

4.3.1 Presentation of Latest Thinking on Customer Experience

A formal presentation was arranged as per the plan to allow the researcher to highlight the latest academic thinking in the area of Customer Experience. Much of the content covered the theories proposed in Chapter 2. The concept of using implicit data (i.e. data held) in Telco information systems to gauge a customer's in use experience was discussed in some detail. Also discussed was the idea of a customer journey, depicting how a customer's experience may change through time.

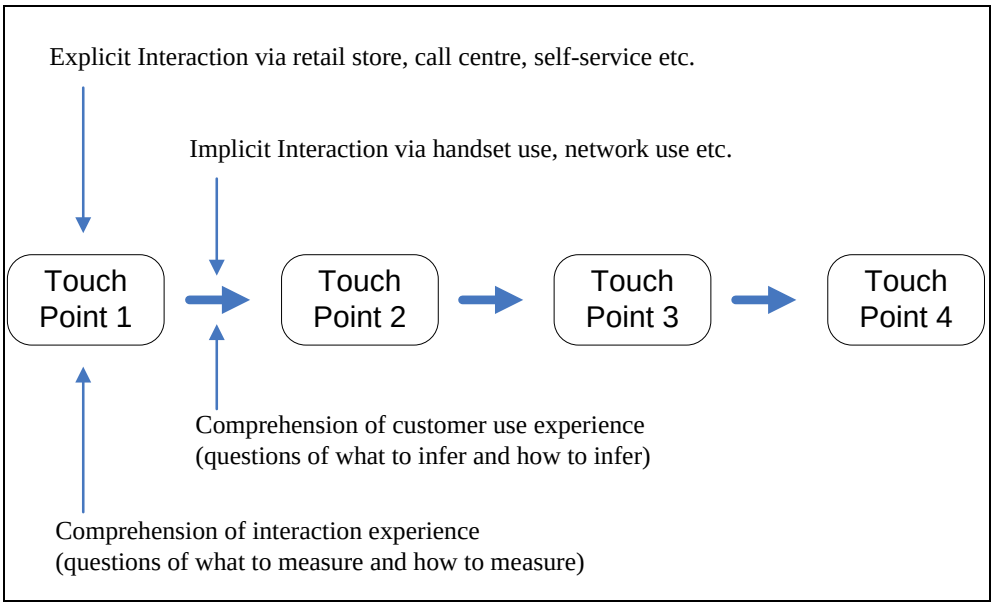

Figure 4-1 - Implicit & Explicit Data Capture

Figure 4-1, builds on (Reichheld, 1996) view of the limitations of relying solely on explicit measures of customer experience though sample surveys is highlighted here, with the idea of also using implicit data, often held within the information systems of many mobile operators (Nauck et al., 2006). Figure 4-2 employs the work of Reichheld (1996) in illustrating the concept of the customer corridor and

the peaks and troughs of an undulating total experience, as customers interact with the organisation at different touch points.

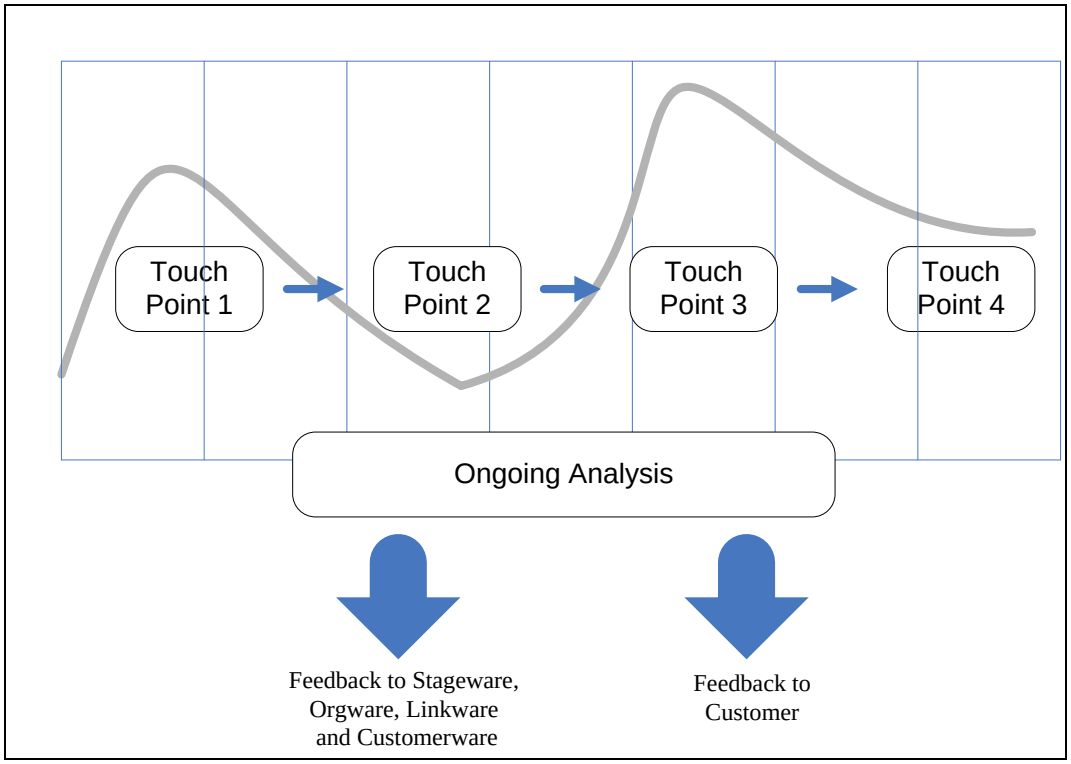

Figure 4-2 - Customer Journey with Feedback Loops

The concept of using ongoing analysis of Customer Experience and feeding this into how retail outlets are designed (Stageware), how the organisation needs to change or realign (Orgware), how teams needs to interact (Linkware) and what customer tools are required to support resolution (Customerware) were seen to be interesting topics see (Voss, Roth & Chase, 2008), but Telco decided these would be deferred to a later date. Telco were however interested in how ongoing analysis could be fed forward to customers in the form of service recovery, which would lead to a more human and emotional connection with customers, through a deeper understanding of issues and real desire to solve them (Seawright et al., 2008; Miller, Craighead & Karwan, 2000; Johnston & Fern, 1999; Johnston & Michel, 2008; Bell & Zemke, 1987). The presentation concluded with an agreement to develop the Customer Experience Model. The next step was for the data analytics

team to supply customer data to allow a Customer Experience Model to be built and validated.

4.3.2 Devising the Customer Experience Model

There was cross functional participation during the early stages of developing the model. One of most influential satisfaction surveys in the mobile industry and one widely seen as the barometer for assessing an operator's satisfaction rating and how it is performing against other operators is one developed by the global marketing information firm J. D. Power & Associates (J.D. Power & Associates, 2008). They assess overall contract customer satisfaction by reviewing seven key factors, with the relative weightings in brackets:

- Image (23%)
- Offerings & promotions (14%)
- Call quality / coverage (18%)
- Cost (14%)
- Handset (7%)
- Customer Service (14%)
- Billing (10%)

The JD Power categories were adopted as the basis, given the wide acceptance of this approach within Telco and across the industry as a whole. It was recognised that the J.D. Power survey normally operates at the macro company level, however the team believed it translated very well to the micro individual level. The items selected were those that would give a great implicit experience indication for each category. Meyer & Schwager (2007) in particular argue that companies must deconstruct their overall experience into component experiences and proposes that organisations may choose to review past, present or potential patterns of customer experience data, with each pattern yielding different types of insight.

Over a series of workshops involving all members of the team and the researcher, the categories were decomposed into the key experience items that represented the

respective experience categories. The team decided to adopt the category weighting from the JD power survey and assign each item as proportion of the category weighting. Whilst this was an arbitrary process, it was based on the collective experience of the team. The image category, it was felt, would be extremely difficult to decompose into experience items and therefore the 23% was allocated to the remaining categories in proportion to their original weighting. The team decided that image was a component part of each of the remaining six categories. An ability for the model to be updated for each customer interaction in real-time would enable customer facing agents to have an "in the moment" view of the Customer Experience whilst they are interacting with them.

The aims for the system were that it would ultimately be able to track and score experience scores over a weekly or monthly basis. This would allow Telco to view how a customer experience items and their overall experience score changes over-time. The model was constructed to take account of Standard deviations and gradients of experience scores in an attempt to capture the rate at which a customer experience was deteriorating or the evidence of a catastrophic event. As noted in Chapter 2, there is evidence to suggest these major movements have a lasting impact on a customer's experience (Oliva, Oliver & Macmillan, 1992 ; Verhoef, Antonides & de Hoog, 2004), so the model could be devised to provide alerts when such occurrences happen.

Table 4-2 provides a summary of the essence of the Customer Experience Model, using the initial iteration approach (i.e. adopting J. D. Power categories without change). Each of the experience items were given a variable label (Xn).

Table 4-2 - Summary of Customer Experience Categories and Items

Experience Category	Category Weights	Experience Item	Description	Variable	Item Weights
Cost	0.1818	Cost competitiveness	Telco customers' cost per minute voice/text bundle versus the cost per minute bundle for the cheapest competitor	X1	0.66
		Bundle efficiency	Percentage of bundle allocation used per month	X2	0.34
Handset	0.0909	Repairs	Number of times handset has been in for repair in a 12 month period	X3	0.75
		Known issues	Known issues with existing handset	X4	0.25
Coverage	0.2338	Dropped calls	Percentage of dropped calls, based on totals number of calls made in that month	X5	0.40
		Set-up failures	Percentage of call set up failures, based on number of calls made	X6	0.30
		Home coverage	Coverage rating at home post code	X7	0.30
Customer Services	0.1818	Complaint repetition	Percentage of customer complaints with the same reason code in a 12 month period	X8	0.60
		Complaint volume	Number of customer complaints in a 12 month period	X9	0.40
Offerings & Promotions	0.1818	Decrease in voice usage	Percentage decrease in voice usage vs. previous month	X10	0.45
		Decrease in data usage	Percentage decrease in data usage vs. previous month	X11	0.45
		Decrease promotion usage	Percentage decrease in usage of latest promotional offer taken up	X12	0.10
Billing	0.1299	Billing complaints	Number of customer complaints regarding billing in a 12 month period	X13	1.00

The experiences items were driven out of a series of workshops set up to identify a realistic and representative set of experience items. Realistic in that there had to be a chance that data representing the experiences were accessible and representative in that they had to good proxy for that experience category. Detail of the experience items is as follows:

- Efficiency of Voice Bundle Usage: In attempting to gain a measure of cost or value to the customer, poor utilisation of a customer's allocated

bundle usage was adopted as the best measure from the data available. Taking an example of a contract customer paying £35 per month for 750 cross network minutes, where the customer only uses 100 cross network minutes per month, poor value for money results. The view here is that most customers at some point will discover this under utilisation and rather than simply changing tariff (if they can – some contracts would not allow this), they would become disenchanted and this would impact their experience of the service, prompting higher chance of leaving at the end of the contract. The team suggested that, based on previous internal studies, a low bundle efficiency utilisation of less that 25% causes an increased step change the propensity of that customer to churn.

- Handset Repair: Handset breakdown and consequently handset repair is a significant issue for mobile customers on two accounts. Firstly the absence of a phone is a great source of irritation to customers as a mobile phone is an integral part of many people's lives. Being without a phone is at best a massive inconvenience and at worst severely disruptive to social, commercial and family matters. Secondly the handset repair process is often fraught with issues, as operators have to disentangle the web of handset fault, from user error, network issues, intermittent faults etc., together with the logistics or collecting phones, sending them for repair and then returning them back to the customer. This situation often results in a significant delays and issues due to the handset process and not the handset fault itself and often irritates the customer more than the original fault and be a very dissatisfying experience for the customer.

- Home Coverage: Coverage and network issues feature highly on the list of issues that detract from a customer's experience. Ideally the researcher would have liked to have obtained dropped call and call set up failure information for each individual customer, but Telco did not

have reliable mechanisms to collect this sort of data for the study. In opting for a home coverage rating, the study was assessing in a binary fashion whether a customer was deemed to have good or bad coverage at their home address. The coverage rating was taken for calibrated national coverage maps that rate coverage geographically by assessing the radio strength in these locations. On the face of it, when assessing a mobile service, home coverage would not appear to be an appropriate measure, however Telco provide data that indicated that more than 75% of customer calls are made or received at their home post codes.

- Customer Complaints: Complaints usually represent a customer's dissatisfaction with their mobile experience. Again as with the handset repair process, the customer service process for handling complaints may prevent opportunities for customers to become even more satisfied. For example, if the customers feel they are not being listened to, if there is a delay in resolving the issue or if the customer feels that the organisation is not treating its issue empathetically.

- Change in Voice Usage: The rate of change in voice usage was used as a measure of whether customers were enjoying using the voice products and services. Whilst there may be other reasons that impact whether usage increases or decreases on the whole this appears to be a reasonable measure based on the experience information data available to the research team. To reduce unrelated impacts, the study compares the information on a quarterly basis. The team suggested that a reduction of greater than 50% quarter to quarter would increase the propensity of that customer to churn. This in some way is an attempt to try and measure changes in experience overtime.

- Change in Data Usage: The rate of change in data usage was also used as a measure of whether customers are enjoying using the data products and services. Again, whilst there may be other reasons that impact

whether usage increases or decreases on the whole this appears to be a reasonable measure based on the experience information data available to the research team. To reduce unrelated impacts the study compares data on a quarterly basis. Again the team suggested that a reduction of greater than 50% quarter to quarter would increase the propensity of that customer to churn.

- Cost Competitiveness: Cost competitiveness attempts to access the competitiveness of Telco tariffs against the rest of the UK industry. The complexity centres around comparing like with like, as the tariff plans can be subtly different and, in addition, keeping pace with changes in tariffs. The view here was to try and construct an experience item that accurately assesses whether a customer felt they were getting a "good deal".

- Dropped Calls: Dropped calls occur when a customer loses radio connection during a voice call. Dropped calls are usually represented as a proportion of successful calls. Therefore 2 dropped calls out of 100 represents a dropped call percentage of 2%, which was the industry average at the time of the study.

- Call Set-up Failures: Call set-up failures are a similar technical problem to dropped calls, but occur when a customer is trying to initiate a call. It is calculated in the same way as dropped calls (e.g. 5 unsuccessful call set-ups out of 100 call attempts represent a 5% call set-up failure rate). The team debated whether call set-up failures were more frustrating to customer than dropped calls, as these failures prevent the customer from even establishing contact. The team were unable to undertake any qualitative analysis to ground any decision, so as a baseline the team agree to give it the same weighting as dropped calls.

- Repetitive Complaints: These types of complaints relate to calls into Telco on the same issue. The team felt that this measure would provide a good experience measure, particularly in instances where a customer's data illustrates a high number of repetitive complaints.

- Changes in new service / promotions usage: A decrease in usage of the most recently accepted service or promotion was identified as a way of gauging a customer's happiness with that new service or promotion. This experience item was identified so as to be consistent with the J. D. Power Survey categories.

- Handset Known Issues: Problem handsets are devices which are known to have customer impacting issues. These can be intermittent faults or problems that occur with the handset during certain operations. All mobile operators tend to have handsets amongst their population base that exhibit these sorts of issues, although they try and keep them to a minimum.

- Billing Complaints: The collective experience of the team suggested that billing is a very contentious subject for customers. This is also indicated in the J.D. Power Surveys. Therefore complaints regarding billing would represent that the customer's experience was being impacted.

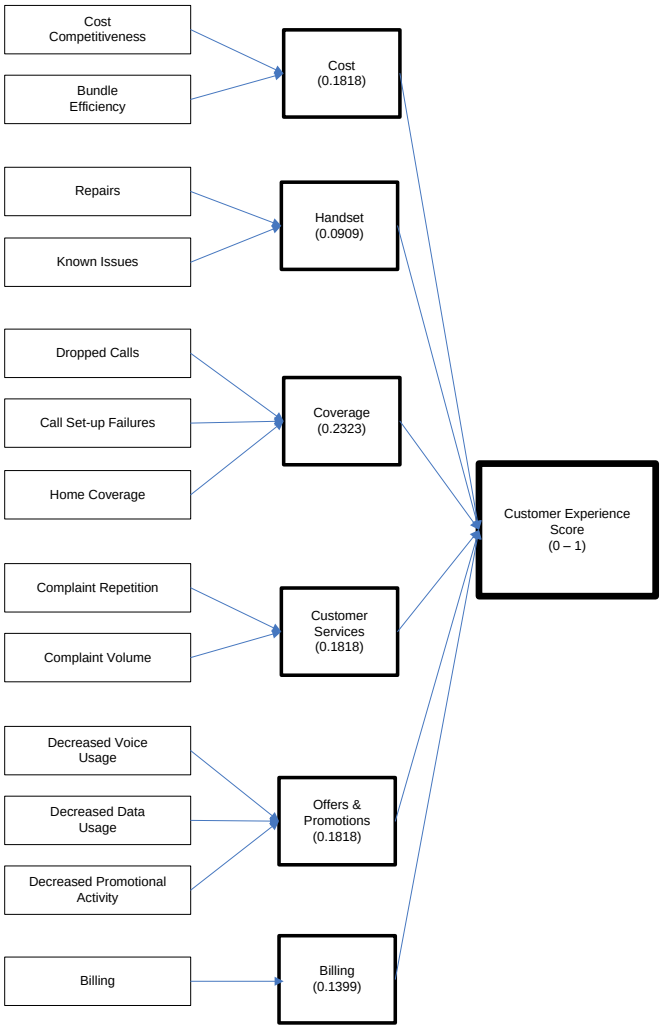

Figure 4-3 - Breakdown of Customer Experience Model and Weightings

A customer experience score can therefore be arrived at by aggregating the score for each category. The theoretical maximum would be 1.0., however any issues at the experience item level, will reduce the maximum value of that category and thus the overall experience score. Telco sanctioned the experience categories, but suggested more evidence would be required to validate the total aggregation score.

Equation 4-1 expresses this in the form of a logistic regression equation, whilst Equation 4-2 expresses this in the form of a linear regression equation.

$$EX = \frac{e^{xi}}{1+e^{xi}}$$

Where:

EX = Aggregate Experience

e = exponential constant

xi = (Constant + (w1*x1) + (w2*x2) + (w3*x3) + (w4*x4) + (w5*x5) + (w6*x6) + (w7*x7) + (w8*x8) + (w9*x9) + (w10*x10) + (w11*x11) + (w12*x12) + (w13*x13))

w = individual weighting for the experience item

x = individual item experience

For example:

w2 for bundle efficiency = (0.1818 * 0.34)

x2 = individual item experience score for bundle efficiency

Equation 4-1 - Customer Experience Score Represented as an Logistic Equation

$$EX = \sum_{1}^{n} xiwi + c$$

Where:

EX = Aggregate Experience

xi = (w1*x1) + (w2*x2) + (w3*x3) + (w4*x4) + (w5*x5) + (w6*x6) + (w7*x7) + (w8*x8) + (w9*x9) + (w10*x10) + (w11*x11) + (w12*x12) + (w13*x13))

c = constant

Equation 4-2 – Customer Experience Score Represented as a Linear Equation

4.3.3 Choosing a Statistical Approach to Validate the Model

The team were keen to establish a way of testing that the Customer Experience Model was a useful proxy for highlighting whether a customer was having a good

or a bad experience. One way would be to calculate customer experience scores for customers and then ask a sample of customers if the customer experience score accorded with how they felt they had experienced the service. It was felt that this would run counter to the central argument that surveys have many flaws, however, as explained in Chapter 2. Instead the team felt that an approach that involved correlating the customer experience scores with whether a customer chooses to stay with Telco or leaves to join another operator would provide a stern but objective test. The feeling was that any semblance of a link would be encouraging and would provide a sound commercial vehicle for discussion with senior managers.

The team were clear to state that they did not think Customer Experience was the only factor to be considered in churn, or indeed the most significant factor, though they believed that experience considerations were very much within the control of Telco to affect and influence. There were also the hard to quantify positive word of mouth benefits of providing good experiences that customers valued plus this approach, if it worked, would provide some view of what might need to change to improve the experience. Consideration would nonetheless have to be given to the fact that all customers are different and may have different requirements.

In determining the statistical basis for the model, the team considered a number of options. Neslin, Gupta et al., (2006), in their study of statistical methods, comprehensively investigated the performance of customer churn predictive models, across 2 telecommunications data sets (approximately 100,000 customers and 50,000 in each). They structured their experiment in the form of a tournament in which researchers from business and academia downloaded data from a publicly accessible website, estimated a churn prediction model on that data, and made predictions on two validation databases. A total of 33 participants submitted 45 entries. The authors identified that participants utilise five main approaches:

- Logistic – where the model builder uses logistic regression for estimation and exploratory analysis and stepwise procedures for selecting the variables.

- Tree – where the model builder uses decision trees for estimation, allocates a lot of time to the estimation task and uses several variables in the final model.
- Novice – where the model builder has no estimation technique preference, relies on common sense to select the variable, does not spend time on the exercise and does not divide data into calibration and holdout samples.
- Discriminant – where the model builder uses discriminant analysis for estimation and includes many predictors in the model
- Explain – where the analyst emphasises theory and data simplification tools such as factor and cluster analysis to select variables.

In their conclusion Neslin, Gupta et al. (2006) found that Logistic and Tree approaches performed relatively well, and equally so; the Novice approach was average performance; whilst Discriminant and Explain approaches had the lowest performance. Their implications for practice states that logistic regression or decision trees will result in a relatively good level of predictive ability. Each of these approaches are considered appropriate when the goal of the analysis is to predict the value of a known variable (e.g. churn), as opposed to trying to find patterns when the variable has not been identified (e.g. which product should be placed next to coffee in the supermarket to achieve maximum sales of both products).

In statistics, logistical regression is used for the prediction of the probability of an occurrence of an event by fitting data to a logistical curve. As with other forms of regression it makes use of predictor variables. For example, the probability that a person has a heart attack within a specified time period might be predicted from knowledge of the person's age, sex and body mass index. Logistic regression is used extensively in the medical and social sciences, as well as marketing applications such as prediction of a customer's propensity to purchase a product or cease a subscription.

In support of these conclusions, the data analytics team had previously considered decision trees, neural nets and logistic regression, and found logistic regression the optimum approach. They found that logistic regression gave the highest true positive results (where the model suggested the customer would churn and the customer went on to churn) and the lowest false positive result (where the model suggests the customer would churn, but they stay). The confusion matrix below, explains this in more detail, with the prediction percentages in brackets.

Table 4-3 - Confusion Matrix (12 month contracts)

	Predicted No (False)	**Predicted Yes (True)**	**Total**
Actual No (negative)	Correctly identifies people that won't churn – Telco take no action but still retain customer (61%).	Incorrectly identifies churners, as these customers would have stayed anyway. Therefore wasted effort and resources in trying to save (39%).	100%
Actual Yes (positive)	Incorrectly predicts that people would not churn, but they go on to churn – this represents a missed opportunity to save (26%).	Correctly predicts churners who go on churn (74%).	100%

In order to score better than chance, the true prediction needs to be greater than 50% and the false predictions need to less than 50%. As previously noted the benefit of retaining a customer far outweighs the costs of trying to save one. Therefore a high true-positive result and low false-negative result, provides Telco with the greatest economic value. In the medium term, the team believed that Telco would wish to improve performance on true negative and false positive scenarios, through re-calibration of the model, using new insights and fresh data sets.

Application of the logistic regression formula, Equation 4-1, results in a customer experience value of between 0 – 1. For presentational purposes this number was multiplied by 10 to give a value 0 – 10 in support of Reichheld's Net Promoter Scoring system (Reichheld, 2006) as described in Chapter 2.

The team concluded that the NPS was appropriate as an experience indicator, as it does not suggest a linear description of experience moving from good to bad, as

most approaches do: It starts with the premise that firms need to be aiming for 9s or 10s in their service delivery and experiences if they want to improve their chances of retaining customers and generating future incomes streams through positive word of mouth. The research adopted this scoring system for a range of questions for Telco customers.

4.3.4 Validation of the Experience Categories by Triangulation

Validation of the customer experience concepts were arrived at via a process of data triangulation. This process synthesised data from the customer experience literature, the JD Power Survey (both areas previously discussed) and the thoughts from real customers (described below), with the aim of further validating the customer experience items and their relative importance. This triangulation along with iterative discussions and input within the team ensured the interpretation of the results would be grounded, thus providing sound foundations upon which to build a Customer Experience Model. The survey of real customers involved a 5 minute semi-structured interview with Telco customers as they were entering or leaving Telco retail stores which were conducted simultaneously across 4 different geographical locations. A sample of 94 customers were surveyed, with a 59% to 41% male to female gender split respectively and a spread of age ranges from 18 to 65. Telco advised that this demographic split was representative of their total customer base.

When asked how they rated their experience with Telco at the moment, using a 0 – 10 scale (Reichheld, 1996), 34% were classified as promoters, 34% were passives and 32% were identified as detractors, indicating there is an opportunity for Telco to make improvements to their customer experiences. The following table shows responses to a question seeking the key reasons for their rating.

Table 4-4 – Reasons for Rating (by Promoters, Passives and Detractors, Total Sample)

Category	Promoters	Passives	Detractors	Total
Billing	0%	0%	3%	1%
Cost	13%	9%	13%	12%
Coverage	19%	13%	30%	20%
Customer Services	56%	56%	27%	47%
Handset	3%	9%	10%	7%
Problem	6%	13%	17%	12%
Products & services	3%	0%	0%	1%
Total	100%	100%	100%	100%

Interestingly at the overall sample level, it appears as though customer services has by far the biggest impact on the experience rating, with nearly half the customers sampled (47%) seeing this as the primary issue. However upon analysis, promoters place an even greater emphasis on customer services (56%), whereas detractors suggest that both coverage and customer services are key reasons for their rating (with 30% and 27% respectively).

When asked what Telco could do to improve the experience, the top 3 answers (excluding null answers) were:

- Improve customer service – (47%)
- Improve costs – (19%)
- Improve Coverage - (16%).

The results were presented to key Telco executives, who accepted the findings.

These results help to confirm that the research is focused on the more significant factors impacting experience in light of the data that was available within the organisation to validate the Customer Experience Model.

4.4 Action Taking

The key workings of the model centred on the promoter, passive and detractor categorisations of customers, to help determine whether action needs to be taken. The change in experience over recent months is suggested to provide an added

indication of the extent of the experience and therefore illustrates the significance of the action required to improve the experience. A combination of poor customer experience scores and changes in experience over time was used to provide key triggers for identifying when the customer had an increased propensity to churn. An analysis of the individual experience items that were most affecting the aggregate score could then be used to determine the type of response Telco need to undertake.

The next stage of action was therefore to focus on illustrating the validating the efficacy of the model, by analysing the relationship between experience scores, individual experience items and the decision for customers to churn or stay. The validation analysis is based on the analysis of 2 data sets (one of 6,500 and another of 8,000 customers), with each data set containing 50% of customers that churned and 50% that stayed. The data sets contained customers on 12 or 18 month contracts, which mirrored the split of Telco customer base (33% and 67% respectively). The analysis period covers data from Month 4 of the new or upgraded contract to Months 9 (for 12 month contracts) and Month 15 (for 18 month contracts). This timeline was taken because the team wanted to capture the in-life experience. The churn or stay date was Dec 2008. All other aspects of the data mirror the entire customer population base.

4.4.1 Data Quality

In practice, a number of significant issues were encountered while attempting to gain access to the data warehousing and source systems of Telco. The first was the availability of the information and the second related to the suitability of that data for the purposes intended. The planning stage described above arrived at a considered but idealistic list of experience items. However at the beginning of the action planning phases it was apparent that there were issues with some items.

Table 4-5 - Experience Items and Data Quality

Ok or Good Data	Unavailable Data	Unsuitable Data
Efficient use of Voice Bundle Allocation.	Cost Competitiveness	Handset known issues
Handset Repairs	Dropped Calls	Billing complaints
Coverage at Home	Call Set-up Failures	
Volume of Complaints	Repetitive Complaints	
Decrease in voice usage	Decrease in usage of most recent service or promotion	
Decrease in data usage		

- With cost competitiveness, one clear difficulty was that the measure assumes customers know the market and can compare their existing tariffs with other competitor tariffs. Due to all these difficulties Telco were unable to provide this information for the study.
- Unfortunately the way in which this dropped call and call set-up failure data is collected and stored, prevented the team from having this information per customer.
- Whilst generic complaint information was available, repetitive complaint data was not available from the CRM systems within Telco and therefore not collectable through the data warehouse or on an ad-hoc basis.
- Also missing was usage for new services and promotions, although the team didn't believe that this item would have a significant impact on the overall experience.

These issues when reviewed on mass, and with a defined purpose of using the data for further importance analysis, were seen as very important revelations for Telco. They had always recognised that they had data issues, but these findings brought these deficiencies into sharp focus. The concern for the quality of the data, extend how the data was extracted. For the second data set extraction the analytics team were told to exercise more care and attention and building on the learning from data set one. They were also told to increase the sample size by over 20%.

The billing complaints data did not discriminate between specific billing complaints and general enquires about billing (e.g. when would the bill arrive, queries about format). This experience item therefore could not be considered. Handset known issue data was also excluded as the team deemed that the data for customers with these handsets was corrupted, as Telco were already taking action to appease customers with these handsets, though monetary incentives and promises to provide discounts at the time of upgrade. The team believe this action would impact the churn figures and a subsequent analysis of the handset known issue data showed a slight inverse correlation between customers with these handsets and their propensity to churn.

4.4.2 Statistical Results

The following statistical charts are presented to help shed light on a number of important questions.

1. Are there correlations between the customers CEM items, individually and whether the customers went on to churn? This would validate the telecommunication paper research in Chapter 2, and would provide the first layer of support for the model.
2. Does an aggregation of the items provide a better correlation to churn than the items individually? This would provide an indication of whether a summation of experiences is correlated to churn behaviour more than the individual items.
3. Can we establish a better correlation between Customer Experience and churn if we use the data to derive the most effective weightings (using linear and logistic regression), rather than assuming the JD Power and team weightings are the most optimum?
4. Do we get improve correlation if we use linear regression or logistic regression.
5. Can we vindicate our decision to exclude the problem handset and billing data?

A selection of the key tables for both data sets is depicted below. The 3 tables describe: a summary of the individual and aggregate indicators and their correlations to churn; a view of the impact on churn the aggregate experience measures; and the correlation statistics for the billing and handset data.

Table 4-6 - Summary view of all Experience Indicator Correlations with churn

Experience Indicators	Dataset 1 (n= 6529) Chi-squared Correlation (2-tailed)	Dataset 2 (n=8145) Chi-squared Correlation (2-tailed)	Experience and churn relationship
Aggregate Experience: J.D. Power	- 0.112(**)	- 0.147(**)	A higher experience score, reduces the propensity for churn.
Aggregate Experience: Linear Regression	-0.168(**)	-0.191(**)	A higher experience score, reduces the propensity for churn.
Aggregate Experience: Logistic Regression	-0.167(**)	-0.191(**)	A higher experience score, reduces the propensity for churn.
Individual Experience: Repairs	-0.039(**)	-0.051(**)	A lower repairs score (i.e. more repairs) increases propensity for churn.
Individual Experience: Complaints	-0.006	-0.020 (**)	A lower complaints score (i.e. more complaints) increases propensity for churn.
Individual Experience: Reduction in Data Usage	-0.058(**)	-0.056(**)	A reduction in data usage increases the propensity for churn.
Individual Experience: Reduction in Voice Usage	-0.179(**)	-0.164(**)	A reduction in voice usage increases the propensity for churn.
Individual Experience: Average Bundle Usage	-0.119(**)	-0.119(**)	A low average bundle usages increases the propensity for churn.
Individual Experience: Coverage	-0.045(**)	-0.050(**)	A low coverage rating increases the propensity for churn.

** correlation is significant at the 0.01 level (2-tailed)
* correlation is significant at the 0.05 level (2 tailed)

Table 4-7 - Correlation Impacts on Churn for All Aggregate Measures

Experience Indicators	Dataset 1 (n= 6529) R Squared Value (%)	Dataset 2 (n=8145) R Squared Value (%)	Experience and churn relationship
Aggregate Experience: J.D. Power	1.25	2.16	The impact on churn based on J.D power weightings of experience items is 1.25% and 2.16 % for datasets 1 and 2 respectively.
Aggregate Experience: Linear Regression	2.82	3.64	The impact on churn based on linear regression analysis of experience items is 2.82% and 3.64% for datasets 1 and 2 respectively.
Aggregate Experience: Logistic Regression	2.79	3.64	The impact on churn based on logistic regression analysis of experience items is 2.29% and 3.64% for datasets 1 and 2 respectively.

Table 4-8 - Churn Correlation with Problem Handset and Billing Queries – Dataset 1

Experience Indicators	Dataset 1 (n= 6529) Chi-squared Correlation (2-tailed)	Dataset 2 (n=8145) Chi-squared Correlation (2-tailed)	Experience and churn relationship
Problem Handset	- 0.025(**)	- 0.041(**)	Having a problem handset reduces then propensity for churn (Illustrated contradiction to theory, as Telco were taking action with problem handset customers).
Billing Queries	- 0.007	0.013	No significant relationship (based on corrupted data).

** correlation is significant at the 0.01 level (2-tailed)

* correlation is significant at the 0.05 level (2 tailed)

4.5 Evaluation

As noted above, the appropriate tests were conducted across the two datasets and the paragraphs below provide highlight the evaluation process conducted by the team. The evaluation considers data quality, statistical significance and what impact the findings could have on Telco.

4.5.1 Churn Correlations and the Customer Experience Items

The results indicated statistically significant correlations for: repairs; change in data usage; change in voice usage; average bundle usage; and home coverage

across both datasets, although it is noted that the correlations should be described as weak. The complaints experience item illustrated a significant correlation in the first data set only. The team felt that the weakness of the correlations, were symptomatic of the myriad of factors that impact churn, but the fact that the items appeared consistent in their correlations vindicated their inclusion in the model.

4.5.2 Churn Correlation and the JD Power Customer Experience Index Score (aggregate)

The results of the aggregate score correlations with churn were mixed. For most of the items, the aggregate score provides a stronger correlation than for the individual items, with the exception of change in voice usage across Dataset 1 and both change in voice usage and average bundle usage across the Dataset 2. However the team felt that because only 6 of the 13 experience items had been considered, there was enough evidence to show that aggregating the experience items was better than relying on the individual scores.

4.5.3 Churn Correlation and the Customer Experience Score

In considering summary tables Table 4-6 a chance is provided to compare the correlation co-efficient of the JD Power weighted index against those derived using linear regression and logistic regression of the datasets. For Dataset 1 the JD Power correlation co-efficient is 0.147, whereas it is 0.191 for linear and logistic regression. For Dataset 2 the correlation coefficient is 0.112, where as for linear and logistic regression it is 0.168 and 0.167 respectively. This suggests that while using the JD power index as an aggregate customer experience score indicates a better correlation than relying on the individual items, allowing the implicit data within the systems to generate the most optimum weightings, provides a stronger relationship between Customer Experience and churn. The r squared values provide an indication of the impact of the item or aggregate score on churn. In Dataset 1 they suggest a 2.2%, 3.6% and 3.6% impact on churn for JD power index, linear regression and logistic regression respectively. For Dataset 2 the r

squared values suggest a 1.2%, 2.8% and 2.8% impact on churn for JD power index, linear regression and logistic regression respectively. There is an anomaly within these analysis when considering the change in voice usage individual item, which provides a relatively strong r squared value of 2.6% in Dataset 1 (i.e. above the JD power index) and a r squared value of 3.2% for Dataset 2 (i.e. above all the aggregate scores including linear and logistic regression). Future action would be to test this further on many more datasets to establish whether this anomaly continued. Caution should be applied to the r squared values with respect to logistics regression as noted in Chapter 3, section 3.5.2 on data collection and analysis.

4.5.4 Linear Regression vs. Logistic Regression

It is difficult to explain why the results for these different models are so similar. One suggestion is that the categorical approach adopted; where continuous experience data is used but thresholds are applied to the data. These deviations from these thresholds coded as good experiences or bad experience, may have inadvertently fashioned the data into a more linear view. Alternatively the data range chosen for the items may not reflect the absolute maximums and minimums for the data, and the selection of data involved in the modelling process corresponded to a section of the curve which was more linear. This appears to be the most realistic explanation, given the study's view on the non-linearity of experience as evidenced by the Net Promoter Scale adopted.

The only other explanation is that the relationship is more linear than first envisaged. This would be surprising, but does not impact on the conclusion of the results regarding the action Telco would go on to take in developing the model. However one area for further study would be to test the assertions made in this section both with the same data sets and with new data. To test whether this augmentation of the data impacts the success of different statistical approaches adopted, the team reviewed the experience data without applying these binary

thresholds and the result model provided a weaker correlation co-efficient when measured against churn.

4.5.5 Consideration of the Engagement Index

The CEM was also compared against Telco's Engagement Index, this illustrated a significantly better correlation to churn. This was not surprising as this index includes many additional factors (e.g. such as willingness to recommend a friend), plus uses information that is captured towards the end of the customer's contract. Whilst this has the advantage that the signals for churn will appear much stronger, it also provides Telco less time to do something about it to change the customer's mind. These additional factors and the different data period made comparisons with the customer experience score extremely difficult. The data analytics team had always stated that the EI was not modelling Customer Experience, but did show a better correlation with churn. The team debated that the customer experience index used information that was in the middle of the customer's contract and therefore probably in advance of any decision by the customer to definitely churn or stay. This made the occurrence of correlations between churn and the Customer Experience Index all the more impressive.

One suggestion put forward was to combine both the CE score and the EI models and review the correlation to churn. The results above show that the combined indexes provide a marginally enhanced correlation relationship when compared with churn and the CE score and EI model separately. However there were question marks over whether this was a valid operation to perform, given the different time periods in which the data was collected in the customer's journey. Also if used it would mean that the model moved from an early warning in life model, to an last minute end of contract system. This appeared to defeat the object of the original exercise, which was to develop a model that provided early indications of poor experience that allowed Telco to engage the customer and do something about it before the customer's mind was made up in the last stages of their contract.

4.5.6 Churn Correlation and the Problem Handset and Billing Queries

As has already been discussed in the results section, the team felt the billing and handset data was corrupted so these items were excluded from the customer experience score figures. For completeness, in considering billing there appeared to be a weak correlation for Dataset 1 but not a significant correlation for Data set 2. With problem handsets however, there appeared to be a slight inverse correlation between this and churn. The team debated whether this was a good example of Telco taking proactive action in relation to an experience item and there being a positive impact on churn, as customers with problem handsets had been targeted with incentives during their contract period. This information came to light very late during the analysis.

4.6 Learning and Reflection

4.6.1 Considerations for Theory

Overall the Action Research Cycle succeeded, due to the fact it established a credible model for monitoring poor customer experiences, with the aggregate experience score providing a statistically significant correlation to churn. In addition the Action Research Cycle achieved the important objective of galvanising the organisation to take action and review the changes as they went along. The research cycle also enabled Telco to take a considered look at Customer Experience in relation to retention. Figure 4-4, provides a reminder of the Customer Experience Framework and highlights the areas that were reviewed during Action Research Cycle One.

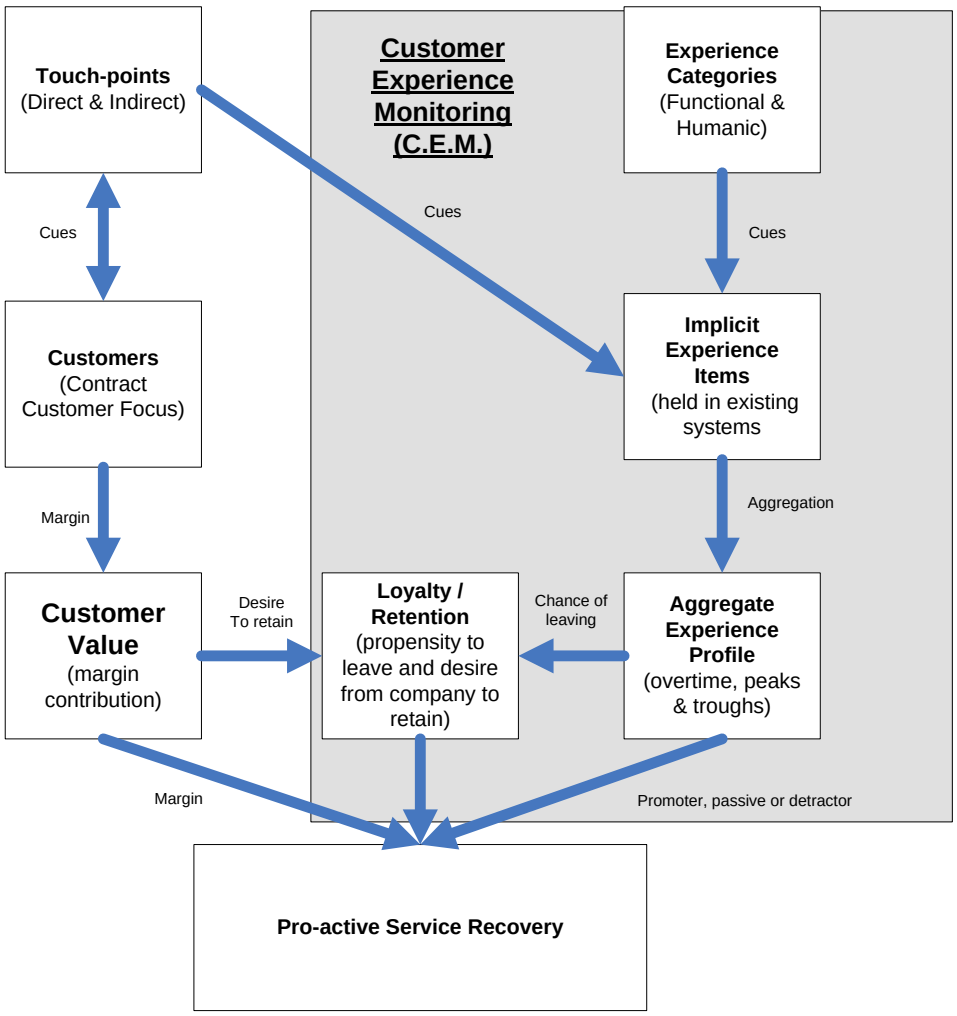

Figure 4-4 – Customer Experience Framework (CEM Focus)

One drawback during the action research process was that there possibly could have been more action. The team were very keen to observe the effect of changes to experience overtime as described in Chapter 2. Sudden drops in experience and gradually improving experience were all phenomena that the team would have liked to study, however due primarily to the unavailability of data, this was not possible.

Further analysis of the data may have taken the research in a different direction. The team decided to adopt the JD Power framework, which provided the categories upon which the team suggested suitable experience items (J.D. Power & Associates, 2008). More work could have been done to conduct a more

thorough customer experience audit of the Telco operation, focusing on functional and humanic cues (Carbone & Haeckel, 1994), which may have unearthed more pertinent customer experience items and in turn these could have provided a better proxy for the Customer Experience. The team also arrived at thresholds for good, indifferent and bad experiences through experience gained on other projects (e.g. drop in voice usage of greater than 50% = bad experience) where as more work could have been done to calibrate these thresholds more effectively. The desire and pressure of senior managers to make quick progress and the approach of starting small to establish whether this was a viable theoretical framework, all contributed to certain non critical decisions being taken more with expediency than academic rigour in mind.

More time could have been focused on reviewing the myriad of statistical techniques, machine learning approaches and data mining concepts (Witten & Frank, 2005). These techniques may have helped Telco identify new experience items, by accessing more data and looking for correlations. It would also have supported a more comprehensive analysis of cause and effect experience items and their relationships, as ideally Telco needs to identify the prime experience items and not secondary order experience items. It was immediately clear that this topic was too large for the study. The idea was much more to gauge the art of the possible and to make sure the study had produced enough results to invest further time and effort. The Customer Experience Framework also ensured that the team remained focused on the over arching theory of experience and were not blinded by the science of looking for correlations and assessing in detail the merits of different techniques. Care must also be taken with regard to the significance one places on the regression and correlations results. These results were relatively weak in nature and further cleansed data sets would be needed before firm conclusions could be drawn.

Despite the relatively weakness of the correlations the model philosophy was deemed to be robust enough to carry forward into the next Action Research Cycle. It would be a building block, from which to explore service recovery, given that

the model generated reliable profiles of good and bad experience (Reichheld, 1996), which provided the context for taking timely and appropriate action (Gessner & Volonino, 2005).

Finally the use of exit interviews for triangulation and cross validation of the key experience category was extremely helpful, but could have been complemented with the further analysis to ensure more comprehensively the correct experience items have been identified. This would test whether measures of a construct are consistent with a researcher's understanding of the nature of that construct, for example whether network and customer services are the most important factors. Time didn't allow for this exercise to take place and in addition, when suggested, Telco were very sceptical that the results of the exercise would contradict what they knew already.

4.6.2 Considerations for Practice

Although the team were unable to test the whole model in its entirety, for the experience items where quality data was available, a good correlation to churn was established for most of these. This propensity to churn appears to increase when the experience items are combined giving optimism to the aggregation functionality with the model. Data quality was perhaps the biggest obstacle the team encountered in constructing a reasonable model. Only 6 of the 13 originally identified items were available and the team felt that the ones available did not provide the strongest impact. Also the 6 chose items provided a crude proxy for the phenomenon under investigation. This gave the team confidence that with better data quality and more appropriate proxies, the model would be significantly improved. Frequently, manner organisations talk about data quality problems, issues and concerns, but not many do anything about it (Solomon, 2005). However the lack of quality data noted above has result in Telco investing in a number of network data capture and analysis tools and enhanced data aggregation capability through a re-invigorated data warehouse, which would aid future cycles

of research with experience items that the team were unable to assess in the second cycle.

Most large businesses run a huge number of legacy systems collecting data in different formats. This data is frequently not collected with analysis in mind and therefore key attributes can be missing. Data fusion across different legacy systems can be extremely difficult and often requires a lot of manual intervention and data cleaning (Nauck et al., 2006). These were significant issues faced by the teams during this Action Research Cycle. In addition, the 6 out of 14 data items that were available for analysis were not the closest proxies of the real information the team were hoping to collect.

This is often the case with modelling systems, however the proxies available, were more detached from the real indicator than the team had hoped for. For example, with coverage the team were keen to obtain a really good measure of a customer experience with coverage. Dropped call data would have been better, but this was not attainable at the time of the work. Instead the team had to use a measure that illustrated whether a customer had a 90 % or higher chance of having good indoor coverage. This gave us a very crude and binary: >90% chance of indoor 3G coverage = good coverage; <90% chance of indoor 3G coverage – bad coverage. Firstly there is the accuracy of the 90% chance statement and secondly the team don't get a continuum or range of excellent coverage through to mediocre coverage and onto bad coverage, which would be more realistic. Put another way the range under not good coverage is much too broad. This said, the impact of coverage appears to be so strong that its impact on experience and thus loyalty and churn was felt in the analysis conducted.

The cost of radically improving data management and ensuring all relevant data items are maintained is not an insignificant amount of work, energy and change of approach, which Telco should not underestimate. This central issue has been a perennial bug bear of information systems design, operation and maintenance for

a long time, with most solutions pointing to hard work and a determined and tenacious attitude to resolving data issues (Wang, Storey & Firth, 2002).

Due to a lack of expertise and tools, data analysis is often done in a too simple or naïve way. Linear models are the most frequently used analysis methods, because they are easy to understand (Nauck et al., 2006). This was experienced with Telco, with team members' "eyes glazing over" during the debate over appropriate analysis methods. It was explained that linear models assume that linearity assumes normally distributed values and that variables are independent of each other. When considering the data available to the study, the theory on churn behaviour and the experience of the team members, it was highly likely that variables would be inter-related and the relationship with churn would not be a linear one.

It was evidently clear from this short study that tackling experience in this way requires a concerted effort on behalf of Telco in order to gain traction. It was the first time a cross functional team had been assembled to focus on Customer Experience and retention. Following the end of this study, Telco decided to set up a customer experience / churn programme headed up by the Director of Customer Management. This illustrates a belief that there were gains to be had by focusing on Customer Experience, but also that a senior director with responsibility for customer management needed to be formally engaged and tasked with bringing about improvement. The director was keen to enlist the assistance of the researcher to help shape and drive the programme of work.

In addition to the customer experience and churn programme, other projects have been initiated, as a result of the work done. The network team in Telco are investing heavily in network probes that will provide better network experience data and also investment is being made into the data warehousing infrastructure in a bid to make more implicit data available to systems and users that may need it. The study has also given Telco confidence that improving Customer Experience is an attainable and profitable goal. Business programmes have been initiated, aimed

at improving organisational alignment, ensuring staff take responsibility for the experience customers receive.

The team started to think about how it would present this information in the context of analysis in the preparation to proactively call a customer and within the context of having a conversation with a customer in real time. The presentation of the information was almost as important as the analysis of good or bad experience within the overall CEM model. There is always a tremendous amount of information during an interaction with a customer and part of the success of any solution would be an ability to present the required information in an informative but easy to digest manner. This formed the basis of the challenge for the next Action Research Cycle Phase.

4.7 Summary

This chapter describes the development of a model for assessing and monitoring Customer Experience. Driven by the request of the support organisation Telco, a set of per-determined JD Power experience categories were utilised. Using implicit data, the categories were decomposed into experience items (items that provided proxies of experience), aggregated and considered over time to establish profiles. Analysis across 2 separate customer data samples, demonstrated a positive correlation between the poor aggregate experiences and a propensity to churn. Although the correlations were weak, they were statistically significant and provided the encouragement Telco needed to progress. The weak correlations were impressive given that the churn data will be affected by many other factors, such as branding awareness, advertising and social network factors. In addition when consideration is given to the fact that data quality issues prevented the team from having the best possible data and indicators, the team were surprised and encouraged that the experience indicators can be heard above this noise. Attention now turns to how this information can be usefully presented to the front-line teams.

Chapter 5: Prototype Development (Action Research - Cycle Two)

5.1 Introduction

The previous chapter illustrated that a model for monitoring Customer Experience, although challenging to set up, calibrate and maintain, was a viable endeavour for Telco. With that in mind, thoughts turned to how this model could be deployed in Telco and considerations of who would use it, how the information would be displayed, and what additional functionality would support Telco's aim to retain more high valued customers. This chapter describes the enhancement of the Customer Experience Monitoring (CEM) with a software capability that helps Telco provide an Action Response (AR), which is crystallised through a prototype Customer Experience Monitoring and Action Response (CEMAR) solution. One again the work is progressed via a formal iteration of Action Research, which has the twin benefits of providing a rigorous academic approach and involving the organisation and ensuring practical relevance.

In line with Action Research Cycle One, Chapter 5 provides a detailed description of the five canonical research phases undertaken by the team. Section 5.2, the diagnosing phase, takes input from a mini investigation conducted with Telco after Action Research Cycle One. With Telco looking at how they could deliver more from the retail stores, this investigation assessed the deployment of a customer experience enhancing solution and this section explains how the findings were incorporated in the diagnosis. Section 5.3 describes the action planning phase and reviews the analysis and design stages of the prototype CEMAR solution, depicting use case diagrams, event tables illustrating the customer journeys, the data tables and the incorporation of service recovery and

the associated business rules. Section 5.4 relates to action taking and discusses the creation of the user interface for the CEMAR and describes how the literature on experience and existing systems within Telco influenced the design. Section 5.5 evaluates the feedback on the interfaces and also the whole systems, incorporating a view of the potential business benefit. Section 5.6 concludes by capturing the learning and reflections of the CEMAR prototype.

5.2 Diagnosing

5.2.1 Scene Setting

The research team now had confidence that there was strong empirical evidence to suggest that a model for monitoring experience items (Customer Experience Monitoring (CEM)) was possible and that it was capable of providing an indication of the propensity to churn. The question now turned to how to make the best use of this information. A significant challenge has always been how to provide experience information to Telco employees via different channels.

5.2.2 Channel Considerations

At the end of Action Research Cycle One, the researcher and the team were asked to undertake a mini investigation with the aim of looking at improving the customer services within the retail operation, (in essence to increase retention of existing customers). The retail foot print was being rapidly expanded (Telco would go on to deliver the fastest retail rollout in Europe at the time) and senior managers felt, with the results of the evaluation cycle one in mind, that the following points needed to be addressed:

- Tools & Systems for store staff: More should be done to equip the store staff with tools that allow them to engage with customers, which would help Telco leverage more from this retail asset.

- Maximise human interaction: It was also recognised that the retail store were the most human and interactive touch-point, and Telco were not making the best use of it and in some cases possibly making things worse.
- Store Environment: Incidentally, they also felt the store environment was too sterile and unwelcoming, with the black and white colour scene and the male dominated workforce prompting one director to comment that "the stores looked like Darth Vader's bedroom"! Telco openly admitted that in this area, the company had not paid enough attention to emotional clues given off by the retail estate and believe that this was a barrier in the engagement of customers in store.
- Gender balance in store: Telco were very much aware of the image a male dominant store projects. The internal marketing teams felt that the store image suggested a geeky, techie experience which may be off putting to someone and or people that were just looking for simplicity from their phone purchases. Over the coming months Telco worked hard at ensuring the workforce reflected Telco's existing customer base and more importantly a customer base that Telco required for the future.

The focus of the researcher and the selected team however, was to concentrate on the experience of customers in store. The team was made up of representatives from the retail shop floor, the contact centre operation dedicated to retail, the head office sales and customer services teams and the technology group. In order to gain a deeper understanding of why existing customers came into retail stores, the team undertook some footfall analysis across a number of stores. The table below provides a summary view of this.

Table 5-1 - What is Currently Driving Customers into Telco Stores

	Customer Service In Store Logs					
Store	Upgrades	Repairs	Bill Payment	Bill Queries	Other – Channel Support	Total
Sunderland	12	15	3	12	17	59
Eastbourne	5	2	0	2	6	15
Bristol	9	7	0	0	1	17
Leeds	3	23	4	9	3	42
Canterbury	4	1	0	0	0	5
Telford	7	4	2	5	4	22
Dundee	5	13	3	4	7	32
Total	45	65	12	32	38	192
%	23%	34%	6%	17%	20%	100%

Based on these results a cross section of retail stores managers and associates attended a workshop, where the analysis was reviewed and the relationship between these results and 'feeling on the ground' was verified. Store managers were also asked for suggestions as to what tools/changes would enable them to serve the customer better and provide a superior level of customer service. The improvement areas were classified as follows:

- Billing and channel support: It was seen that checking bills, making payments by credit card and setting up credit cards together with some channel support queries such as changing address and personal details would be resolvable via a Customer Service in Store self service solution (CSIS 1). This solution was already available to customers via the handset and via the web already, but surprisingly, not widely known about. At the time retail staff needed to call channel support to help with all of these issues.
- Coverage: A more realistic version of the network coverage checker was requested. The previous versions overstated coverage and therefore often mislead customers.
- Repairs: At the same time a project was set up to trial the setup of a repair centre in the store, where customers could leave their phones for either hours or days (depending on the nature of the issues). They would be fixed and the customers could pick up at their convenience.

- Upgrades: A project was initiated to make changes to the sales system to ensure the stores could offer the same value upgrade deals as the contact centre. This was previously not the case and often lead to customers coming into store and being disappointed because the store could not give the same deal they had been offered or heard about from the contact centre.
- View of customer care systems: The Customer Service in Store phase 2 (CSIS 2) project was also kicked off, to deliver a deeper view of the customer's account than CSIS 1 looked to provide. The aims of CSIS 2 were to show what services the customer has, providing a view of any outstanding issues/cases they had and to make readily available the interaction notes from the contact centre discussions. In essence, this project is oriented around providing an easier dialogue with the customer and enabling face-to-face discussion on the issues.

The team and researcher's brief was to focus on CSIS 1 deployment, and analyse whether it provided an improved in store experience as well as gaining a better understanding of the organisational barriers that might hamper efforts. Following the creation of the solution, a live trial period of two months was set. Prior to the trial, store staff were interviewed in order to get information on their attitude towards the current in-store customer service. Store staff were also asked to get customers to complete the online attitude questionnaire after they had used the new in-store customer service. In addition, members of the team visited the stores on a weekly basis to observe customers and staff using the new service. Store staff were also asked to collect details on customers who agreed to be contacted and interviewed by the researcher at a later date. Once the trial had finished, store staff and channel support staff were interviewed again by the researcher to find out what they thought of the new in-store customer service in relation to the old in-store customer service provision.

Summarising the results, the store staff viewed CSIS 1 as a marginal improvement, with comments like:

> *"CSIS 1 looks more professional in the eyes of the customer, don't need to say I'll phone through to customer service to get problem sorted".*

However there appeared to be lack of organisational alignment concerning the value of time spent on customer services with existing customers, versus the value of acquiring new customers. New sales provided the cornerstone if not the whole structure of the reward and incentive system at the time. This was evidenced by comments such as:

> *"CSIS1 provides for a better experience as long as it didn't take too much time from sales" and "Touch screens would be a improvement with CSIS1 as it would speed up sales" and finally, "we're told to concentrate on sales and make sure we hit our targets".*

In addition one of the five trial stores withdrew for the trial, stating:

> *"they had too much to do".*

In terms of the working relationship between store staff and call centre staff, the former were neutral in terms of the effectiveness in CSIS 1 improving this relationship. Several of the store staff felt that call centre staff were "too scripted" in their interactions with customers. This, they believed, led to a sense of frustration on both the part of the customer and the store staff. The call centre staff who were interviewed as part of this study, in contrast, actually felt that their relationship with store staff had actually improved due to the fact that the store staff seemed "better informed" in relation to the information provide by CSIS 1.
Overall 35 Telco customers completed an online attitude questionnaire. A 5 point Likert scale format was used to collect the attitude data from the Telco customers; (The scale ranged from Strongly Agree to Strongly Disagree). From the data collected, there was an almost 50-50 split between male and female customers. In terms of age, there was a good spread between age groups (18-24, 25-34, 35-44,

45-55) apart from the last age group (55-64), where there were no recorded entries for this group.

The table below provides a summary of the results.

Table 5-2 Mean Customer Attitude Scores Towards In-Store Service

Statement	Sample of 35customers
Happy to use CSIS 1 again	4.1
Sales person was knowledgeable about service	4.2
CSIS 1 needs improvement	3.0
I feel confident using CSIS 1	3.7
CSIS 1 service was friendly	4.0
CSIS 1 service was helpful	3.9
I will use CSIS 1 on handset in future	3.9
I will use CSIS 1 service on internet in future	3.7
I enjoyed in-store experience	4.0

As part of the data collection process the aim was also to conduct in-depth telephone interviews with customers after they had completed the online attitude questionnaire. However, only 5 customers agreed to be contacted by the researcher to discuss their in-store experience. Of those 5, only 3 were available for a telephone interview. For two of these customers, their specific problems had not been resolved in store. For example, one customer had gone to the store to enquire about the possibility of changing their make of phone as they had been experiencing problems with it. They did not take out any insurance cover on their phone and were told that they would have to pay if they wanted a new phone. The customer felt frustrated about this as they had been a Telco customer for several years and they expected better treatment. Although they were aware that they were offered insurance when they signed the contract, they felt that as they were still under contract with Telco, they should be allowed to have a new phone without incurring any personal cost.

The second customer appeared to have problems with their SIM card which would, apparently, dial up the number of a premium rate line at regular time intervals. As a result of this, the customer had a large monthly phone bill. The customer felt that they should not have to pay for the excess charges as the fault was the SIM card. At the time of the interview, the issue was still unresolved.

The third customer interviewed, stated that they found store staff to be very helpful and preferred going into the store to get an issue resolved rather than phoning the call centre. The reason for this is that they had, on previous occasions, spent a long time on the phone to the call centre without getting the issue resolved to their satisfaction. On this occasion, the store staff using CSIS 1 were able to resolve their bill query issue.

Considering the reaction of the customers at a descriptive level, there appears to be strong supporting evidence for the use of emotional factors in developing and improving the Customer Experience. There appears to be a strong and proportional correlation between how friendly a customer views the service received, and how that customer rated the overall experience. There also appears to be a strong link between friendliness and a customer confidence in using the solution again in the future.

Through this exercise Telco recognised that measuring customer experiences on a continual and comprehensive basis was a key factor in beginning to improve the Customer Experience further. A key finding was that the solution enhanced the emotional clue set for the stores as it give store staff a tool to interact more meaningfully with the customers and made them more knowledgeable about the customers they were serving. The lack of togetherness between the contact centre based channel support team and the retail staff prompted the team to investigate whether common systems, as well as common incentives and objectives that would help support greater organisational alignment. The team began considering whether a channel independent solution would be more efficient to develop and maintain, plus instigate the organisational alignment required.

With hindsight, a number of key anomalies occurred which, once again, demonstrate a lack of systemic thinking within the organisation. Firstly, whilst the project was being paid for by the sales and retail directorate, it was the customer service function that was more engaged, more open to alternative ideas and more supportive in steering the programme. This may have been because ultimately the customer service function ends up with the consequences of poor customer experiences in stores; typically with calls into the contact centre. Also this attitude was clearly due to the fact that the prime and over-arching measure for success across retail at the time was sales numbers. The company was relatively young and did not have a cross business view of programme management, seeking instead to look at programmes as a collection of related projects, rather than a set of initiatives that should achieve business objectives, which may have to be achieved through changes in people, process, technology and the organisational set-up. This attitude results in a point solution approach to issues, rather than holistic solutions.

Customers communicate with Telco via 4 main channels. Contact centres that are globally dispersed; UK based retail outlets; Online via the PC access to the internet; Mobile access via the handset. Reviewing the most significant volume of interactions, the solution was focused on the contact centre and retail store contacts. The review focused attention on the challenge of how to present the experience information in an appropriate form that allows there to be a productive conversation with the customer in quite a short space of time. Requirements therefore aimed at providing an interface that was simple and intuitive, and that allowed conclusions and actions to be provided in a clear and concise way. Additionally the investigation validated the choice of experience categories identified in the Customer Experience Framework and employed in the Customer Experience Model. These categories clearly impact customers, as evidenced by the footfall traffic and reasons for contacting Telco. This provided confidence that the model had a reasonable foundation.

5.2.3 Service Recovery and Emotions

Having decided that a multi-channel solution, fronted by a simple clear interface was the way to go in supporting front line staff in their interactions with customers, the team's thinking now switched to the importance of taking action, pro-actively and contextually (i.e., relevant to the customer's poor experience). As noted in Chapter 2, the reality for all organisations is that despite efforts and precautions they may take to avoid issues or incidents during service delivery, problems at some point are certain to occur and the team were keen to put in place a pre-emptive service recovery mechanism, with the aim of solving problems at the service encounter before customers complain or before they leave the service encounter dissatisfied (Michel, 2001).

The team also began thinking about how they could build on their growing use of real-time marketing, which attempts to ensure goods and services are not only customisable to the individual customer, but also inherently capable of adapting themselves over time (Oliver, Rust & Varki, 1998). Telco saw real-time marketing as an opportunity to turn inbound (where the customer initiates contact with the organisation) and outbound (where the organisation initiates contact with the customer) interactions into more profitable customer relationships. Telco also believed that insight-driven customer service could optimise interactions and generate both incremental revenue and greater loyalty. This view is supported Gessner and Volonino (2005), who suggest that leveraging customer transaction and interaction data enables firms to identify up-sell, cross-sell and retention opportunities, thus mitigating attrition and defection rates. The decision to build a prototype, was taken to examine whether service recovery could be combined with the approaches of real-time marketing. Prototyping was aimed more at improving organisational development and investigating what could be, rather than a strict systems design prototyping exercise aimed at deploying a solution immediately (see Baskerville & Wood-Harper, 1998).

5.3 Action Planning

5.3.1 Prototype Development Life Cycle

The development of the prototype was conducted in collaboration with academic colleagues from Rey Juan Carlos University in Spain. The researcher was responsible for the requirements capture, analysis and design of the solution and Rey Juan Carlos University (senior lecturer and MSc Student) were responsible for the development. Joint responsibility was assumed for testing and evaluation in collaboration with Telco. At the start of the development cycle, a outline plan was constructed, detailing the key deliverable and milestones. These are described in Table 5-3 below.

Table 5-3 – Prototype Outline Plan

Activity	Description	Owner
Latest Research	• Review literature on technology mediated service provision • Review technical infrastructure options	Joint
Requirements	• Gain understanding of the existing cross sell solution • See cross sell solution in action • Establish requirements baseline with Telco • Produce evaluation plan	Researcher
Technical Specification	• Produce high level solution design • Produce detailed solution design	Researcher
Develop Prototype	• Establish database • Build rules engines • Develop screen interfaces	Rey Juan Carlos
Test Solution	• Create test plan • Conduct tests	Joint & Telco
Present Solution	• Present solution and background to the work and document next steps	Researcher

An evaluation plan was developed, which was essentially based on the feedback of the CSIS investigation and a desire to ensure the solution looked and behaved like the existing cross sell marketing solution, and whilst this represented a non specific evaluation reference, the researcher, Rey Juan Carlos and Telco decided

to maintain the collaborative and evolutionary nature of the systems by scheduling in several review meetings, with via voice conference or on site at Telco, which would typically involved sharing feedback on screen shoots or discussions in business rule based scenarios.

The prototype architecture was built up from three main components: A rules engine; a reporting front end; and database. The business rules engine was development in Jess (www.jessrules.com), which is a rule engine and scripting environment written in Java. Jess was selected as it was an open source solution, available at no cost for academic use and has the capacity to reason, using knowledge supplied in the form of declarative rules. The reporting front end was developed using an Eclipse based open source reporting system called BIRT (www.eclipse.org/birt/info) and formed the basis of the interface design. A simple flat file structure database was employed to simulate data passed from data warehousing and source systems. Examples of some of the key data tables created are listed below.

Table 5-4, looks at the profit margin bands. This value is already calculated within Telco information systems and is a monthly aggregate of the customer's margin contribution. This was important given the literature on customer value and how it is not practical for Telco to attempt to retain every single customer irrespective of their profit contribution. In Telco's operational business processes, they adopt high, medium and low value definitions (H,M,L). The prototype traffic light indicator, matches green with high value, amber with medium value and red with low value.

Table 5-4 - Customer Value (Margin Bands)

Margin Bands	Monthly Margin	Traffic Light
H3	>= £86	Green
H2	£48 to £85	Green
H1	£33 to £47	Green
H0	£27 to £32	Green
M1	£21 to £26	Amber
M0	£13 to £20	Amber
Low	£9 to 12	Red
L2	Negative to £8	Red

This output maps directly to event flow 16 - create average customer value - in use case 2 (Table 5-8).

Table 5-5, is a summary of the customer's experience and is also matched to the traffic light indicator concept. The monthly score is a composite of all the individual experience items to form a Customer Experience score. This then, using Reichheld's Net Promoter Score scale, divides customers into the promoter, passive, detractor categories (Reichheld, 1996).

Table 5-5 -Aggregate Customer Experience

Experience Band	Monthly Score	Traffic Light
High (Promoter)	10	Green
	9	Green
	8	Green
	7	Green
Medium (X)	6	Amber
	5	Amber
Low (Detractor)	4	Red
	3	Red
	2	Red
	1	Red
	0	Red

This output maps directly to event flow 13 – calculate experience profile mean - in use case 2 (Table 5-8 - Create Customer Experience Profile).

The team discussed a number of different potential experience profiles and what criteria would be used to trigger action. The following paragraph looks at "low experience", "high experience" and "degrading experience profiles", but with consideration given to average Customer Experience scores, slope values and standard deviation measures. The following are included as examples of the nature and form of that discussion.

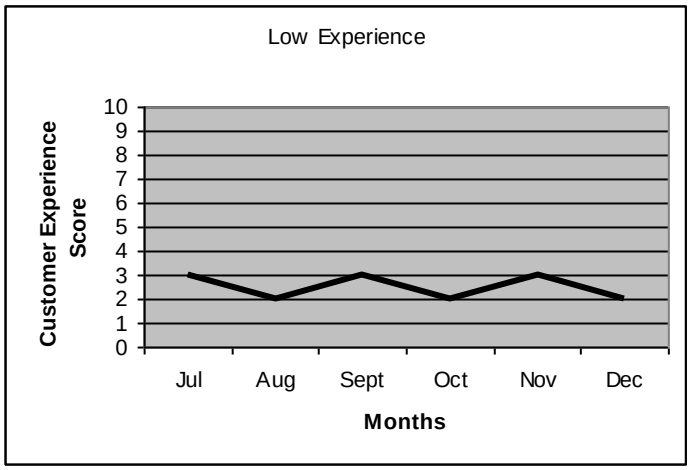

Figure 5-1 - Low Experience Profile

Figure 5-1 has an average Customer Experience score = 2.5, the slope value = -0.09 and the standard deviation = 0.55. This depicts a story of a customer whose experience is consistently low and would be characterised as a detractor in Net Promoter terms. This could be characterised by poor word of mouth advocacy and extreme dissatisfaction with their experience. If action is not taken soon, this customer's memory of previous poor experience may make it difficult for service recovery to occur. The customer may be so dissatisfied they are beyond help. This also highlights the necessity of taking action before the end of a customer's contract, so as to leave enough time to turn things around.

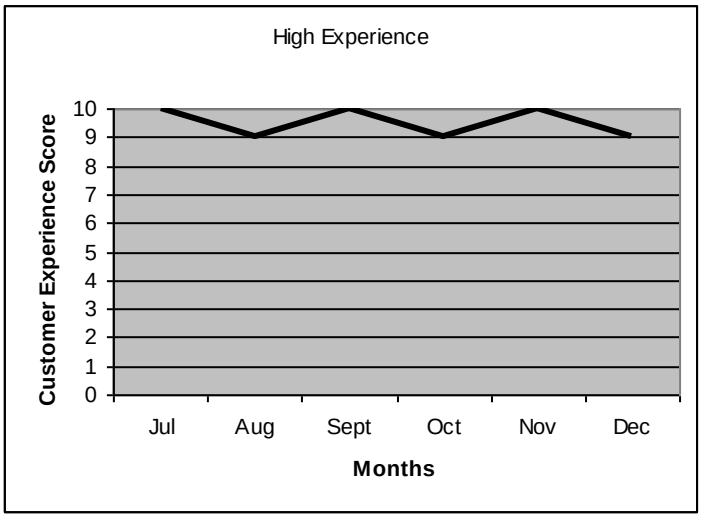

Figure 5-2 - High Customer Experience Profile

Figure 5-2 has an average Customer Experience score = 9.5, the slope value = -0.09 and standard deviation measures 0.55. This appears to characterise a situation where a customer is having a consistently high level experience and does not appear to require any recovery action.

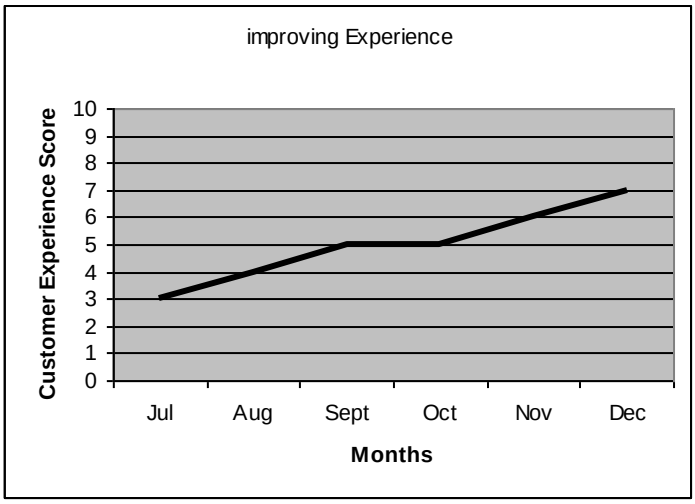

Figure 5-3 - Improving Customer Experience Profile

Figure 5-3, has an average Customer Experience score = 5.0, the slope value = 0.74 and standard deviation measures 1.41. This appears to characterise a situation where a customer, having suffered from poor experiences appears to be enjoying

an improvement. However the average experience figures indicate that in Net Promoter terms the customer is still on average a detractor, so recovery action may be required. This more complicated scenario prompted the team to look more deeply at the business logic required to cope with this type of occurrence and the resulting conclusion. Appendix E provides a more detailed view of traffic lighting thresholds for average Customer Experience scores, slope values and standard deviation results. It also provides a mapping of these values and ranges to experience profiles.

A full list of identified profiles can be found in Appendix D. The combined team need to think carefully about which scenarios were appropriate for consideration for a loyalty action response. The team focused on a number of considerations: (a) Remembering to stay focused on the aim of improving experience and thus retention; (b) Examining what would provide the biggest gain for the least amount of investment; and (c) The requirement for a simple solution that would make implementation easy and maintenance pain free. Based on these considerations, the team decided to focus on the following scenarios:

- Low experience customers – they would be detractors and generate poor word of mouth.
- Rapidly degrading experience customers – they would be detractors, aghast at the worsening state of their experience
- Degrading experience customers – would be slowing turning into detractors and may not show up on the calls to customer services as the change is gradual, but when faced with a decision or if they take time out to think, would recognize that things are getting worse.
- Critical experience customers – could be detractors, passive or promoters, but will have noticed the experience problem and would welcome a quick reassuring response.
- Fluctuating experience customers – should be treated like degrading customers or critical incident customers, depending on the severity of the fluctuations.

- Medium experience customers – are a difficult group, as it may be hard to take the experience to the next level. However, from the premise that it would be supportive to retention efforts if Telco had a significant mass of promoters, this group may receive some focus.

5.3.2 Customer Value

The theory on customer value evolved from the initial thoughts of value as customer co-creation to a more short term commercial view of looking more at the value of the customer to Telco. Building on Telco's already established practice of real time marketing and the concept of service recovery, the team, buoyed by the results of Action Research Cycle One and spurred on by the necessity to produce a profitable solution, decided to combine the Customer Experience Model thinking with a view of customer value. It was clear from Telco's profitability analysis, that different customers generate different profit levels for the organisation and while it would be laudable to treat all customers the same (and maybe this should be the end game / target for organisations), with limited resources, focused action should be on the higher value customers. From a customer experience and retention perspective the team were interested mostly in the scenarios where high or medium value customers (depicted by monthly margin figures) were having a medium or low experience. (Reichheld, 1996) supports this approach, contending that actionable customer feedback needs to relate specific problems to specific groups of customers, in particular customers with enough economic value to merit investing in solutions to their concerns. The table below provides a high level strategic view of how different customer interactions would proceed, based on a Customer Experience score and knowledge of their customer value.

Table 5-6 - Loyalty Action Strategies

Value / ***Experience***	**High (>£27)**	**Medium (> £13, but <£27)**	**Low (<£9)**
High (Promoters)	Cross –sell	Cross –sell	Up-sell
Medium (Passives)	Implement loyalty action	Implement loyalty action	Up-sell
Low (Detractors)	Implement loyalty action	Implement loyalty action	Do nothing

5.3.3 Service recovery and business rules

Business rules as defined and implemented take the form of:

- IF customer experience is <X> AND customer value is <Y> THEN DO <Z>.

In practice the rules are further elaborated with contextual information related to given experience criteria. Actions are influenced by:

1. The mean of the customer value score.
2. The mean of the customer experience score.
3. A comparison of the standard deviation of the most recent customer experience score from the mean customer experience score against prescribed constants.
4. The slope of the profile that results from analysis.
5. Whether previous action has been taken.

The general approach therefore accounts for both trends and the notions of peak/critical experience as described in the literature. The detailed rules and actions implemented by the "action response" (AR) part of the system were built up in collaboration with Telco experts. Again the considerations of retention, biggest gain and simplicity were helpful criteria in guiding the team as to the scope of this exercise.

A full list of the Action Responses or Loyalty Actions can be found in Appendix F, however the bullets below capture a couple of the examples:

- For high value customers continually not using a large proportion of their allocated minutes or data bundle against their chosen tariff, Telco could pro-actively and profitably migrate customers to a more appropriate tariff, in the knowledge that any short term reduction in margin would be more than covered by increased chance of longer tenure with Telco, and therefore protection of more medium revenue through reduced churn.
- For medium value customers continually having repair problems with their handset, Telco could pro-actively offer to replace it with a re-conditioned handset. High value customers may get completely new handsets.

The Action Response (AR) when combined with the CEM provides the platform for a Customer Experience Monitoring and Action Response (CEMAR) solution. In summary, full agreement was now reached on devising a solution that triggered events based on a customer's experience. The notion of customer value allowed Telco to be more discerning and discretionary with their spending.

5.4 Action Taking

5.4.1 System Context

In a book by entitled "Rethinking Management Information Systems", (Currie & Galliers, 1999), Avison and Fitzgerald contribute to a chapter and are quoted as saying of a prototype that it is:

> *"...an approximation of a type that exhibits the essential features of the final version of that type. By implementing a prototype first, the analyst can show the user inputs, intermediary stages and outputs from the system. These are not diagrammatic approximations, which tend to be looked at as abstract things, or technically orientated documentation, which may not be*

> *understood by the user, but the actual representation of the system on the screen with relevant outputs" Avison & Fitzgerald in* (Currie & Galliers, 1999, p.260).

With this quote in mind and based on the information gathered in the diagnostic phase (essentially the requirements) the team embarked on the development of a prototype solution that would use the continual output of the customer experience model and provide helpful information for Telco employees to engage with customers. The researcher followed the process of producing context diagrams and entity state relationship diagrams to provide a summarised view of the solution and its key interactions. In conjunction with the team from Telco, business logic was analysed and crafted in business rules that enabled the solution to provide contextual actions. The interface was developed in a participatory manner with the Telco team and was based on existing solutions and feedback from earlier implementations.

This summarised view of the development life cycle, suggested a neat sequential process akin to a traditional software development life cycle. However this was not what happened in practice. (Nandhakumar & Avison, 1999) suggest that this traditional view is a necessary fiction to present an image of control. However the iterative nature of the prototype's development allowed the researcher and team to amend and improve the design as the team's learning improved. This learning was often as a result of seeing earlier iterations of the prototype.

The following paragraph describes in a more detail the development outputs. The context diagram below defines the boundary of the CEMAR solution and shows the primary analysis use cases.

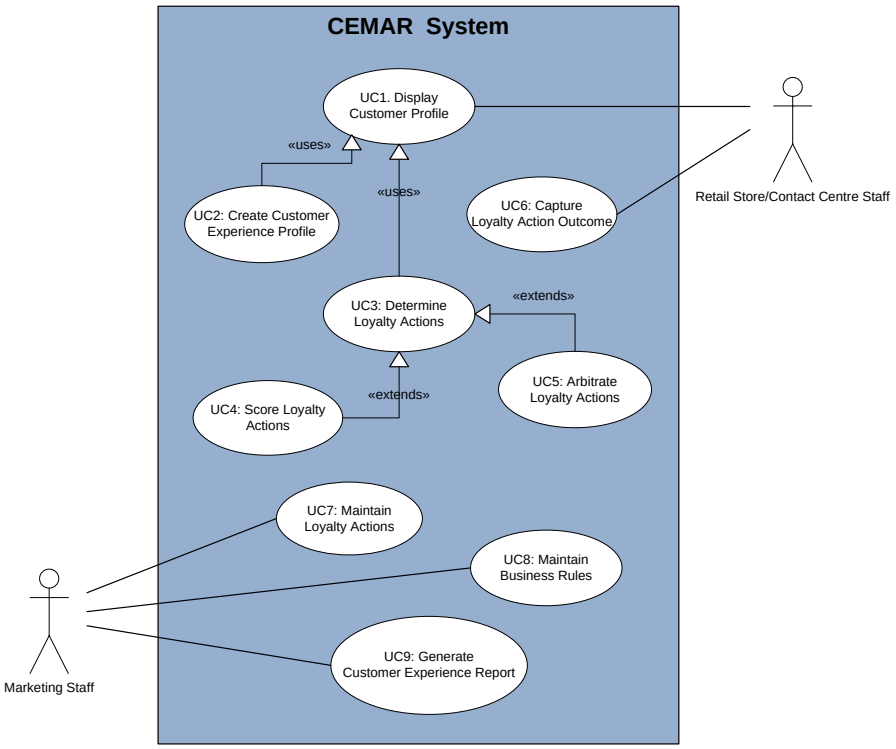

Figure 5-4 - Use Case Context Diagram

5.4.2 Class Diagrams

In software engineering a class diagram in the Unified Modelling Language (UML), which is the de-facto standard for software design and analysis (Berardi, Calvanese & De Giacomo, 2005), describes the structure of the systems, showing the classes, attributes and the relationships between classes (Booch, Rumbaugh & Jacobson, 2005). The classes are taken for the Customer Experience Model and are the foundation upon which the prototype is designed (see Figure 5-5).

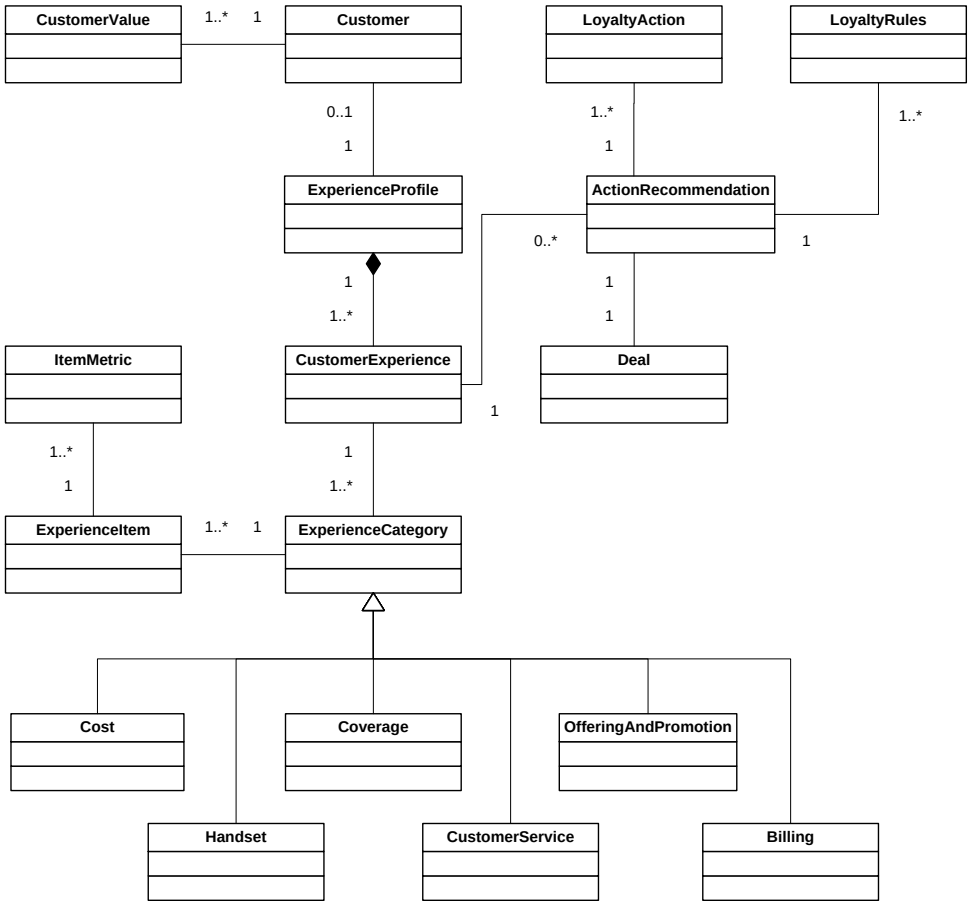

Figure 5-5 – Outline Class Diagram Representing the Customer Experience Model

The class diagram could be used to represent many different scenarios across many industries. The detailed experience categories are specific to model telecommunications, but the classes are generic, which provides the model with a high degree of transferability and gives CEMAR relevance beyond Telco and the mobile industry.

5.4.3 System Event Table and Use Case Diagrams

Table 5-7 presents the analysis of the external events pertinent to the core functional requirements of the prototype. The table describes a customer journey, where the customer has an interaction with Telco, either via the retail store, contact centre, on line with a PC, or via the handset. This inbound interaction (customer initiated) describes the chain of system events leading from initial

contact, and proceeds via an experience profile onto being prompted with a loyalty action.

Table 5-7 - System Event Table

No.	Event	Trigger	Source	Use Case	Response	Destination
1	**Existing customer makes an enquiry**	Change package Complain Terminate contract Report handset lost Change personal details View bill Buy add-ons/services Change payment details Check network coverage	Customer	**Display Customer Experience Profile (UC1)**	Customer profile	CCF/CSIS
2	**Existing customer logs on to 'My3'**	Change personal details View bill Buy add-ons/services Change payment details Check coverage	Customer	**Display Customer Experience Profile (UC1)**	Customer profile	Web/ Handset
3	**Produce customer experience analysis**	Customer enquiry	Epiphany	**Create Customer Profile (UC2)**	Real-time customer experience profile	CCF/CSIS
4	**Produce customer experience analysis**	Management information request	Epiphany	**Generate Customer Experience Report (UC4)**	Aggregated real-time customer experience profiles	Marketing
5	**Poor customer experience**	Customer enquiry	Customer	**Determine Loyalty Action (UC3)**	Loyalty actions appropriate to the experience	CCF/CSIS
6	**Loyalty action agreed**	Loyalty actions available	Customer	**Display Customer Experience Profile (UC1)**	Confirm and monitor action(s) taken	Customer
7	**Create/read/ update/delete loyalty strategies**	Customer loyalty campaign	Marketing	**Maintain Loyalty Actions (UC6)**	New loyalty strategy	Epiphany
8	**Create/read/ update/delete business rules**	Customer loyalty campaign	Marketing	**Maintain Business Rules (UC5)**	Rule table linking experience to action	Epiphany

The following tables describe the 2 key use case scenarios that capture the essence of the Customer Experience Framework. They seek to describe the key entities/actors/people involved and the flow of events once a trigger event is

enacted. The use cases describe the pre and post event states and any exception conditions that may be encountered.

Table 5-8 - Create Customer Experience Profile

Name:	**UC2: Create Customer Experience Profile**	
Triggering Event:	An existing customer makes an enquiry (UC1) or Business Intelligence/Marketing staff request a management report (UC4).	
Brief Description:	The purpose of this use case is to generate a customer experience profile, which is time-bound and comprises of a co-ordinated set of customer experience and customer value scores, summary statistics and summary details of poor experience.	
Actors:	System generated.	
Related Use Cases:	UC1, UC4.	
Preconditions:	The customer is an existing one and has been with Three for 3 months or more.	
Post conditions:	A customer experience profile is generated.	
Flow of events:	**Actor (UC1)**	**System**
	1. Set time period and time chunk for customer experience profile	
		2. Calculate scores for all experience criteria
		4. Check scores against threshold criteria
		6. Generate experience detail
		7. Get the existing peak customer experience score
		8. Check the highest score in profile against existing peak customer experience score
		10. Get the existing critical customer experience score
		11. Check the lowest score in profile against existing peak customer experience score
		13. Calculate experience profile mean
		14. Calculate experience profile standard deviation
		15. Calculate experience profile slope
		16. Calculate average customer value
Exception conditions:	3 If metric exists then calculate the metric 5 If threshold is exceeded then get criteria details 9 If the peak customer experience score is exceeded then revise with new value 12 If the critical customer experience score is exceeded then revise with new value	

Table 5-9 - Determine Loyalty Actions

Name:	**UC3: Determine Loyalty Actions**	
Triggering Event:	Poor customer experience.	
Brief Description:	The purpose of this use case is to determine appropriate loyalty actions that may be taken in relation to poor customer experience (expressed via a given customer profile) via the application of business rules.	
Actors:	System generated.	
Related Use Cases:	UC2.	
Preconditions:	Customer experience profile.	
Post conditions:	Loyalty actions are determined, scored and ranked (and arbitrated where necessary).	
Flow of events:	**Actor (UC2)**	**System**
	1. Customer experience profile	
		2. Apply business rules
		3. Get action associated with rule
		4. Check existing record of loyalty actions taken for customer to see if action has been previously taken
		6. Score available loyalty actions
		7. Rank available loyalty actions
Exception conditions:	5. If loyalty action has been taken then remove from list 8. If loyalty actions exceed a given number [6] then arbitrate to produce shorter list	

5.4.4 System Architecture

A major input into the building the prototype solution was the feedback garnered from the CSIS study and the observation of customer interacting with Telco staff using in store technology, and from the understanding gleamed from retail front line and contact centre teams. It was important that a participatory approach was adopted in the development of the front end application. Participation had the twin benefits of ensuring firstly that the thoughts and insights of the front line team were harnessed and secondly engaged these teams and fostered their buy in to the end solution. This participation took the form of interactively reviewing interface design with representatives of these two groups.

The intended architecture for the prototype borrows very heavily from existing real-time marketing infrastructure that existed at the time. The real-time capability was used predominately as a sales capability that allowed Telco to cross sell other product lines to customers or up-sell them onto more profitable items if there was an opportunity.

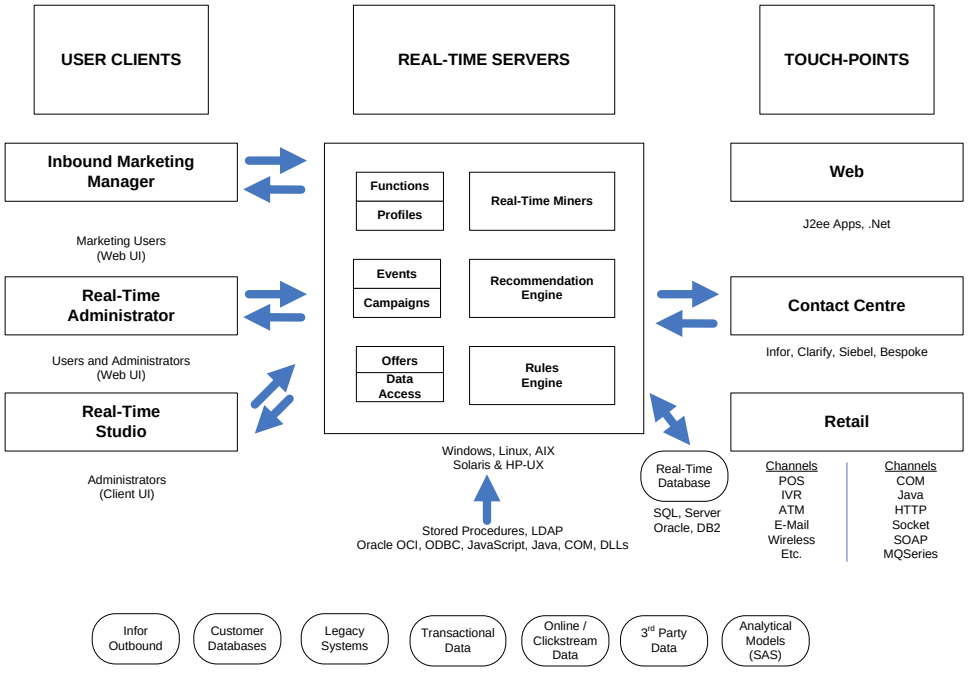

Figure 5-6 - Telco Existing Real-Time Architecture

The prototype is positioned as being able to be deployed within this infrastructure with the key changes coming in the areas of: Analytic Models; Engine Functions; Touch points; User Clients. These are highlighted in the amended diagram below.

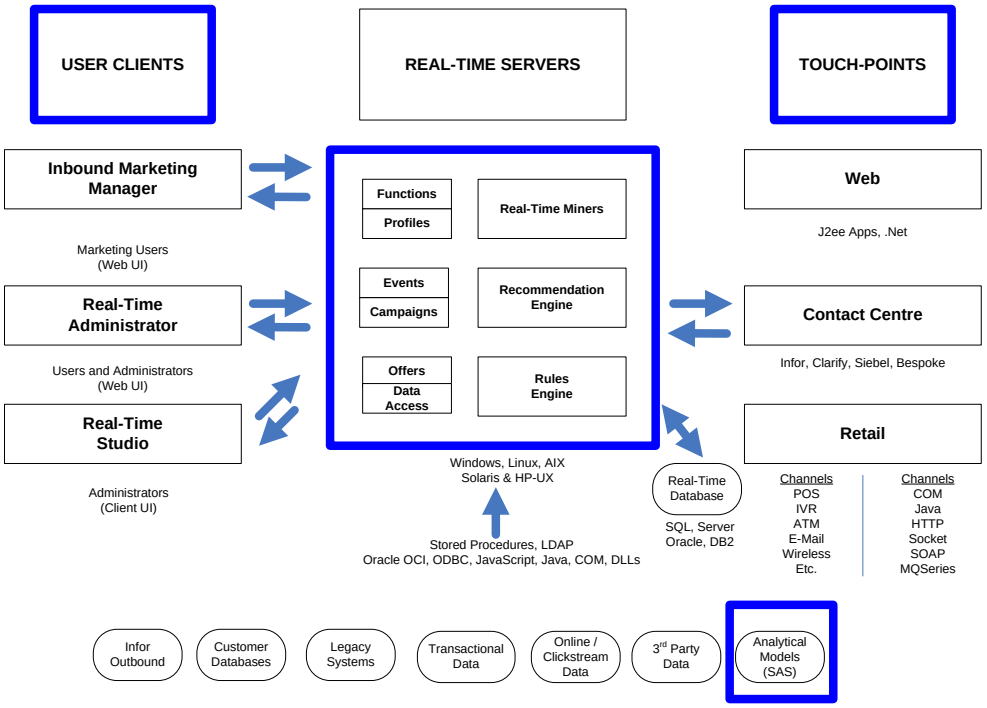

Figure 5-7 - Focus areas for retention amendments to Real Time Architecture

Analytical Models - The modelling philosophy devised in the first Action Research Cycle would sit comfortably in the areas of the architecture. The team believe that whilst there was a degree of complexity in the CEM aspect of the CEMAR model, at a broad level it was simply analytical capability which would interface to other parts of the real-time architecture in much the same way as the existing analytical capability.

Engine Functions - The central engine room of the system would house the experience profiles generated from the analytical models. It would house the business logic and rules aimed at tackling the experience issue highlighted in the profiles. It would hold the recommendation responses required for communicating to the customer and also any generic campaigns that may be launched simultaneously to multiple customers who may have the same experience profile.

Touch points - As Telco is a multi touch point organisation it was important that any solution could be employed primarily in the retail stores and contact centres, but also had some scope to be made available to customer via the web or via the

handset. This meant that the design had to be simple, intuitive, allowing quick processing of information and be conclusive (i.e. it must be clear what would happen next as a result of the information). Contact centre staff are under pressure to minimise the time a customer is on a call for two prime reasons. Firstly customers are often keen to spend the least amount of time possible on the call, having possibly spent a long time in a call queue waiting to speak to a member of staff. Secondly all mobile operators are trying to manage the cost of their contact centre operations and set targets for the Average Handling Time (AHT), which they aim to be as low as possible as this reduces the amount of people required to man their operations.

User Clients - In the retail stores, Telco faces similar pressures as noted for the contact centres, but in addition they need to be aware that the customer may want to see the screens they are using. In fact sharing this screen with the customer may enrich the interaction they were having and help develop and enhance humanic aspects such as trust, respect and empathy between the customer and store staff. During the CSIS study customers and store staff reported that the ability to show customers their services (in particular billing history on-line) helped the relationship and often supported a happier interaction ending. This learning was employed in the design, in that the information displayed was appropriate for a customer to view.

The figures below provide a detailed mock-up of the primary user interface. The key aspects to note are (a) traffic light reporting against customer experience, customer value profiles and summary statistics and (b) summary detail of poor experience, which provides retail store staff with data to allow some contextualisation of the proposed actions.

5.4.5 System Interfaces

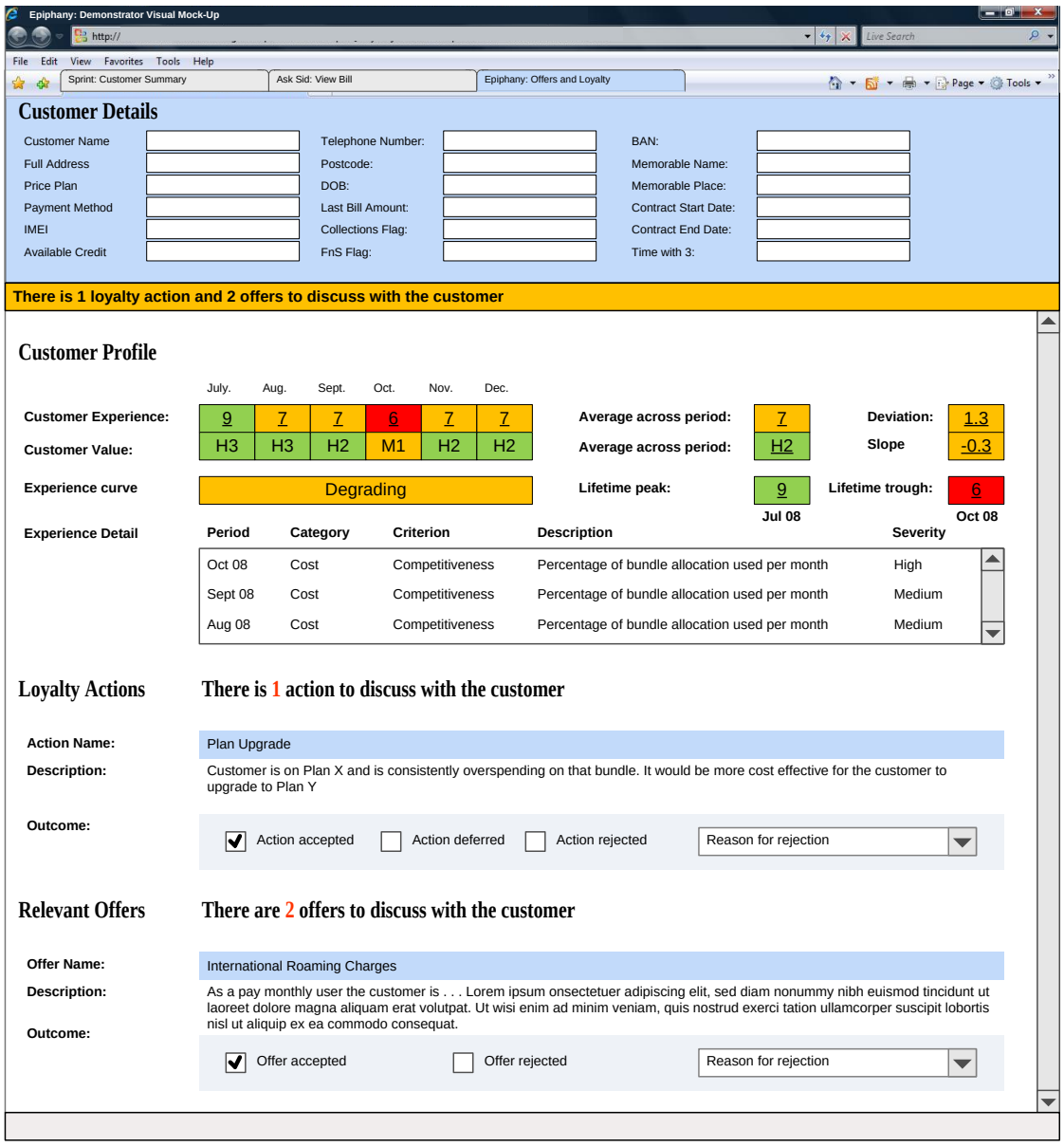

Figure 5-8 - Customer Experience Demonstrator - Summary Page

Figure 5-9 - Customer Experience Demonstrator – Detail

The summary screen indicated how many loyalty actions and relevant offers were available to the customer, and also allowed Telco staff to initiate a conversation backed up by a level of evidence and analysis. The individual experience screen gave the store staff a bit more information as to what might be driving the overall experience score. The screens were presented to the team and retail and contact centre representatives through-out the Action Research Cycle and then formally at the end of the development.

5.5 Evaluation

Reviewing the evaluation criteria in Chapter 3, it was important to ascertain the potential impact of developing the prototype. The criteria listed were:

- Match to existing systems
- Front-line Feedback
- Team feedback
- Consideration of an outline business case for CEMAR

The criteria for success centred on whether the solution would be simple to implement, understand and maintain; whether CEMAR represented a compelling business case; and whether the prototype could be used as a vehicle for organisational learning, with the development process serving as a measure of focusing better retention, via improved customer experiences.

5.5.1 Telco Feedback & Prototype Match to Existing Systems

As described in Chapter 3 the prototype evaluation adopted a formative approach, where the evaluation started as soon as the researcher and Telco began exploring ideas. The interface architecture and look and feel for the customer service in store solution, was adopted as the template for CEMAR following direction from Telco. This meant that any production deployment would match existing screens, but also would be familiar to the front-line teams using them.

Following the initial development of the prototype, test data was compiled with the help of the data analytics team. These data files were then tested by the researcher, the programming team from Rey Juan Carlos University and the IT representative from the study team. This exercise proceeded with a few iterative systems amendments concerning statistical functions, discussion over the treatment of unusual experience profiles and simple text based errors. In the final phase of testing the prototype was evaluated against the use cases, such as the one

document in Table 5-8 - Create Customer Experience Profile and Table 5-9 - Determine Loyalty Actions. Following the testing exercise the working prototype was presented to the entire team, in the form of background slides re-capping the journey and a demonstration of the working prototype.

The general comments were positive and members of the team commented that this was what they had expected, having been involved in the design process. The traffic light system was intended to help Telco staff to quickly gain a view as the whether the system data indicated customers' current state of happiness (in case they were in doubt from the body language and verbal cues given off by the customer). The visibility of that experience over time, gave a feel for how that emotional state may have been developing.

The summary screen interface received a positive reaction from the front line Telco team, who were quick to say that the interface was easy to understand and if the model provided them with the appropriate data, the solution would enhance their interactions with customers. This suggested benefit of the customer experience data to empathise with customers and provide contextual response was recognised and noted in the CSIS investigation (Section 5.2). There were questions as to whether it was necessary to include the standard deviation and slope score, as these formed part of the overall experience curve and were therefore a bit of a distraction and also too technical for what the front line teams need to contend with. All other features were strongly supported.

However, more challenging comments arose with the second detailed screen. There was a general view from the team that the second detail screen contained too much information, and perhaps provides more detail than the frontline teams had time to or were able to process. These comments triggered the representatives of the front-line teams to suggest that front-line agents should not have to think too much and should take the summary information and recommend action without interpretation or questioning. However, the researcher and the marketing representative suggested that the tool was not a substitute for "intelligent

thinking" on behalf of the agents, and that CEMAR was a tool that should enable enriched conversations with the customers and was a vehicle to validate the conclusions, and gain richer feedback from the customer.

Additionally, the loyalty outcome tick boxes were there to collect performance information on the success of the loyalty actions and review the reasons for rejection. It seemed that these concepts were not high on the list of requirements for the front line teams, but the marketing teams were very keen to have this management information. This difference of opinion appeared to go to the heart of what role should the frontline teams play in retaining customers. The suggested more active role was a stark change from what had happened in the past. This prompted the suggestion that prior to any deployment, a review of the roles, training and incentives for frontline teams should be undertaken. This echoed the conclusion from the CSIS investigation.

5.5.2 CEMAR Business Case Considerations

From an analysis of the data available to the study it was apparent data quality issues impacted the ability to assess the model comprehensively, and also may have negatively influenced the weak correlation relationship between the experience scores and churn. This relationship, it was postulated, will improve with better customer experience auditing to identify items, the sourcing data directly linked to the items. The overall CEMAR solution will then seek to improve churn by ensuring contextual and relevant loyalty actions are employed. Telco and the researcher were keen to demonstrate the potential financial impact CEMAR could have by constructing breakeven analysis and payback information. The following paragraphs attempt to estimate the costs of 'productionising' and maintaining the CEMAR solution and contrast this with the impact of reducing churn to understand where the breakeven point would be and gain a view of what value percentage improvements in retention CEMAR could yield.

Using figures supplied by Telco, the revenue box attempts to draw out the margin benefit of retaining percentages of customers. The figures conservative assume that Telco churn is approximately 11% of the c.4milllion customer base. The researcher was guided to use churn figure, which contradicts significantly with the 44% churn figure previously provided. The marketing team explained 44% represents the total churn within Telco, but there was an aspiration to reduce this to just below the industry average at 22%. In addition this figure represented voluntary churn, where customers leave of their own volition, and compulsory churn, where the decision of customer and organisation to part company is initiated by the company. Telco stated their voluntary churn target was 11% and this was the figure to use. The marketing and finance team also suggested that if the team could make the business case work at this level, then that would make the case even more compelling. The researcher did not agree with this approach, as aspirations are very different to reality. However it was not a large issue, and was not worth the risk of affecting the relationship. The spreadsheet would be constructed to allow different churn percentages to be used.

Revenue Summary

	Annual Accounts	Average Margin Loss	Annual Churn Lost Revenue
Predicted Contract Customer Churn	440,000	£121.00	£53,240,000
Approx Cost of Churn			**£53,240,000**
			Annual Opportunity
	1%	4,400	**£532,400**
Influence on Predicted Churn	5%	22,000	**£2,662,000**
	10%	44,000	**£5,324,000**

Project Costs

	Days	Rate	Total
Marketing Team	50	400	£20,000
Data Analytics Team	100	400	£40,000
CTO Design team	20	400	£8,000
Others (Retail & Contact Centre)	30	400	£12,000
Project Manager & Business Analysis	40	400	£16,000
Technical Development	500	350	£175,000
			£271,000

Ongoing Costs

	Days	Rate	Total
Data Analytics (Data Management)	100	400	£40,000
Marketing (Business Rules Maintenance	50	400	£20,000
			£60,000

1%

	Year 0	Year 1	Year 2	Year 3	Breakeven
Revenue		£532,400	£532,400	£532,400	
Project Costs	£271,000				
Ongoing Costs		£60,000	£60,000	£60,000	
Profit	**-£271,000**	**£472,400**	**£472,400**	**£472,400**	0.6 years

5%

	Year 0	Year 1	Year 2	Year 3	Breakeven
Revenue		£2,662,000	£2,662,000	£2,662,000	
Project Costs	£271,000				
Ongoing Costs		£60,000	£60,000	£60,000	
Profit	**-£271,000**	**£2,602,000**	**£2,602,000**	**£2,602,000**	0.10 years

10%

	Year 0	Year 1	Year 2	Year 3	Breakeven
Revenue		£5,324,000	£5,324,000	£5,324,000	
Project Costs	£271,000				
Ongoing Costs		£60,000	£60,000	£60,000	
Profit	**-£271,000**	**£5,264,000**	**£5,264,000**	**£5,264,000**	0.05 years

Figure 5-10 - Investment Appraisal of the CEMAR Production Deployment

The calculations assumed the average margin per year is £121.00. The end result is that 1% impact on churn yields c. £500k, 5% yields c.£2.5m and 10% yields c£5m. If the current voluntary churn figures were used in the calculation, the impact would be twice as effective. For example, a 0.5% on churn would yield c.

£500k. These low percentages are relevant in the light of the Customer Experience Model and the relatively small correlations established. Small percentages can have significant monetary impact.

The project costs are relatively low at c. £250k, with ongoing business rule maintenance and data management amounting to c. £60k per year. These figures point to a swift payback and a compelling business case. The calculations assume that retention expenditure is substitutional, meaning the existing retention budget used to fund recovery actions. The figures also assume the effort of the customer facing teams is substitutional, as they will be dealing with customer in a quicker more effective way. As already mentioned, this takes quite a conservative view of the benefit, through a desire not to overstate the potential impact of the solution. This view also does not include the word of mouth benefits of providing good experiences (experienced by potential new customers) or the increasing usage and consumption of services by existing customers enjoying the experience.

5.6 Learning and Reflection

5.6.1 Considerations for Theory

In reflecting on the prototype build, there are theoretical considerations in relation to (a) the prototype itself; (b) awareness of the business case; and (c) service recovery.

The Prototype

Action Research Cycle Two was instigated in response to the questions posed at the end of cycle one: What would a customer facing version of the Customer Experience Framework look like? Can a solution be devised? Is there a simple solution that could integrate into Telco's existing infrastructure? Is there a strong business case for building the solution? This cycle reveals some anticipated and some unanticipated consequences of developing and reviewing the prototype and

these are categorised in terms of considerations for theory and considerations for practice.

The existence of a prototype that looked and behaved like a real Telco system had two key psychological impacts. Firstly it provided the team with the knowledge that conceptual model could be made operational. The prototype's components: data; databases; business logic; rules engine and interfaces, were all components, admittedly in a simpler form that would be found in a working live system. Secondly the existence of the prototype allowed the teams and the representatives of the impacted areas to start to think about what the implications for them moving forward would be. What they would need to do differently. How they would need to behave differently. A prototype allows this visualisation more than paper designs or discussions and was an essential tool for the study in prompting these expectations of the future. Figure 5-11, once again provides a reminder of the Customer Experience Framework and highlights the areas that were reviewed during Prototype development in Action Research Cycle Two.

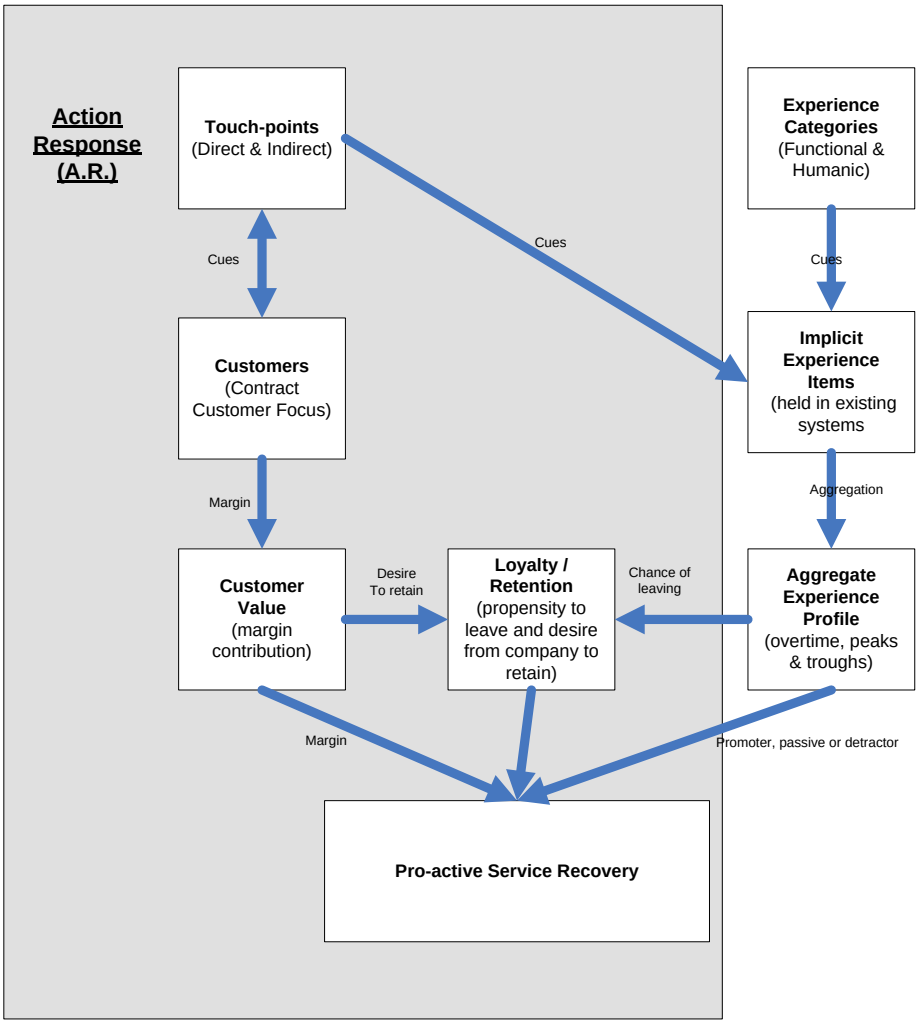

Figure 5-11 – Customer Experience Framework – (Service Recovery Focus)

As discussed within Section 5.5, in general terms, due to the formative evaluation approach the technical manifestation of the prototype was reasonably uncontentious. The look and feel matched the CSIS implementation which had already been introduced to frontline teams. The creation and final visibility of the business logic that would drive the loyalty action responses gave the team confidence that the service recovery element would provide the foundation for a knowledge and empathetic discussion between the front-line employees and customers.

Awareness of Business Case

Concerns over the profitability of mobile operators, which led to pressure within Telco to reduce the retention budget, prompted a change in the team's

consideration of customer value. Earlier theoretical considerations of customer co-creation of value were replaced with more short term and directly financial considerations of Average Margin Per User (AMPU). This led the team to seek to target their efforts on high and medium value customers. This amended focus of customer value emerged at the end of cycle one and provided an updated feed into cycle two.

Another emerging aspect was the view that funding for the service recovery actions within CEMAR, should be substitutional, in that some of the existing retention budget, much of which was spent at the end of the customer's contract, should be transferred for use with CEMAR. The idea was that targeted investment earlier on, and in a context specific way would reduce the need to spend significant sums at the end of customers' contracts. This new thinking improves the business case for CEMAR.

Consideration of the business case for CEMAR provided insights into the level of understanding of the cost and revenue drivers for new and existing customers. A mix of inconsistency of financial definitions of costs and revenue together with an uncertainty on how to treat intangible benefits such as goodwill and positive word of mouth seemed to make it difficult to see the benefits of retaining customers. Whilst the business case generation process did not provide common agreement on the definitions and treatment of intangibles, it made their existence explicit which enabled the team to have a fuller appreciation.

The investment appraisal of the CEMAR solution, even using the conservative figures provided by Telco, provided a compelling assessment of the benefit. The Marketing Manager worked closely with the researcher on the figures and concluded that:

> *"following this exercise the size of the opportunity is now not so much in question, but specifically how we tap into it is…based in the impact of very modest improvements in churn CEMAR could play a significant part in the realisation of this opportunity."* Marketing Manager and Study Team Member

Service Recovery

Visibility of the experience profiles, in particular ones indicating poor experiences, which had occurred over many months, re-enforced the teams' conviction in the utility of attempting to service recovery mid contract and not waiting to the end of the contract. Once again physically seeing rapidly degrading scenarios and continually low experiences, prompted the team to decide that waiting until the end of the contract not only allowed the customer to store up bad will, but presenting them with money incentives was expensive, probably will not fix the problem and didn't have a good chance of succeeding.

Despite weak correlations between CEM and churn, primarily based on poor data availability it was suggested, the team concluded that customers operating at the extremes (i.e. high value customer, but suffering a terrible experience), there was confidence in providing mid life service recovery. This was based on Telco experience that effective service recovery would increase the chances of the customer staying and the cost expended would be significantly lower in value to the future revenues of a high value customer.

The view was that the model was by no means perfect, but provided an opportunity put forward ideas about how Telco agents can engage with customers at the key touch-points and provide a vehicle to discuss and improve customer experiences. One excellent low cost proposal coming out of the demonstrator prototype for testing the efficacy of service recovery, was to build a simple semi-production quality system and to draw up a list of high value customers, who are having a low experience and use it for outbound calls agents make to customers all the time. This way a refined model using new experience items, the efficacy of the experience item aggregation, with better quality data and the loyal action responses, can be tested over the whole or part of a customer's contract life-cycle, without the need for large scale IT investment.

5.6.2 Considerations for Practice

In reflecting on the prototype build, there are also practical considerations in relation to (a) the simplicity of the solution; (b) customer engagement and the role of the front-line teams; and (c) related improvement projects; (d) Action Research reflections.

Simplicity

There was and continues to be a need to keep the solution simple, as this provided good engagement from Telco. The researcher was eager to highlight the fact that the solution was a tool in improving experience and not the answer on its own. The environment that the solution would be deployed into is fast moving and complex. Therefore, there are dangers in being pre-occupied with the detail specific analysis or the absolute "perfection" of the solution. The team subsequently adopted an approach akin the following quotes attributed to Albert Einstein (physicist) and George Box (statistician) respectively…"Make your theory as simple as possible, but no simpler" and "All models are wrong but some are useful" (Oberg & Mahoney, 2007).

Customer Engagement and the Role of the Frontline Teams

Although the look and feel of the user interface was generally praised, discussions were had over whether the customer should be able to see the screen. Questions of whether it would be acceptable to stop customers seeing the screen, whether it was part of the open culture to be accessible and free with the information… The main reason for this was with experience items such as bundle usage and cost competitiveness. In these areas, Telco could be making short term gains from customers being on a higher tariff, to the detriment of the customer's finances. The team concluded that Telco should not take chances with customers that are high value and having a poor experience, even if it appears to reduce company margins in the short term.

The discussions with the representatives of the front-line teams prompted further consideration on the obstacle to improving the Customer Experience. CEMAR was envisaged to provide a valuable tool for Telco, but required the buy-in from the front-line teams and organisational alignment driven from the senior managers within Telco, motivating front-line agents to adopt this approach to customer experience improvement. Supporting customer-facing employees in service industries requires the integration of operational business intelligence with knowledge intensive business processes that the customer facing employees use (Marjanovic, 2007).

The team believed that the concept of having discussions held with customers relevant to their experience was a very different approach and would require a culture change across the organisation (i.e. a more open, listening approach and a focus on retention as well as sales). This Action Research cycle once again highlighted the need for organisational alignment in addressing Customer Experience, and illustrated again the short term push for sales and the pressure on the front line teams to restrict the time spent on "saving" existing customers, in favour of short term sales. Any future iteration should consider what changes would need to be put in place to improve this alignment.

Related Improvement Projects

Dickens & Watkins (1999) suggest that the essential aims of Action Research are to improve and involve. The validity of the theory can be judged by the simple criterion of whether it leads to improvement and change within the context. With this in mind, changes in the way the organisation views Customer Experience has developed since the end of Cycle Two and appears to be developing even further. A business led churn reduction programme was initiated with that team, looking at whether they could develop CEMAR into a more robust production quality system, to use within a live trial. In parallel to the study a project called "deal calculator" was initiated with the aim of providing better fairer value deals to customers. The focus of this project centred on the cost to retain vs. the customer value, and not all aspects of the Customer Experience Model.

As noted previously, data available and quality restricted the team's ability to test further, although change is underway with Telco to improve the situation. New data architecture is being implemented in line with a new business intelligence strategy and architecture. Significant investment is being made in improved network probes, to monitor individual customer performance. The network team within Telco has also initiated more work to correlate experience to network data, which will provide input in network investment decisions around capacity and improve coverage.

Action Research Reflections

The consideration of the size and holistic nature of change required is pertinent when discussing Action Research, since although real progress has been made, Action Research is often criticised for enabling only small scale changes and not the revolutionary changes that are sometimes required. However, a counter argument to this is that, Action Research is useful at relatively quickly but thoroughly assessing and testing whether a course of action should proceed, whilst being careful to capture the learning and the assumptions made along the way. In further reflecting on the research process, it would be fair to say that it was difficult to pursue a purist Action Research approach and not be influenced at the time by the desires of the organisation for speed and quick results. This often resulted in pressure to analyse in less detail and less comprehensively than the researcher would have liked. However this appears to be a fact of modern commercial life and possibly the Action Research literature should strive to be more explicit about these challenges, highlighting any strategies that may help the researcher.

5.7 Summary

Research cycle two adopted the evaluation, learning and reflection from Action Research Cycle One and progressed through the five canonical research phases. A prototype solution CEMAR was developed, which was deemed deployable as a

concept in both contact centre and retail store environments. This would enable Telco to minimise one of the sources of tension that arises with the front end teams, which tends to arise, when they have to interact and are using different front line systems in their communication with each other.

The chapter discussed a collaborative and iterative development process in which the researcher was able to obtain immediate feedback from teams closest to front line experience. The service recovery design and business rules provided realistic action recovery proposals, although the study did not have time to quantitatively test the impact of these actions on whether they help improve the experience for the customer and whether this contributed to churn reduction. In evaluating the prototype, Telco were happy that the solution was simple and intuitive, went to the heart of identifying customer experience issues and provided an instrument for front line agents to have a productive and human conversation with customers within the context of the experience the customer was having. The process however raised the issue of clarity of roles and responsibilities of all employees impacted. The improvement process would need to provide awareness, training and changes to objectives and reward and remuneration mechanism where necessary.

Using CEMAR, Telco will still not get every interaction right, but in summary, the team believed that even if agents simply show empathy towards the customer's situation (easier with CEMAR due to having a view of the Customer Experience) this is productive in the fight for retention. Moving a step further, if the agents can contact the customer before the customer complains or becomes extremely frustrated; this would build good faith between the organisation and the customer. Advancing once more, if agents can respond with a solution to the main pain point for the customer, then organisations will be well positioned to win the retention battle. Finally, if they can do this profitably and with a reduction in the overall retention budget (resisting the temptation to throw money at every customer at the end of their contract) then this would be the ideal scenario.

Chapter 6: Discussion

6.1 Introduction and Overview

The Action Research Cycles have enabled significant progress in the evaluation and validation of the Customer Experience Framework. This chapter presents support for the conclusions reached and further validates the initial and emergent theoretical contributions with positive commentary from Telco Directors. Following a review of the nature of theory, CEM is shown to have explanatory and predictive theoretical properties, and the prototype CEMAR displays good design and action theoretical properties. A lack of organisational alignment and some ambiguity over customer experience roles and accountabilities, both for individuals and teams, are shown to present obstacles to the successful implementation of frameworks such as CEMAR. In addition data availability issues, if not addressed, present another significant barrier to implementation. The strength of Action Research in promoting change in organisations is document with a description of projects initiated as a result of the framework findings.

The chapter demonstrates the concerted effort required from organisations to bring about sustained Customer Experience Improvements. Through an analysis of the commentary of the 5 Telco Directors, Section 6.2 highlights the potential impact of CEMAR for individuals and teams. Section 6.3 reviews the implications for practitioners, looking particularly at organisational considerations, issues of data availability and activities required to bring about a quick improvement in Customer Experience. Section 6.4 reviews the nature of theoretical contributions and contrasts the thinking against the components of the CEMAR framework. Section 6.5 reflects on the research process and the adherence to sounds Action Research principles. Section 6.6 provides a summary.

6.2 Telco Senior Management Commentary

6.2.1 Background to Senior Management Interviews

Following the culmination of the Action Research Cycles, it was important to interpret what the impact of the outcomes meant for Telco highlight the implications for the teams and individuals within the organisation. In order to support the evaluation, a number of senior managers were interviewed in an attempt to draw out their thoughts on aspects of the Customer Experience Framework, obstacles to implementation and the approaches they supported for improving customer experiences. These Directors represented the areas of Retail, Retail Development, Customer Management, Customer Experience and the Consumer Champion Director. The interview process helps ground the contributions (Strauss & Corbin, 1998) and helps identify gaps in the theory or literature with respect to what Customer Experience means for the wider organisation and for the business performance of Telco.

The Telco Directors provided good representation of the customer facing. They were also selected based on their influence, authority and willingness to change the Status Quo with respect to Customer Experience. All the Directors held positions that reported into Board Directors (with the exception of the customer experience manager) and all the Directors who were approached agreed to give their time to contribute to the interviews. Although it should be noted that the Customer Experience Manager was due to leave the company in the coming months with the Customer Champion Director taking over all responsibility for this area.

This section captures their feedback provide during semi- structured interviews (see Appendix H) with recorded transcripts (see Appendix I). This section synthesises their responses within the following sections: Customer Experience

Model; CEMAR Framework; and Additional other Senior Management Considerations.

6.2.2 Customer Experience Model

When asked how they would define Customer Experience, the senior managers supported the Customer Experience literature's view in considering experiences at touch points with functional and humanistic perspectives, but they stressed the importance of gauging the experience from the customer's point of view.

> *"It's the emotional outtake from an interaction…its what they go away feeling…". [Customer Experience Manager]*

> *"We need to ensure Customer Experience is not seen as a management fad….CRM was very nineties and CE seems to be very noughties and teens…..however there is substance to it if executed correctly". [Customer Management Director]*

The Retail Development Director added it would also be useful to consider the experience of "potential" customers at these touch-points, which unfortunately the implicit customer experience model would not be able to support, as Telco would not have data about these customers. The Customer Management Director was keen to point out that a customer's usage profile could be viewed as an indicator of whether the customer is having a good or bad experience, which supports the changes in voice and data usage experience items within the Customer Experience Model described in Chapter 4.

The Customer Experience Model attempted to cover the relative importance of the experience items by using weightings. The Customer Champion Director supported the idea of weighting experience items, characterising experience issues in terms of volume and impact.

> *"The biggest single obstacle is the network, which is high volume in terms of the customers it affects and high impact as it often measure customers have a disrupted service. Customer service and first call resolution is also high volume and high impact…handset repair is also an obstacle as while it is low volume...it is off the Richter scale in terms of impact, as people hate being with out their phones". [Customer Champion Initiative Director]*

This handset anecdote is supported by the correlations with handset repairs and churn. Being without the phone is an irritation, but the inadequate handset repair process exacerbates the poor experience and this view accords with the weighting within the Customer Experience Model.

The Customer Management Director and the Retail Development Director both endorsed the Net Promoter Scoring Mechanism (Reichheld, 1996).

> *"I really like the Reichheld books on the Net Promoter. It's just a really simple concept of good and bad profits…good profits come from delivering good experiences". [Customer Management Director]*

When asked to rating Telco's approach to tackling Customer Experience on a scale of 0 – 10 (with 0 being extremely poor and 10 being extremely good), most managers suggested 3, with the highest score being 4, indicating the size of the task for Telco to improve. However all said with the new focus on Customer Experience as part of the CEO leadership and as a result of this study, the attitude and desire to change would be rated as an 8.

> *"Looking at the Net Promoter for the industry as a whole, it's a (-3). So you put all this in the right perspective". [Retail Development Director]*

When asked to rank the following items in teams of their importance to Customer Experience the responses are as follows (the initials denote each director):

Table 6-1 - Telco Director's Assessment of the Importance of Experience Categories to Overall Experience

Experience Category	DB	MB	DC	IP	SR
Cost	7	3	4	5	4
Coverage	1	1	3	2	2
Handset	5	5	5	3	3
Customer Service	2	2	1	4	1
Offerings and Promotions	6	7	6	1	5
Billing	3	4	7	6	6
Image	4	6	2	7	7

Customer Service and Coverage or Network, were ranked predominately as 1 or 2, which support the emphasis of the model on these areas. The network emphasis supported the philosophy of getting the basics right and the focus on Customer Service suggested attention to more human aspects of Customer Experience (Carbone & Haeckel, 1994). The other supportive observation was that cost was not ranked high and its was therefore ironic that this area was the prime focus within the existing retention process (i.e. give the customer a better deal). As noted in Chapter 4 and Chapter 5, contextual action responses should be encouraged during the retention process.

All the Senior Manager recognised the importance of Customer Experience and viewed the retention of existing customers, rather than new acquisition, as the more pressing concern.

> *"Our experience makes our business…Customer Experience is a discipline, but Telco are only at the start of the journey in understanding this". [Customer Management Director]*

6.2.3 CEMAR Framework

The Director of Retail Development was supportive of the Action Response element of CEMAR, stating:

> *"all organisations can make mistakes, but poor Customer Experience often comes from trying to recover for a problem…companies can typically make bad experiences worse, which is what provides the lasting experience." [Director of Retail Development]*

The literature supports this and also some the supportive opposite argument that doing service recovery well may provide an opportunity for organisations to improve a customer's experience beyond the point it was at, prior to the incident (Hart, Heskett & Sasser, 1990).

The Customer Management Director pointed out that there was a need to differentiate loyalty from retention, with retention (as used within Telco at the moment), being likened to a sales transaction.

> *"It's a bit like calling the ambulance at the bottom of the cliff…If we can build the loyalty commitment before the 999 call, we don't get into a sales transaction discussion…where the cost to retain starts to equal the cost to acquire…customer stay because they want to". [Customer Management Director]*

This view supports timing considerations, which is integral to the successful working of CEMAR, in that it focuses on gauging experience overtime, intervening mid contract and ensuring agents can do this in a real-time manner. Telco and other organisations need to treat the retention of customers as a lifecycle process that provides loyalty actions when customer experiences are poor through-out the contract and not just at the end.

During the first Action Research Cycle and at the beginning of the second, there were always lots of discussions around the economics or new customers versus retaining existing customers. The overwhelming response was that retention is much more important than acquiring new customers, especially when you consider the benefit of building a base of advocates who through word of mouth can support acquisition. There are greater acquisition costs in fighting for new customers, plus greater exposure to fraud, which is naturally much less with existing customers who have already been through the fraud screening process.

The above assertion tends to be correct, as long as one retains profitable customers or has a plan for turning non profitable customers into profitable ones. Also for a smaller company in an established market the prospect of net negative growth (where customers acquired is less that the customers that churn) is a real one. The Customer Champion Director was careful to note that you need to consider profitability when retaining customers.

> *"…the way you keep a customer can impact the financial assessment…so if you are keeping that customer like we were in the past, which is give them the kitchen sink, throw money at them, give them lower tariffs, actually you see substantial margin dilution". [Customer Champion Director]*

This comment supports the customer margin functionality within the Customer Experience Model, which allows the organisation to propose loyalty responses appropriate to the customer's profitability.

> *"many companies do the "Customer Experience thing", but not within a sound commercial framework. I'm interested in keeping margin in the business...Customer Experience must make financial sense." [Customer Management Director]*

The Customer Management Director was pleased with the focused on the business case and wider commercial framework put forward by the team, believing this would help other in the organisation, sit up and take notice.

6.2.4 Additional Senior Management Considerations

The lack of consistency of service delivery at different touch-points was also seen to be a major obstacle to providing continually great experiences, together with organisational alignment around the best course of action for a customer. In large organisations the decomposition of roles sometimes means that employees lose sight of what makes sense for customers and they fail to act in a customer centric way (Meyer & Schwager, 2007). Directors have suggested that organisational changes have taken place providing improved ownership for the end to end experience. For example the retail director is also accountable for the contact centre staff that support the retail channel and the repair teams that fix handsets that are brought back into store, as well, as the expected front line sales force. His incentives and rewards have been amended to reflect this change in accountability. He stated a real desire to fill in the gaps which are often left by traditional functional accountabilities, but there is still some way to go.

> *"Different people are accountable for different touch-points with inconsistent understanding of what it should be…accountability has not been good across the organisation and therefore it has become an excuse and not a big enough priority for people to fix." [Retail Director]*

There were a number of additional suggestions put forward by the Senior Managers to overcome the obstacles. One was to support experience management by providing corporate communication on what good experience looks like and engendering a cultural change whereby all employees see providing a great customer experience as part of their individual accountabilities. The senior managers suggested that organisations, if not challenged, get complacent and as times goes on, allow poor experiences, and overtime these poor experiences are accepted. The communication on expectations around experience was viewed as being as important to employees as it is to customers (Johnston & Michel, 2008).

The senior managers believed that having a Customer Experience Model that worked in real or near real time, assessing the experience of individual customer

and suggesting loyalty actions, was an important part of employees' toolkit and provides a continuous jab to the organisational consciousness. The fact that the model can be deployed across many channels would help provide a consistent level of service. The Customer Management Director was supportive of the CEMAR philosophy:

> *"Would CEMAR support the real-time decision making…so it constantly analyses your customer information? Could you put a single system across all touch points…and you can decide proactively what is the right conversation to have with that customer...This is what I would like to see. [Customer Management Director]*

On the way forward there were some areas of agreement and some areas of difference. Most agreed in the need to invest in the Network and adopt a honest and open approach with customers. There were differences of opinion over how to accelerate progress. The Customer Experience Manager suggested a customer experience blueprint was needed informed by a review of the experiences customer should be receiving by touch point and by life stage (e.g. first few months, nearing the end of contract). However the Customer Management and Customer Champion Directors disagreed.

> *"I think all the insight we need is in the business. Our people can tell us where the key points of failure are, and they can probably tell us what we need to do to fix them". [Customer Champion Director]*

Improving Customer Experience clearly requires organisations to align many different departments / teams that have become accustomed to working in isolation. The alignment must make use of incentive and reward mechanisms, but at the core a deep seated culture change that explains why improving the Customer Experience is good for the company and what part individuals play in that is essential. It was also evident from interviews with senior managers in Telco that whilst the mobile industry pushes the envelope with new products, services and handsets, the key areas of coverage, customer services when people encounter

problems and value for money (cost) are still the deal makers and breakers for the vast majority of customers. Issues of alignment, data integrity, culture change are extremely difficult to achieve, which means that if Telco can get the formula right, it provides a competitive advantage that is very difficult to replicate.

6.3 Implications for Practice

6.3.1 Organisational Considerations

(Galliers & Land, 1987) contend that the measure of the success of research in an applied topic such as Information Systems, is whether the knowledge has been improved to the extent that this improved knowledge can be applied in practice. If our research fails to be applicable in the real world, then all endeavours are relegated to the point of being irrelevant. The following section reviews the practical impact on Telco.

In the area of teamwork, the key representatives of the team mentioned that many of the questions surrounding Customer Experience and their particular sphere of activities had not been discussed in a cross functional manner before, and it was refreshing to see how ideas improve or additional considerations are noted when collaborative feedback is received from different parts of the organisation. Although Telco is not a massive lumbering organisation it was interesting to see the "siloed" nature within which some teams operated. Whilst that approach may be ok for many of the operations performed within Telco, the area of Customer Experience requires a more united and co-ordinated approach. The team commented that the close working enabled the teams to develop a shared understanding of the problems and a feeling that "we were on the same team" in trying to develop solutions.

This co-ordinated approach at the project team level is not always mirrored within the organisation. Often the incentives and reward mechanisms were not always

aligned. The starkest example of this was the contrast between the contact centre and the retail stores. In retail all financial rewards were linked to new sales, and upgrades (retention) were viewed as being of less importance in view of the bonuses paid for upgrades versus new sales. One view was that it was cheaper to upgrade via the contact centre and therefore this is where people should be pushed. This view would have more weight in the idle time in stores were not c.70%. Also the Customer Experience view would be to do everything to upgrade in the manner chosen by the customer. In the exercise before the first Action Research Cycle it was clear that c. 50% of customer traffic into stores were for non new sales activity and this percentage is about to increase as the base of existing customers outweighs new customers. At first the defence from the sales senior managers was that agents need to hit the numbers or the company does not hit its operating plan, plus the feeling that store staff can be motivated in non financial ways to provide a good level of service of existing customers. However from the results of the first study, it was clear that the sense of pride that would drive store staff to help existing customers even though there are not be directly paid to do so, was not sufficient to push improving the Customer Experience to the levels required to make a dramatic difference.

Telco have started to address this by adopting a mystery shopping campaign, where an agency is employed to randomly send mock customers into stores to assess how well they are being treated. And whilst some of the focus is on whether the store member sold effectively and honestly, part of the scoring mechanism is aimed at helpfulness of the agent, knowledge, appearance and rapport / connection. The attributes will form part of an agent's appraisal and the stores periodic assessment, with both these aspects leading to financial ramifications for the agents. These emotional treats are being introduced and would support the quest to provide a better in store experience.

It has been noted that is more cost effective to retain a customer than it is to attract a new customer, so firms should re-evaluate the relative budget allocations and the resources they focus on these two activities. Due to the systems changes,

organisation alignment requirements and the cultural reconditioning required, the improvement programme can be expensive from an outlay perspective, but the returns do appear compelling. If the CEMAR solution were to be rolled out, the area of incentives and the role of front line staff in store would need to be revisited in order to get the more production outcome for the company in the medium term.

Another key aspect that may foster a greater acceptance within a traditional sales environment, is presenting tools like CEMAR as an effective, efficient and most importantly fastest way of dealing with customers. Productivity (number of sales, per agent, per day) is a key metric within the retail community and if improving Customer Experience is presented as a priority from Senior Management, CEMAR and other tools may provide the quickest way of dealing with a customer effective, freeing up time for pursuing more sales. CEMAR could be presented as the quickest way to get to the root issues with a customer and without it, the conversation may take longer (if the agents plays the listening and supportive role) and the customer may go away unsatisfied.

Telco as also started to tackle alignment issues by making the key directors accountable for the entire end to end process, within their channel. For example for the sales director, it means that he's not only accountable for the sales through the retail challenges but also the repair process and customer services across this channel. The sales director mentioned that this provides an additional motivator to sell honestly and informatively in the first place (to minimize returns and disgruntled customers that will come back to haunt them), but also gave the director at the top accountability for resolving issues that customers may have.

In reviewing how better to manage Customer Experience across organisations, Responsetek (2010) suggest: Involve the customer and capture the experience whenever, and wherever it occurs; Integrate the customer's voice into processes and employee activities; Improve the situation by continually turning insights into actionable improvements. The challenge is that companies need to elevate the

creation of a differential experience from an intuitive art to a management discipline. Engineering an experience begins with the deliberate setting of a target customer perception and results in the successful registration of that perception in the customer's mind (Carbone & Haeckel, 1994).

Berry, Carbone & Haeckel (2002) go one step further in suggesting that organisations need to build a new customer experience competence, which could include observing customers and performing in depth interviews. This could provide competitive advantage as it's hard to replicate. They stress that Customer Experience must be part of the organisational culture. Improving the Customer Experience in a company is as much about improving the user/customer experience for colleagues, whose role it is to serve the end customer (Hassenzahl & Tractinsky, 2006).

6.3.2 Data Availability

The lack of availability of data items that provided a strong map to experience items, was considered to be a major reason why the correlation within the analysis phase was not as strong as expected. Whilst Telco generates a mass of data and information, it is not always in the form required or at the frequency requested. If one gives consideration to the two experience categories that were universally agreed by customers and senior managers for being key experience categories and the highest sensitivity areas, the area of network and customer services require the most attention.

In terms of the coverage experience, the network measures employed were extremely crude. Since the completion of the study Telco have already spent millions of pounds to improve the ability to assess how the network, and may be impacting individual customers, at a particular moment in time. These tools, which included Velocent software, have been deployed in the network and are already paying back. The analysis data of dropped calls and call set-up failures,

which was impossible to obtain during the study, can now be obtained. The study played a part in convincing Telco to invest these sums of money.

In a consideration of customer services, the inability of the team to have information on repetitive calls once again was seen as a major reason for weaker correlations than expected. Telco is faced with two key issues here. Firstly, the issue of ensuring that agents are recording the reasons for customer calling in an accurate manner: This is a challenge given the pressure to reduce average handling time and also the subjectivity in describing the reason for the call. Secondly, storing this information and making it available to systems like CEMAR, to use in real time provides an information systems architecture challenge. The business intelligence team at Telco have started addressing these issues in the evolution of the data warehousing and data mart solutions. Applications such as CEMAR provide additional backing for the business case for re-engineering Telco business intelligence system to take advantage of these new initiatives.

6.3.3 Improving the Experience

It has been extremely encouraging to see the creation of a number of projects and programmes aimed at improving the Customer Experience, as mentioned in the learning and reflection sections of the Action Research cycles. More focus has been placed on improving the Customer Experience and the initiative has sponsorship at board level. Network improvements have received a disproportionately large share of the attention, as the whole company believes this is the bedrock upon which the basic customer experience stands. Therefore investment and organizational responsibility alignment changes have been directed into improving capacity and coverage, as well as customer monitoring and profiling. These activities are much more cross-functional in their design and implementation than they have ever been in the past. This in part is in recognition of the fact that the experience a customer receives and takes away, is definitely the sum of actions across many teams in Telco and also, importantly, that to provide

better than average customer experiences, cross functional alignment and working is essential. Customer experience is extremely exposing if organizations fail to grasp this point, so it is encouraging to see Telco taking the right steps forward.

In addition, the researcher and the university were requested to take part in a subsequent exercise following the study to look at how Customer Experience is impacted by degradation in network performance (both throughput/speed and capacity/coverage). Telco are also employing the Customer Experience thinking in new and innovative ways. As well as monitoring experience data to fix issues and reassure the customer, they are also using the information to plan their network investment, due to a re-calibration of the thresholds at which more investments are made in heavily congested areas, and the timing of these investments.

The studies have indicated that areas previously thought to be heavily congested and providing a poor customer experience were not as bad a previously thought when an analysis was conducted of the new network statistics, together with comments from students performing mobile services in these areas. It has transpired that whilst the video streaming experience may be seen as unaccepted by the test customers, this tended to be in the evening busy hour only and did not affect the experience of other services such as browsing, emailing, downloading and voice calls. This new information allowed Telco to make effective budgetary decisions that provide the biggest impact to the most popular services in the right priority order. This, Telco believes, allows them to raise the bar, for the benefit of the most people as quickly as possible and thus improving the experience of a large number of services that customers feel are suffering from poor experience sooner.

The mobile market can be broadly categorized as Voice and Data, with the study primarily concerning the voice experience. Telco has taken many of the lessons learned from the study and applied them to the data market, which appear to be paying off as the customer survey and data metrics suggests a radical

improvement. For example, to the extent where there are now considered to be the company to beat in terms of market share and customer experience. It may have been easier starting afresh with a "new service" and without the baggage of trying to change perceptions of existing services that was considered below par. While a case study from the mobile telecommunication sector is employed in this research, the results are generalisable to companies in other industries whose profitability depends on developing a competency in experience management and who have desire to retain more of their high value customers.

The practical changes reported in the section have without a doubt moved Telco forward; however it is fair to question whether change has been sufficient in relation to where Telco wants to be. One of the suggested weaknesses of adopting a pragmatic approach is that this philosophy may promote incremental change rather than more fundamental, structural, or revolutionary change (Johnson & Onwuegbuzie, 2004). The following section goes in to more detail with reflections on the research.

6.4 Implications for Theory

6.4.1 The Nature of Theoretical Contributions

Developing theory is what we are meant to do as academic researchers and it sets us apart from practitioners and consultants and theories should be practical allowing knowledge to be accumulated in a systematic manner and the knowledge then enlightens professional practice (Gregor, 2006).

(Gregor, 2006) highlights five different types of IS theory: theory for analysing; theory for explaining; theory for predicting; theory for explaining and predicting; theory for design and action. These are described in more detail in the table below.

Table 6-2 - A Taxonomy of Theory Types in IS Research (adapted from Gregor, 2006)

Theory Type	Distinguishing Attributes	Thesis Contributions
Analysis	Says "what is" The theory does not extend beyond analysis and description. No causal relationships among phenomena are specified and no predictions are made	
Explanation	Says "what is", "how", "why", "when", "where". The theory provides explanations but does not aim to predict with any precision. There are no testable propositions	
Prediction	Says "what is" and "what will be" The theory provides predictions and has testable propositions, but does not have well-developed justificatory causal explanations.	
Explanation and Prediction	Says "what is", "how", "why", "when", "where" and "what will be". Provides predictions and has both testable propositions and causal explanations.	• Customer experience model (CEM)
Design and Action	Says "how to do something" The theory gives explicit prescriptions (e.g. methods, techniques, principles or form and function) for constructing an artefact.	• Prototype Demonstrator (CEMAR)

The contributions within this study are focused on explanation and prediction, and Design and Action theory types, although many of the contributions to the CEM framework; business case for retention; in life service recovery; pro-active intervention; implicit experience indicators, are distributed across the explanation and analysis theory types. This wide coverage ensures that there is a degree of integrated thought in the assertions that are being put forward and supports the notion within Action Research of being able to advance and support change in the organisation.

It is useful to test whether the theories highlighted live up to the true test of being theories. A helpful way to reviewing this is to deconstruct theory into key components. This assists researchers in allowing them to identify what theory is composed of in general terms.

Table 6-3 - Structural Components of Theory (adapted from Gregor, 2006)

Theory Component	Definition
Means of representation	Theory must be physically represented (e.g. words, diagrams, mathematical terms, pictures, models, prototypes)
Constructs	Refers to the phenomena of interest in the theory. Construct types include: observational (e.g. technology, theoretical (e.g. methodologies)
Statements of relationships	Illustrates the relationship among the constructs. Types include: associative, compositional, uni-directional, bi-directional, conditional, or causal.
Scope	Specified by the degree of generality (signified by modal qualifiers such as “some”, “many”, “all”, “never”.
Causal explanations	Statements of relationships among phenomena that show causal reasoning.
Testable propositions	Statements of relationships between constructs are stated in a form that can be tested empirically.
Prescriptive statements	Statements in the theory specify how people can accomplish something in practice

The decomposition of theory into the structural components, allows interested parties to compare and contrast different theories. The means of representation describe whether it is words, mathematical symbols, diagrams, graphs, pictorial devices, working models or prototypes that from the main way of communicating the theory. Each theory should also possess constructs, which refer to the entities that the theory concerns. These entities tend to be either physical phenomena or abstract theoretical terms. All the other components depend on both means of representation and constructs. (Gregor, 2006) cite the example of e=mc2 as a theoretical statement of words or symbols that represent constructs. Statements of relationship, scope, causal explanation, prediction (testable propositions) and prescription, are all different types of statement.

The following sections divide the study contributions into: (a) Customer Experience Model; CEMAR Prototype; and (c) Organisational Contributions. Gregor (2006) suggests that researchers should think very carefully and separately about issues such as causality, explanation, generalisation and prediction in framing theory, with the realisation that stronger theory can result from combining theory of different types. The sections attempt to describe the contributions using the theory components, providing a view of the emergent aspects of theory during the study. The study's theoretical contributions are different and varied and are a product of progressing through the action research process.

6.4.2 Customer Experience Model (CEM)

Customer Experience Monitoring Model: Contributions here are presented in the form equations and a framework, which synthesises implicit and in-life theories into a model for dealing with improving Customer Experiences. Business logic, rules and technology are employed to provide a rapid and real-time output. In terms of the statement of relationships, the model deals with aggregated experience items that form a composite experience, which is then monitored overtime. The scope concerns most customers and provides causal explanations, which are then tested and prescriptive statements of how this could be used within Telco are made.

Implicit Indicators of Experience: Contributions here are words describing representations, cues and proxy indicators of experience. In reviewing the statement of relationships they can be described as associative in nature, in that the theory puts forward the view that one can review a number of implicit indicators represented by data existing with the information systems of companies and by association determine whether they are having a good or bad experience. This causal explanation and scope mainly covers the more functional aspects of experience and does not attempt to uncover humanic experience indicators in the data. The Customer Experience Monitoring Model and data analysis provide the

testing environment and prescribes how organizations can proceed with using this theory.

6.4.3 Prototype CEMAR

Prototype Demonstrator (CEMAR): Contributions here are presented in the form of a working model and demonstrator, synthesising the CEM model with the Pro-active Service Recovery thinking (Action Response) to provide CEMAR. Screen, interfaces and working software form part of the means of representation. The relationships between the entities are thought to be complementary and synergistic. The scope covers the same concerns as with the Customer Experience Model which forms the basis. Through the business logic and rules and ultimately the graphic representation, it provides causal explanations. Time did not allow for the full solution to be productised and tested in the normal cause of Telco's business, but the demonstrator provided a prescriptive suggestion of how the organisation could proceed.

Pro-active Service Recovery: Similarly to the means or representation and constructs for In-life retention, contributions here are based on a worded explanation of the timely communication with a customer in respect, however in advance of the customer notifying the organisation that there is a problem. The causal relationship expounded here suggests that being upfront and honest with the customer builds trust in the relationship and fosters the more humanic aspects of customer experience. It provides an opportunity to listen to customers, prevents the build up of a negative mindset, and ensures action is taken as close to the onset of the poor experience as possible. Once again, time did not allow for testing the impact of being proactive, or the provision of prescriptive statements. However in the results of the pre-cursor to Action Research Cycle Two, conducted with real live customers, there was a clear illustration that an informed interaction with the customer based on real data, led customers to feeling more trusting of the frontline member of staff. This approach also prompts customers to think that front-line

staff were more knowledgeable and credible, which in turn led to a greater rapport with the customers.

In-life Retention Strategies vs. End of Contract Retention Attempts: Contributions here are based on a worded explanation of the timely communication with a customer in respect of improving the Customer Experience. Presently Telco primarily place the most effort and resources in the final months just before the end of contract. The theory put forward explained that more resources should be diverted to intervening earlier, once there is an indication there are experience issues and this provides more time to turn things and does not assume "throwing money" at the problem at the end of contract is either cost effective or targeting the main problem. It is thought that the scope covers most customers and that a causal relationship exists as the theory builds on the positive results of the CEM model. The indication is that one can identify likely "churners" mid contract (in life) and that through Customer Experience Monitoring one is able to address problem areas, other than through the mechanism of lower prices, that may be affecting the customer's experience. This application of retention strategy is fairly unique, as previously it was difficult to know what to say to customers and what areas to base your conversations on. Time did not allow the team to test this intervention or provide prescriptive statements, however the belief was that Telco would now be able to focus on likely churners with more confidence than they would have in the past.

6.4.4 Organisational Contributions

Incorrect Business Case Assumptions: Contributions here are based on the accounting for costs and value additions of new and existing customers. The model presented suggests that it is more cost effective to retain a customer versus acquiring a new one. In the earlier years of rapid growth in the industry, the onus was on rapidly signing up customers in a bid to get greater market share and reach market dominance before the other competitors. This was also fuelled by the fact

that running a mobile operation requires significant capital investment and high customer numbers help to spread the costs and allow companies to benefit from economies of scale. As the market has matured and growth slowed, the lack of "new" customers means retaining customers becomes increasingly important to retain market share. Firms were slow to see this transition. It's easy to see now that whilst the business case is for acquisition versus retention is clear and compelling the prospect of net negative growth, if new sales are not continually found, is a major challenge for mobile operators.

Another key reason that this realisation is only now beginning to dawn on organizations is because previously the full costs of acquisition were not very visible across the company. Aspects such as advertising are treated as central operating costs, which once can argue are more attributable to new customers, and also handset subsidy tended to be greater for new customers, in an attempt to snare greater numbers of customers. The potential value generated by existing customers in terms of positive word of mouth was also either undervalued or not taken into account at all, due to the intangible nature of this benefit. It's interesting to see how the change in success criteria for mobile operators has changed over the years. In the rapid growth period, subscriber numbers were the main currency, then focus was on revenue with Average Revenue Per User (ARPU), and now the emphasis is on profit with Average Margin Per User (AMPU).

Organisations have not responded quickly to this developing economic picture, and whilst this thesis does not provide prescriptive statements in regard of what organisations need to do, a better understanding of the economics, at all levels of the company, to differing degrees of detail, would illustrate how looking at the operating environment in this light could alter individual, team and senior management approaches to Customer Experience. This is extremely important for retention, as the current mindset presents a barrier to improvement.

Data Integrity: Contributions here are presented in the form of words, together with the constructs of technology, process and design. The relationships concern integration and consistency, with the scope covering all elements of the information systems connected with the organisation. The theoretical contribution does not attempt to provide causal explanations or present testable propositions or provide prescriptive statements, but instead seeks to further support the literature on the impact that data inconsistency can have on the effectiveness of information systems and in the case of the study the ability to improve the Customer Experience.

Organisational Alignment: Contributions here are presented in the form of words, observing the interplay between individuals, teams and the organisation. The relationships between the entities are governed by organisational culture, incentives and consideration of accountability and responsibility. The scope covers the organisation and it's relationships with outside entities, but as with data integrity seeks to support the current literature, which sees organisational considerations as a major contributor to the success of customer experience improvement initiatives.

6.4.5 Gaps in the Literature

The research study provided the opportunity to uncover a number of unique findings that contribute to the customer experience literature. Earlier discussions highlighted how most attempts to monitor and analyse customer experience rely on survey data from a sample of customers. The base is then divided into different demographics, and the sample set is extrapolated to drawn conclusions about the whole population base. As has been explained, with CEMAR the idea is to use behavioural, operational and transaction data to infer whether the customer is having a satisfactory experience or not. The systematic use of implicit data to analyse, monitor and proactive respond to customer experience issues, at the tine of writing has not been advanced within commerce or academia. The systematic terms, refers to the systems infrastructure, processes, and organisational

configuration that is required to drive the CEMAR solution on an operational basis. The work of Gessner and Volonino (2005) is aligned but does not focus on aggregated experience constructs, experience profiles or providing service recovery based on the context of the experience issue the customer is facing

Building on the use of implicit data to depict customer experiences, the areas of the literature most favourable to concepts of experience, such as JP Power's survey, tended to use pre-determined weights for their experience items and these have been readily adopted by the telecommunications industry. The researcher tried over the period of the studies to contact the JD power organisation to gain an insight into how their weights be derived, however a number of conversations resulted in the organisation being reluctant to provide access to their methods. When these weights were applied within the model, they provide a degree of correlation to churn, however, when the team allowed the data to drive the weights this saw an improved correlation co-efficient and gave the team even more confidence that there was a relationship between aggregate experience items and churn. This basic attempt at data mining opens the door for more investigation regarding experience. At the end of the Action Research Cycles the team concluded that whilst the JD power experience items provide a good basis to begin, a deeper analysis of possible experience items, across the existing company data and even reviewing new potential company data items would be very fruitful.

As developed in Chapter 2, once Telecommunication companies have tackled poor experience, more focus can be placed on using CEMAR to understand ways in which customer can be transported towards more delightful experiences, where customers experience "flow" during the usage or products or services, further strengthening the relationship between the customer and the organisation. This would require a more detailed customer experience audit, searching for new more hedonistic implicit experience items.

As described in the "implicit indicators of experience" paragraph, data mapping of items to functional experience items was relatively straightforward, but trying to

uncover implicit indicators for more humanic cues presented a challenge. The experience literature provide very little of this and the team's approach to utilising the human dimension of experience was in service recovery only. Further research could be undertaken to investigate the best way to go about uncovering possible humanic cues, in the mounds of data organisation hold. This may provide a deeper and richer implicit experience score in comparison to what has been developed to date.

Customer journeys or corridors, as (Reichheld, 1996) describes them, were difficult to apply wholly in the study, as the author had intended that consideration was given to major events in a customer life, such as getting married, moving house etc.. Due to the relatively short time period under assessment, the study was unable to validate the benefit of taking such a detailed interested in customers, or whether it was possible to get at the data to unearth these events and make them visible. However the related concept of looking at what is happening to a customer as they move between the start and end date of their contracts was adopted. This combined with the theory on peak experiences appeared to link well with the theory on service recovery. Due to lack of resources from Telco the team were unable to test these during the Action Research Cycle, however for a literature review perspective both theories or peak experience and service recovery appear to be well suited.

It is important to note that in the area of service recovery, by a company being very open about its desire to perform service recovery, companies raise the stakes. It is possible that a negative result in recovery is magnified by virtue of the fact of it being the second or more time that the company has failed. This subconscious realisation of the taking on greater risk, may be what lies behind some companies reticence to meeting the Customer Experience improvement and service recovery challenge head-on. So it is important for the literature to stress that it is not just any one service recovery that will make this better. Firms have to really strive to execute remarkably well to avoid making things worse.

In recent years the advances in computing, namely processing power, database design, storage and intelligent middleware and network engineering, have made the monitoring and processing of real-time customer experience data a reality. The literature focuses on real-time marketing, with a sale focus, but here the work has advanced concepts of real-time experience monitoring with retention as the driving force.

6.5 Reflections on the Research Process

The researcher was aware of the misgivings around Action Research. The methodology has been criticised for lack of methodological rigour (Cohen & Manion, 1980) and its similarity with pure consulting (Avison, 1993) and the fact that it has often produced either research with little action or action with little research (Dickens & Watkins, 1999). The establishment of research methods is part of the body of knowledge of an academic discipline, but whilst the field of Information Systems is striving to be the latter, a certain sceptical and flexible approach is required (Paul, 2002).

This study was keen to ensure that key principles for assuring academic rigour and relevance, as set out by (Davison, Martinsons & Kock, 2004), were adhered to and was mindful of the observation that learning and reflection during Action Research projects are usually devoted to the topic being investigated and not on the Action Research as a method itself (Davison, 2010). The key principles can be described as: Establishing a researcher & client agreement; Following the cyclical process model; Use of theory; Enabling change though action; Ensuring learning through reflection.

6.5.1 Establishing a Researcher and Client Agreement

Davison, Martinsons et al (2004), suggest that the agreement should contain mutual guarantees for behaviour of both parties in the context of the project. They go on to suggest that a well-constructed agreement should provide a solid basis

for building trust among the various stakeholders, contributing to the internal validity of the research. The principle of this artefact was bought into by both the research and Telco, and in order for it not to be seen as an inflexible document, allowing either party to hide behind formal statements if things go wrong, the principles were included in the project brief (see Appendix C).

The process of creating the agreement / brief helped Telco contribute with greater diligence than they would ordinarily do on this type of project, to determine goals, plans actions, implement changes and assess the outcomes of those changes. Typically the pressure on Telco in the fast moving mobile industry is to attempt to move quickly and gain increasing clarity as the project progresses. Members of the team readily admitted that this does not always mean that they will deliver quicker, as this approach can lead to confusion, mis-communication and rework.

During cycle one, there was good adherence to this principle as there was clarity of objectives and the roles agreed and clearly defined. However there was some blurring of the role of the researcher, between being an academic investigator and being a member of team enlisted to find a solution to a business problem. This blurring of the lines made some team discussions different, with the researcher often wanting to identify theory and tie actions back to the theory and with Telco team members keen to simply brain storm ideas and go forward with an approach based on the democratic process within the team. In practice there were not many occasions when the researcher's thoughts on progress differed with the rest of the teams. This tended to appear when the researcher wanted to go further in influencing the wider business when making the changes. For example, all members appreciated non alignment of incentives and rewards were an inhibitor to providing great Customer Experience, and whilst the researcher wanted to test this supposition during some of the changes made, the team felt that this was not within their sphere of influence and beyond the direct scope of the study.

During cycle two, there was good adherence to the agreement / brief, although the Telco were again more intent on getting to the answer quickly than following the

formal methodology. However due to the fact there was a good respectful relationship, the Telco team largely trusted the researcher and in some cases indulged the request for more rigour than they would have been used to. The mutually respectful relationship was a great benefit and the researcher would note that efforts must be made very early on in action research projects (actually)before they even start), to make these issues easier to navigate and make the creation of the agreement process smoother.

It must be said that the senior sponsoring team were more passive in their engagement, in comparison to cycle 1. Part of the reason links back to the fact that much of the effort naturally fell to the researcher and the key technical sponsor who was passionate about the initiative, but ultimately left to pursue other activities outside of Telco. This lack of engagement for the senior team meant that team members were reluctant to commit more than their allocated time, which prevented the team from progressing faster and delivering production ready working solutions into the business. The only positive from the lack of engagement, was that the team were freer to investigate wider options for improvement and not the particular hobby horses of the senior managers.

6.5.2 Following the Cyclical Process Model

Susman and Evered (1978) originally proposed a model with the following five stages: diagnosis, planning, intervention, evaluation and reflection. The adoption of the process proved easy for Telco and the researcher as it mapped neatly onto the delivery process within Telco.

During cycle one and two, the cyclical process model was followed with independent diagnosis of the client situation by the researcher and a session to feedback, digest and challenge the findings and then build in the planning phase.
At the start of the diagnosis phase it there wasn't a great deal of debate as to how this should take place. The researcher attempted to influence this by suggesting a mixture of approaches that would help the organisation gain a rich picture of what

was happening. For example the analysis of the store during the pre cursor to Action Research Cycle Two amounted to a time and motion study of what happens when customers walk into retail stores in addition to a agile deployment of a potential solution during the pre phase 1 stage, that provides a rich amount of feedback from customers, store staff and the project team. It was via the trust that had been built up by the researcher during previous engagements that helped the researcher convince Telco of this approach. In addition the Chief Technology Officer at the time of the early stages of the study had completed doctoral studies a number of years ago, which meant that the investigative research process was familiar. During this part of the study, he was one of the main stakeholders, so his support for the process, encouraged other stakeholders and members of the team to fall in line with this approach.

There was a clear decision to proceed through an additional process cycle. However areas that had always been a problem for Telco were learning and reflection or lessons learned when applied to other projects within the organisation. This was characterised by an unwillingness dwell to much on this phase and moving quickly onto the next phase. Part of the explanation for this, is the unreasonable corporate way or requiring people to know all the answer, plus the fallacy that if you have time to learn and reflect then you are not busy enough.

6.5.3 Use of Theory

McKay & Marshall (2001) contend that AR without theory is ‘not research’. They insist that a clearly articulated theoretical framework must be imposed on the phenomenon of interest. As described in chapter two, the study made use of the extensive literature on Customer Experience and service recovery. In addition new theoretical concepts such as implicit experience measures, real time continuous experience monitoring, and in life retention strategies were all topics that had not received sufficient (or any) attention in looking at Customer Experience in the mobile industry. Constructs of implicit measurement developed in the study have added practical value for predicting and explaining experiences. In consideration

of customer experience theory and the telecommunication industry in the UK at the moment, it was suggested that the researcher and practitioners firstly need to look beyond the concept of experience as just being about providing jaw dropping sensory pleasures, and from a retention perspective, focus on the aspects that indicate that customers are getting a poor experience.

This theoretical framework provided a tight focus for the team and an objective way of assessing whether the findings were significant. Typically in Telco and most other organisations, companies do not take time to be explicit about theory, when taking on change initiatives. Post hoc explanations are all most companies have provided to explain why certain initiatives were or were not successful. It is recognised that you can not run companies and their environments like laboratories, but it was interesting to see how being more explicit, debating and explaining a course of action has given Telco a tool in its armoury for future projects. It has helped Telco engage their employees as well as providing an additional reference point for assessing whether an initiative has been successful.
The theoretical framework also provided Telco and the researcher with a tool for interpreting the outcomes of the interventions, in a more structured manner than had been conducted in the past. It has been suggested that clients must acknowledge necessity and value that theory adds to the Canonical Action Research Process (Davison, 2010), however in practise this may be easier said than done. Telco's engagement in the theorising process, was more passive and accepting of the original theory in Action Research Cycle One, but became more engaged and participative in the emerging theoretical aspects, during the diagnostic phase in Action Research Cycle Two. This can be explained by Telco and many commercial organisations sceptical treatment of academic theories until they have been demonstrated to have some practical value.

It is important to differentiate between theoretical frameworks and analytical frameworks. CEMAR predicts consequences, as theories are designed to do (Davison, 2010) and this aspect is not present in analytical frameworks. This theoretical input provided integrity to the Canonical Action Research process and

gave both Telco and the researcher confidence that in CEMAR, a real academic and practical contribution had been devised. The knowledge the researcher possessed on the organisational context and the researcher's willingness to continue to theorise, noting emergent aspects as the study unfolded enhanced the suitability and applicability of the theory.

During Action Research Cycles One and Two, the existing and new customer experience theories, led to publications of the findings at key Information Systems Conferences, with recognised journal publications pending. In addition the Royal Academy of Engineering provided financial sponsorship, following a formal application and presentation process. The Royal Academy provided the funding on the basis that they believe that the research made a unique contribution and fostered the sharing of knowledge between academia and industry. It really helped Telco to look at employing more rigour in its operations. For the researcher it not only provided valuable data for the doctoral studies, it provided an unique opportunity to assess the experience theory and the utility of the action research methodology.

6.5.4 Enabling Change through Action

Davison, Martinsons et al (2004), suggests the principle of change through action reflects the indivisibility of action and change, with intervention seeking to produce change. The authors go on to say that if there is a lack of change in the unsatisfactory conditions then this would suggest that there either: was no meaningful problem; that the intervention failed to address the existing problem(s); or the existing situation could not be altered because of political or practical obstacles that were neglected when the agreement was established. Whilst this is a helpful starting point, it fails to recognise that some obstacles do not appear or are not present at the start, but are uncovered or emerge as the process unfolds.

Idealistically the researcher wanted to provide a full production version of the CEMAR solution, so that the customer experience benefits could be assessed along with the reduced churn benefits. The team were keen to test the concept of experience overtime in practice, and the true impact of the service recovery loyalty actions. This would have required a full customer contract cycle and a company financial budget cycle, to determine all the impacts. However the team and researcher have advanced Telco along the "improving Customer Experience" journey, which is evidenced by the amount of projects initiated that are tasked with improving the Customer Experience, and the way in which Customer Experience is now centre stage. This is in stark comparison to four years ago.

One challenge to overcome, however, is that fact that ultimately it's was Telco who made the final decision on what form any action should take place and in deed whether to take action at all. Although it didn't happen on many occasions, the research agreement does not count for much when a company is determined to follow a course of action which differs widely from the research. These issues present a real balancing act between ensuring that the study would yield some defensible claims, by linking the action to the theories proposed and the findings observed, and keeping Telco engaged and supportive of the study. One could also argue that the whole fresh attitude to Customer Experience across the organisation, whether it is linked to a specific pockets of research or not, were most probably triggered by the study. However it is always hard to distinguish those actions that would have happened anyway, independently of the action research findings.

6.5.5 Ensuring Learning through Reflection

The rationale for our Principle of Learning through Reflection stems from the multiple responsibilities of the action researcher to clients and to the research community. This is consistent with the common call for research reports to specify the implications for both practice and (further) research. Clients will focus on practical outcomes while the research community will be interested in the

discovery of new knowledge. Practical progress and the advancement of knowledge both result from considered reflection and learning (Davison, Martinsons & Kock, 2004).

The reflection and learning paragraphs at the end of each Action Research Cycle illustrate the conscious and formal approach the study took to this principle. During cycle one, status updates were regularly provided and research papers were written and published through-out the cycle. This learning was further advanced with the arrival of a new doctoral student, whose work continues to develop and enhance the learning acquired to date. During cycle two, regular reports were provided and the final presentation of results and demonstrator provided a formal closure of the researcher involvement in the customer experience improvement journey.

The inability to fully test a production solution in a positivist conceived experiment, should not take away from the success of the model and the conclusions it allowed the team to reach. Argyris and Schon (1989) suggest that

"if social scientists tilt towards the rigour of normal science that currently dominates departments of social science in American universities, they risk becoming irrelevant to practitioners' demands for usable knowledge. If they tilt toward relevance of Action Research, they risk falling short of prevailing disciplinary standards of rigour. For the Action Researcher the challenge is to define and meet standards of appropriate rigour without sacrificing relevance."

These statements describe the research cycles very well. Whilst it seemed apparent that the research cycles had generated more focus and helped initiate projects focused on improving the Customer Experience, it was also evident that the organisation's readiness for change was not quite at the same level as its desire for change. It was interesting to see that whilst there is wide spread agreement that the company needs to improve the Customer Experience, the impact this had on individual departments sometimes met with some resistance. For example the

need for store staff to spend more time with customers, ensuring all their issues are resolved, was sometimes seen as taking time away from gaining extra sales.

In reflecting on the research process, mixed research is said to have a long history in research practice, because practicing researchers often ignore what is written by the pure methodologists when they believe a mixed approach will best help them answer their research question. It seems that it is time that methodologists caught up with practicing researchers (Johnson & Onwuegbuzie, 2004). A contingency theory when considering research approach selection, which recognises that quantitative, qualitative and mixed research are superior under different circumstances and it is the researcher's job to examine the specific contingencies and make decisions about which research approach or combination of approaches should be used in a specific study (Johnson & Onwuegbuzie, 2004). Working closely with a commercial organisation required a significant amount of quantitative analysis, when making investment or operational decisions, but the richness of the subject also requires qualitative input to capture the complexity. By reviewing the research cycles against the methodological principles, one is able to conclude that on the whole the integrity of the action research methodology was upheld.

6.6 Summary

This chapter presented a critical discussion of the frameworks developed during the study, and looks at what aspects would be conducted differently if the researcher were able to repeat the exercise or progress a Third Action Research Cycle. In discussing the implications of the work for theory the chapter discussed different notions of theory and theoretical contributions highlighting where the study supported and contradicted the literature. The study presents a novel way of monitoring, analysing and presenting information on Customer Experience. It supports the use of implicit data that already exists within organisations, to produce profiles of whether customers are having good or bad experiences. It suggests the utilisation of service recovery as a humanic way of interacting with

customers and recommends this is not left for the customer to initiate and is timed to take place mid contract to prevent fixed negative views being formed, which are often hard to change at the end of a customer contract and when there are fewer penalties for leaving (and possibly some advantages for leaving). The chapter prompts organisations to take a fresh look at the business case of retaining existing customers versus acquiring new ones, concluding that the case for striving to retain high value existing customers is compelling.

In analysing the implications for practice both for Telco and other organisations faced with similar challenges or environments, it appears as though in many ways Telco has adopted a new fresh and positive outlook to improving customer experiences. Projects have been initiated to look closer at Customer Experience and churn. The network team have adopted Customer Experience philosophies in determining where and when to invest in the different parts of the network and the marketing team have progressed many different projects using much of the thinking developed during the study. Further analysis is ongoing to see whether the prototype can be productionised in a way that would allow the Action Response prompts via service recovery to be tested more empirically. Along with these positives, there is the realisation that data quality and systems integration issues are preventing Telco from having access to improve indicators of Customer Experience. Additionally organisational and culture challenges must be addressed if more radical improvements are going to be made, and if Telco wants to present the image of an integrated Customer Experience at all touch points, rather than pockets of very good practices that are often disconnected from other parts of the business.

The consideration of the size and holistic nature of change required is pertinent when discussing Action Research, since although real progress has been made, Action Research is often criticised for enabling only small scale changes and not the revolutionary changes that are sometimes required. However, a counter argument to this is that Action Research is useful at relatively quicker assessing thoroughly and testing whether a course of action should proceed, whilst being

careful to capture the learning and assumptions made along the way. In further reflecting on the research process, it would be fair to say that it was difficult to pursue a purist Action Research approach and not be influenced at times by the desires of the organisation for speed and quick results. This often resulted in pressure to analyse in less detail and less comprehensively than the researcher would have liked. However this appears to be a fact of modern commercial life and possibly Action Research literature should strive to be more explicit about these challenges, highlighting any strategies that may help the researcher.

Chapter 7: Summary and Conclusions

7.1 Thesis Summary

This study began by highlighting that Customer Experience is a subject of real relevance to individuals and organisations, due to mass adoption of mobile phones and the poor record of organisations in improving the experience. Customer experience was described as a new economic phenomenon, which required a comprehensive approach to understanding it many facets. It is clear that many organisations see Customer Experience as a key area of differentiation and a better understanding of the dynamics of experience would position them well to bring about improvements.

Chapter 2 described and presented definition of Customer Experience which covered functional and humanic distinctions, incorporating differing degrees of participation and immersion in experiences. A synthesis of the literature suggests that poor experience leads to less loyal customers and good experience leads to greater degrees of loyalty. In addition poor experience with basic aspects of a service, ones that are normally taken for granted, impact heavily on the potential for customers to have good experiences. The chapter synthesises the discussion into a Customer Experience Framework.

Chapter 3 described how the study followed a Canonical style of Action Research reviewing carefully the diagnosis, action planning, action taking, evaluation and learning aspects. The research design consisted of Two Action Research Cycles. The first cycle was designed around the generation of a Customer Experience Model and the subsequent testing through quantitative analysis of churn data for 6,500 and 8,000 customers to ascertain linkage between experience indicators and churn. It was also devised to include qualitative output from Telco customers,

concerning their attitudes to experience, captured in the form of customer retail store exit questionnaires. This was conducted to provide triangulation of the data and instil confidence that the correct experience categories and items were being selected. For the Second Action Research Cycle, a prototype was to be developed, to help hone ideas and thoughts from the first cycle and provide a realistic solution to depict how a solution could be put together.

Chapter 4 described the development of a model for assessing and monitoring Customer Experience. A set of pre-determined JD Power experience categories, aligned to basic elements of mobile telecommunication services, were utilised. The items from these categories, when analysed across 2 separate customer data samples, showed a correlation between items indicating poor aggregate experiences have a tendency towards higher churn in comparison to good aggregate experiences. Although the correlations were weak, they were statistically significant and were impressive given that the churn data will be affected by many other factors that impact churn, such as brand awareness and advertising. In addition, when consideration is given to data quality issues that prevented the team from having the best possible data and indicators, it was both surprising and encouraging that the experience indicators can be "heard above the noise".

Chapter 5 saw the inclusion of the Action Research Cycle One's Learning and Reflection phase, into the Diagnosing and Action Planning phases of Action Research Cycle Two. The chapter saw the development of a prototype solution (CEMAR), which was deemed operational as a concept for further work, refinement and implementation in both contact centre and retail store environments. This would enable Telco to minimise one of the sources of tension that arises with the front end teams, which tends to arise when they have to interact and are using different front line systems in their communication with each other. The chapter discussed a collaborative and iterative development process in which the researcher was able to obtain immediate feedback from teams closest to front line experience. The service recovery design and business

rules provided realistic action recovery proposals, although the study did not have time to quantitatively test the impact of these actions on whether they would lead to higher retention and improved company profits. In evaluating the prototype, Telco were happy that the solution was simple and intuitive, went to the heart of identifying customer experience issues and provided an instrument for front line agents to have a productive and humanic conversation with customers within the context of the experience the customer was having. The prototype also enhanced Telco's understanding of Customer Experience and led to the initiation and delivery of several related projects.

Chapter 6 presented a critical discussion of the frameworks developed during the study, and looked at what obstacle to implementation of CEMAR. In discussing the implications of the work for theory, the chapter discussed different notions of theory and theoretical contributions highlighting where the study supported and contradicted the literature. The chapter prompts organisations to take a fresh look at the business case of retaining existing customers versus acquiring new ones, concluding that the case for striving to retain high value existing customers is compelling.

In analysing the implications for practice for Telco projects have been initiated to look closer at Customer Experience and churn. The network team have adopted customer experience philosophies in determining where and when to invest in the different parts of the network and the marketing team have progressed retention projects, such as deal calculator, using much of the thinking developed during the study. Further analysis is ongoing to see whether the prototype can be productionised in a way that would allow the Action Response prompts via service recovery to be tested more empirically. Along with these positives, there is the realisation that data quality and systems integration issues are preventing Telco from having access to improve indicators of customer experience. Organisational and cultural challenges must be addressed if more radical improvements are going to be made, and if Telco wants to present the image of an

integrated customer experience at all touch points, rather than pockets of very good practices that are often disconnected from other parts of the business.

7.2 Contributions

7.2.1 Customer Experience Monitoring Framework

The Customer Experience Framework (CEM) outline in Chapter 4 provides a synthesis of the relevant literature on Customer Experience and provides evidence that organisations should view experience as a way to exploit this phenomenon as new economic offering. A relationship between aggregate experience (devised from implicit data accessible within the organisation) and churn was validated. This was established across two separate data sets, despite the lack of availability of all required data items or the most appropriate proxies for experience. The relationship was found to be statistically significant, despite using data 3 months before the decision to churn, where the relationship between the data is open to the vagaries of what could happen in the final 3 months before the decision to churn, plus is subject to all the "noise" in terms of external events that may impact the churn decision.

At the core of the model is the concept of implicit measures. In Chapter 2, paragraph 2.5.1, the thesis discussed the deficiencies of explicit customer experience measures, such as surveys in relation to continually tracking the experience of individual customers over time. With the definition of implicit measures (such as adverse change in usage) in Chapter 4, paragraph 4.3.2 and the subsequent evaluation in paragraph 4.5, the thesis was able to demonstrate that the use of implicit experience proxys, fashioned by an analysis of the data that organisations have access to within their information systems, provides not only a strong challenge to explicit measures, but also presents a unique way of being able to track and monitor individual experiences over time.

The notion of implicit experience cues extends beyond the realms of Telco and is directly applicable to all other mobile operators, with their effectiveness as proxys for experience only tempered by the availability and quality of data collected and stored. In addition, other data and information system rich industries, such as banking and insurance, can also benefit from this contribution (see Chapter 6, paragraph 6.3.3, p.186). The class diagram presented in Chapter 5, paragraph 5.4.2 represents a generic experience model with generic classes that provide the model with a high degree of transferability, giving the model relevance beyond Telco and the mobile industry (see Figure 5.5).

7.2.2 Customer Experience Monitoring and Action Response

The Customer Experience Monitoring and Action Response (CEMAR) solution, evaluated in Chapter 5, employed the Customer Experience Model linking churn to experience and uses the context from the aggregate experience to enable the organisation to provide a service recovery action.

The approach to retention of systematic and pro-active service recovery is a significant change to the status quo, for at the time of the study, Telco relied on the practise of intervening primarily at the contract end point and relied on the use of monetary incentives for retention. Chapter 6, paragraph 6.4.3 presents the argument that initiating an honest dialogue with customers builds trust in relationships and fosters the more humanic aspects of customer experience. It provides an opportunity to listen to and validate the recovery actions suggested by the model, and ensures action is taken as close to the onset of poor experience as possible.

In addition, the concept of in-life retention together with the context of what the key issue may be, instead of waiting until the end of a customer's contract and relying on monetary incentives, is an important contribution of the work. This is backed up by support from a senior executive from Telco, who reported that at the

time, Telco's retention approach was analogous to calling the ambulance at the bottom of the cliff (see Chapter 6, paragraph 6.2.3, p.176). These evolutionary concepts have relevance across other mobile operators who have contract customers and also across industries where customers are able to switch their business to alternative companies easily and where one to one communication channels are regularly available for interaction with customers.

The prototype takes advantage of the emerging theory in regard to customer value, which began as viewing customer value as something which is co-created with customers, to a shorter term view of the margin contribution of each customer, to ensure that retention is profitable. This perspective of what is profitable was also an important contribution of this theory, in light of general views of the costs of acquiring customers versus the costs of retaining existing customers. The thesis concluded that the Telco mindset was one of a company still almost entirely focused on new acquisition growth and therefore the many costs of acquiring customers were viewed as essential overheads of doing business. This skewed the perception of the cost of new customer acquisition versus retaining existing customers, which when combined with the fact that reward systems were still focused on new sales, meant that there was low incentive and motivation to focus on retention and thus experience. Paragraph 6.4.4, discussed how this action research study helped to redress the balance in some way, enabling managers within the organisation to be aware of this different retention perspective.

The prototype provided a vehicle for uncovering obstacles to implementation and improving experiences, by exposing the organisation to a life like solution that forced the company to consider the implications for the future behaviour of individuals, teams and the whole company. One criterion for the success of action research studies is whether it leads to change within the organisation. This study led to the adoption of new thinking by the organisation, evidenced by some of the projects initiated, adopting the conclusions of the Customer Experience Framework. Investment in the network by Telco was in line with the analysis that network performance is fundamental to experience. In addition the technical

teams adopted a novel approach to Customer Experience Monitoring, by using it to make decisions on where and when to invest in the network, driven by the experiences of customers. This realm of customer experience thinking had never happened in this department, before the study. The Marketing team were also keen to firstly look at cost, as a way to retain customers, by initiating a cross comparison deal calculator project, with plans to use CEM model once developed to help mediate the decisions of what deals to give to customers.

7.2.3 Use of Action Research

This study has sought to apply Canonical Action Research in a rigorous manner. Aware of some of the criticism of Action Research, the work has sought to be open in presenting the noted deficiencies and used recent and well respected literature, to act as useful guidelines for the appropriate application of Action Research. In Chapter 5, paragraph 5.6.2, the thesis describes one emerging observation of the more detailed and prescriptive guidelines / principles, following Two Action Research Cycles. The section on action research reflections note that is there guidelines are difficult to adhere to in their entirety, due to the need to exhibit flexibility during the discussion with the organisation over the approaches and lines of attack. Whilst care must be taken to ensure the process is rigorous blind adoption to each detail of the methodological guidelines, will not enable researchers to get the best out of the organisation during these projects. Practitioners have valid theoretical constructs to bring to the debate, so their thoughts should not be immediately dismissed. Also researchers need to choose their battles over methodological application and take a view as to which differences are material.

The Action Research approach was fundamental in getting Telco to see Customer Experience in a new light. The approach was central to uncovering important organisational challenges and gaps, which may not have emerged through a different approach. Evidence of team members going on to initiate new projects

applying the Customer Experience Framework thinking developed, helps illustrate the power of Action Research in changing the Status Quo.

7.3 Limitations of the Work

This study was afflicted by issues of availability and integrity of data highlighted in Chapter 4 and Chapter 6. These issues meant that there was a lack of access to the most appropriate data items, which would have been mapped to key experience items. The impact of this is that the experience scores and profiles may be under-estimated and the subsequent correlation relationships may in fact be stronger than is represented in the study. In some respects, and as a result of these studies, these areas are currently being addressed by the organisation in terms of a new data architecture, new data warehousing solutions, investment in network probes, and the provision of network data at an individual customer level. If the study were to be conducted again, Telco would have access to most of the originally requested implicit experience item data.

Chapter 5 mentioned that it was also unfortunate that there was not sufficient time to test the service recovery aspects of the CEMAR solution, with actual recovery interventions with real customers and then study monitor the impact on retention rates and organisational profits. This would have provided more quantitative evidence that intervening mid contract not only increases retention, but also improves the profitability of the company. With more time the study would have adopted a suggestion that emerged from the team. In advance of a fully working CEMAR, Telco would select and create two groups of customers with similar low, degrading or rapidly degrading experience profiles. One group would be a control group and the other would be subject to outbound calls and service recovery, mid contract. The churn results at the end of the contract would then be studied. It should be noted that this study would need to conducted over an approximately nine month duration to test the mid life intervention effectively.

The study also highlights a number of organisational obstacles, noted in Chapter 5 and Chapter 6, which will impact on an organisation's ability to get maximum value from CEMAR. Whilst it was not the aim of the research to resolve these issues, acknowledgement is made that they exist, and future studies may wish to look at how CEMAR is best integrated in the working practices of organisations. Any implementation would need to address the roles and responsibilities of the teams in Telco, as well as instilling a culture that people buy into and take the improvement of Customer Experience seriously. Getting employees to experience customers' experiences by using the services and getting senior managers visiting retail stores and contact centres is a start. Also adopting a philosophy of employees making their activities customer centric and aiming and either to directly supporting the customer or indirectly excelling in support for other groups that are more customer facing, is a step forward and these initiatives are underway in Telco.

7.4 Areas for Future Consideration

7.4.1 Experience Audit

The J.D. Power category constructs, described in the literature review in Chapter 2 and adopted during Action Research Cycle One, whilst acceptable and useful, were not selected after an exhaustive audit and evaluation process, and ultimately there may be other categories that may better represent the mobile experience more accurately (Berry, Carbone & Haeckel, 2002). Further work could be undertaken to investigate whether these categories are the best map, and test alternative categories for their efficacy. A possibility would be to perform confirmatory factor analysis, based on customer responses to experience across all of an organisations touch points. New relevant categories may help organisations identify new implicit data items that provide an improved proxy for experience.

7.4.2 New Modelling Approaches

The statistical approach adopted (linear and logistic regression) in Chapter 4 was effective but fairly rudimentary in nature in comparison to more sophisticated techniques. Future studies may wish to employ advance techniques such as data mining or agent based simulation (which involves creating artificial agents mimicking attributes and behaviours of real world customers) to uncover new relationships between different experience constraints. This work is currently being undertaken by a doctoral student, using the contributions of this study as the basis of his investigations and could allow greater analysis of the complexity of human behaviour and better incorporate the more emergent behaviours of customers. As Telco develops a greater level of sophistication for assessing experience for implicit data, the discovery of new items that better reflect the Customer Experience will be sought, new analytical techniques may help in this regard.

7.4.3 System Learning and Maintenance

In reviewing areas of future research focus for CEMAR, the areas of modelling and maintenance offer evolutionary opportunities that strive to deal with the complexity of the real world. Lycett, Kanellis el at Paul (1997) contend that information systems development can leave us with static systems that are envisaged to work in dynamic environments, with these systems failing to allow for change in the business, organisational and commercial environment. A key process issue in event driven marketing is learning how to improve customer responsiveness and continuous improvement requires feedback and analysis to improve the rule base and decision making process (Gessner & Volonino, 2005).

Investigations into the area of systems learning (Xu & Lu, 2007; Jouffe, 2002), which attempt to tackle how systems can learn based on the feedback received from the environment to actions taken, would be an interesting future direction for this research. In the areas such as the development of business rules that feed loyalty actions, described in Chapter 5, there are opportunities to reduce the

maintenance burden of continually having to review the success of loyalty actions and constructing amended actions that may prove more effective. This may reduce the daunting maintenance aspects and ensure a dynamic system is operation.

7.4.4 Employee Innovation

Research into service innovation has started to look beyond the integration of business processes and business intelligence. This is evidenced by customer centred business processes created by customer facing employees who have domain knowledge and who are empowered to offer the best solution to customers based on their customer value. The culture change signalled by Senior Managers as described in Chapter 6, could see employees, rather than process analysts, designing completely new and highly personalised business processes, to meet the needs of a particular customer, making use of their knowledge and arming them with data (Marjanovic, 2007).

7.4.5 Action Research Evolution

Building on the use of Action research introduced in Chapter 3, and the review of the adherence to guidelines for the effective application of Action Research, presented in Chapter 6, the study advances the view that flexibility is required. Some of the more detailed prescriptive guidelines do not provide greater utility, if one were to offset the perceived view of extra rigour, with reduced co-operation, goodwill or progress along the route to solving the issues with the organisation. It would be helpful to conduct future studies to ascertain optimum levels of adherence to detailed principles versus the benefits of flexibility. This study has benefited for a degree of flexibility, evidenced by the improved understanding of Customer Experience with Telco and the activities underway seeking improvements.

7.4.6 Great Experiences

CEMAR provides a rigorous yet relevant response to the issues of improving customer experiences. The study focus on the mobile telecommunications sector, but the model has contributions to be in other industries such as banking and insurance, where organisations have access to implicit knowledge of their customers, the products the use and the "footprint" of their experiences. Once organisations have raised the bar on improving poor experience, a future avenue for CEMAR, and highlighted in Chapter 2, would be to endeavour to make good experience, astounding.

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Appendix A - Adherence to Action Research Guidelines

	The Principle of Research-Client Agreement
Ref	Criteria
1a	*Did both the researcher and client agree that Action Research was appropriate for the organisational situation?*
1b	*Was the focus of the research project specified clearly and explicitly?*
1c	*Did the client make explicit commitment to project?*
1d	*Were the roles and responsibilities of the researcher and client organisation members specified explicitly?*
1e	*Were the project objectives and evaluation measures specified explicitly?*
1f	*Were the data collection and analysis methods specified explicitly?*

	The Principle of the cyclical process model
Ref	Criteria
2a	*Did the project follow the cyclical process model or justify any deviation from it?*
2b	*Did the research conduct an independent diagnosis of organisation situation?*
2c	*Were the planned actions based explicitly on the results of the diagnosis?*
2d	*Were the planned action implemented and evaluated?*
2e	*Did the research reflect on outcomes of intervention?*
2f	*Was this reflection followed by an explicit decision on whether or not to proceed though an additional process cycle?*
2g	*Were both the exit of the researcher and the conclusions of the project due either to the project objectives being met or some other clearly articulated justification?*

	The Principle of Theory
Ref	Criteria
3a	*Were the project activities guided by a set of theories?*
3b	*Was the domain of investigation and the specific problem setting relevant and significant of the researcher's community of peers, as well as the client.*
3c	*Was a theoretically based model used to derive the causes of the observed problems?*
3d	*Did the planned intervention follow from this theoretically based model?*
3e	*Was the guiding theory or any other theory used to evaluate the outcomes of the intervention?*

	The Principle of change through action
Ref	Criteria
4a	*Were both the researcher and client motivated to improve the situation?*
4b	*Were the problem and its hypothesised cause(s) specified as a result of the diagnosis?*
4c	*Were the planned actions designed to address the hypothesised cause(s)?*
4d	*Did the client approve the planned action before they were implemented?*

4e	*Was the organisation situation assessed comprehensively both before and after the intervention?*
4f	*Were the timing and nature of the actions taken clearly and completely documented?*

	The Principle of learning through reflection
Ref	Criteria
5a	*Did the research provide progress reports to the client and organisational members?*
5b	*Did both the researcher and the client reflect upon the outcomes of the project?*
5c	*Were the research activities and the outcomes clearly reported?*
5d	*Were the results considered in terms of implications for further action in this situation?*
5e	*Were the results considered in terms of if implications for action to be taken in related research domains*
5f	*Were the results considered in terms of implications for the research community and theory?*
5g	*Were the results considered in terms of the general applicability of Canonical Action Research?*

Appendix B - Summary of Adherence to Action Research guidelines for Cycles One and Two

The Principle of Research-Client Agreement			
Ref	Criteria	Cycle 1	Cycle 2
		There was good adherence to this principle as there was clarity of objectives and the roles agreed and clearly defined, with the exception of some blurring of the lines between the researchers and practitioners.	Again good adherence, although the organisation were more intent on getting to the answer quickly than following the formal methodology. The senior team were more passive in their engagement, when compared with cycle 1.

The Principle of the cyclical process model			
Ref	Criteria	Cycle 1	Cycle 2
		The cyclical process model was followed with independent diagnosis of the client situation, with implemented and evaluated planned actions and a clear decision to proceed through an additional process cycle,	The process was followed, and as mentioned the model requires further testing and calibration.

The Principle of Theory			
Ref	Criteria	Cycle 1	Cycle 2
		The Customer Experience literature was applied and interim output form the research led to published papers. and financial sponsorship for.	The results of cycle 1, together with literature on service recovery literature, were employed as the theoretical basis. The research output also attracted funding from national academic institutions.

The Principle of change through action			
Ref	Criteria	Cycle 1	Cycle 2
		Researchers and the client organisation were equally motivated to improve the situation as this was seen as a new way of doing this, with large commercial ramifications.	The organisation situation was assessed before and after the cycle and it was clearly that more focus was now being place on improving the Customer Experience, with the organisation making it one of the three key strategic initiatives.

The Principle of learning through reflection			
Ref	Criteria	Cycle 1	Cycle 2
	Did the research provide progress reports to the client and organisational members?	Status updates were regularly provided and research papers were written and published through-out the cycle and also a new doctoral student	Regular reports were provided and the final presentation of results and demonstrator. New projects were initiated within the client organisation as a result of the work. The action research

		is investigating related work. It was recognised that there was a need to address data integrity and source data issues to improve the model.	approach adopted seemed to have a good fit with the situation under research.

Appendix C - Researcher and Telco Agreement

Telco/Brunel Collaboration – Real Time Marketing Solution Epiphany Enhancements

Executive Summary

Brunel University have conducted research on 'Customer Experience' indicating that Telco's Epiphany Marketing Solution can be enhanced to manage customer retention more effectively. Members of Telco and Brunel began discussions at the end of Q2 2008 and propose that existing cross-sell/up-sell offers can be complemented by an enhanced analysis of customers that are having a poor experience, and therefore have a higher propensity to churn. These experiences are likely to be driven by issues related to handset and devices, value for money, call quality and coverage, customer services and issue resolution.

In broad terms, the effort aims to develop a pragmatic approach to indicating the state of a customer's experience i.e. a Customer Experience Indicator (CEI). This will allow Customer Development and Retention teams to better propose real-time actions to address retention via inbound customer touch points. The CEI under development by Brunel appears to differ from Telco's existing Customer Experience Model, the Engagement Index (EI), in that the Brunel Model seeks to include the impact of customer services and picks up critical experiences as well as degradation in a customer's experience overtime. These additional aspects are important factors as to whether a customer is open to up sell or cross sell offers from Telco and in their decision making on whether to stay with Telco.

Such a CEI could provide benefits to all of Telco customer communications planning, inbound and/or outbound. The focus of the work is to deliver a credible foundation and recommendations for how a customer experience indicator could be built and deployed at Telco. Consideration will also be given to how marketing interactions are presented and contextualised across different channels (contact centre, retail, handset, Web). It is also intended that the results provide input to the forthcoming POP Driver and Deal Calculator projects where appropriate.

People involved so far

- Alex Berry (Marketing); Tasmina Rahman (Data Analytics); Chris Taylor (CTO); Mark Chaimbault (Data Analytics); Tina Harrison (Marketing); Michael Anaman (Brunel University - in the 3rd year of a PhD in this field); Dr Mark Lycett (Brunel University); Jo Lung (previously Marketing).

Benefits for Telco

- Facilitation of cross-functional working as the project is set-up to provide a 'joined up' solution.
- Recommendations for how the customer experience indicator can be used in practice
- Practical advise on how the effectiveness of the Churn model can be improved
- Intellectual contributions to the 'POP driver' project
- Minimal cost - academic input is Government funded (see below for what is needed).
- Supplemental resource for the internal analytics team
- Potential to further supplement Telco teams with additional resource, if/when appropriate.

Phases

- Phase 1: CEI research conducted and validated — Dec & Jan wks 1-4
- Phase 2: CEI development and build — Feb wks 1-3
- Phase 3: presentation of results — Feb wk 4

Telco is responsible for driving the initiate beyond phase 3

- Phase 4: calculation/estimation of the opportunity — Feb wk 4
- Phase 5: pilot deployment/implementation — tbc
- Phase 6: measurement against expectations — tbc
- Phase 7: roll-out decision, roll-out planning… — tbc

Deliverables

- Documentation detailing the approach, reasoning, logic and explanation of the method/models used
- Provision of Customer Experience scoring model and a list the factors (churn triggers), that make up the score
- Comparison of how new model / approach may provide business benefit over and above existing practices
- Presentation of how retention focus can be deployed in a practical way through the inbound channels
- Practical recommendations for how for enhanced interaction with customers using inbound real-time solution, via the retail channel can impact customer retention overall

Note: the deliverables above are the key focus, and both Telco and Brunel stand to gain learning from the process of trying to achieve the aims of the initiative. This is part of the action research methodology and these lessons will also be captured.

Benefits for Brunel University

- Provision of a practical grounding for Michael Anaman's PhD research
- Demonstration of knowledge transfer in action (University target)
- Relationship development between organisations and the fostering of opportunities for future work partnerships (Government target)
- Helping a corporate achieve/recognise tangible benefit i.e. measurable

What we need from Telco

- Joint ownership for the timeframes, deliverables and benefits realisation
- Attendance at a meetings and/or workshops - no more than 2 hrs per week

- Data and information for the demonstrator to ensure efficacy of research findings (e.g. Epiphany inbound business rules/logic (to understand chaining logic; churn model data; existing retention campaign rules; analytical data mart schema)
- Senior management support/sponsorship (e.g. Tina Harrison & Customer Management Team)

Additional Information

- This work is being is being sponsored by the Royal Academy of Engineering to encourage collaboration between industry and academia.
- Brunel University are also engaged with the retail and marketing products directorates on a one-year research looking at window display advertising and product usability respectively.
- Non Disclosure documents between Telco and Brunel University are in place.

Brunel University

Brunel is a world-class university based in Uxbridge, West London - its distinctive mission to combine academic rigour with the practical, entrepreneurial and imaginative approach pioneered by its namesake Isambard Kingdom Brunel. The University has a strong research ethos designed to (a) generate a culture of intellectual endeavour fundamental to the achievement and success of all students, staff and organisations it interacts with and (b) encourage the cross-fertilisation of ideas and expertise for which it has long been famous.

The Department of Information Systems and Computing at Brunel University is an internationally recognised centre of excellence rated very highly in the last UK Government Research Assessment Exercise (Grade 5). The Department is home to 4 research centres that provide core themes:

- *Centre for Information and Knowledge Management*, concerned with the derivation and use of knowledge through methods such as intelligent data analysis and software testing in the context of Information Systems

- *People and Interactivity*, concerned with developing knowledge of users' information seeking in interactive systems and interactive techniques to help users exploit information effectively.
- *Centre for Information Systems Research*, concerned with the effective development and use of information technology by individuals, organisations and society

- *Centre for Intelligent Data Analysis*, a multidisciplinary centre concerned with the effective analysis of data using artificial intelligence, dynamic systems, image and signal processing, optimisation, pattern recognition, statistics and visualization

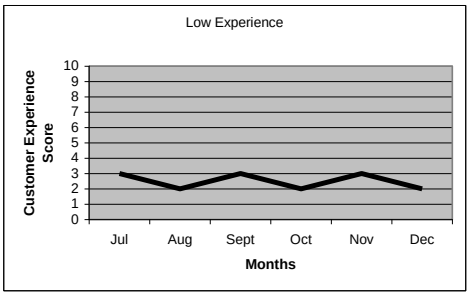
A number of research groups operate within and across these centres. The group of interest in this project is 'Fluid Business', which seeks to enable a more dynamic fusion of people, organisation, process, information and technology with an emphasis on enabling more flexible and adaptable software systems.

END

Appendix D - Typical Customer Experiences

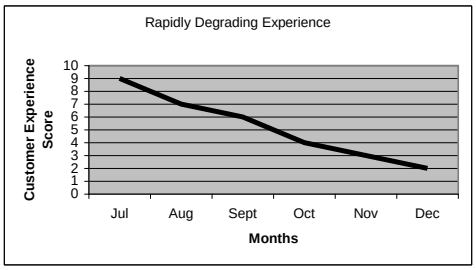
LOW EXPERIENCE

Jul	3
Aug	2
Sept	3
Oct	2
Nov	3
Dec	2
Average CE	2.50
Slope	-0.09
Std Dev	0.55



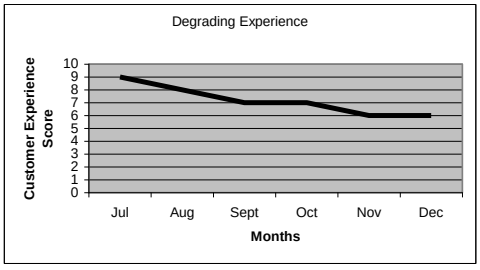
RAPIDLY DEGRADING EXPERIENCE

Jul	9
Aug	7
Sept	6
Oct	4
Nov	3
Dec	2
Average CE	5.17
Slope	-1.40
Std Dev	2.64



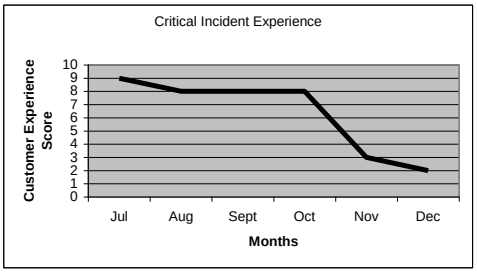
DEGRADING EXPERIENCE

Jul	9
Aug	8
Sept	7
Oct	7
Nov	6
Dec	6
Average CE	7.17
Slope	-0.60
Std Dev	1.17



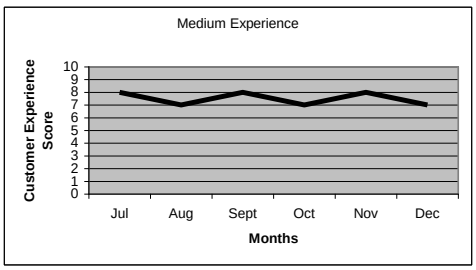
CRITICAL INCIDENT EXPERIENCE

Jul	9
Aug	8
Sept	8
Oct	8
Nov	3
Dec	2
Average CE	6.33
Slope	-1.43
Std Dev	3.01



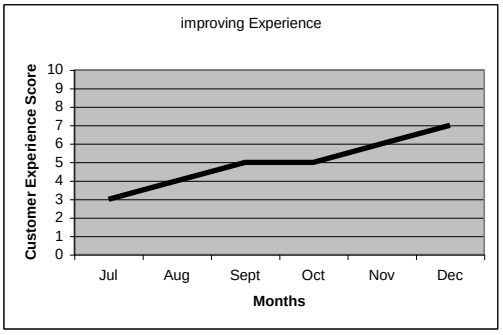
MEDIUM EXPERIENCE

Jul	8
Aug	7
Sept	8
Oct	7
Nov	8
Dec	7
Average CE	7.50
Slope	-0.09
Std Dev	0.55



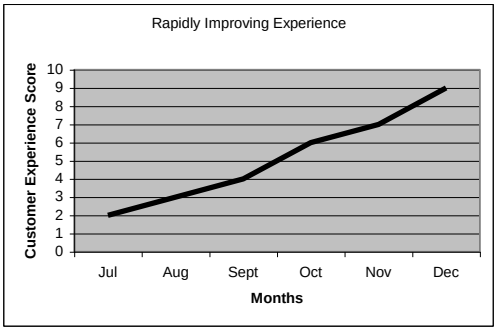
IMPROVING EXPERIENCE

Jul	3
Aug	4
Sept	5
Oct	5
Nov	6
Dec	7
Average CE	5.00
Slope	0.74
Std Dev	1.41



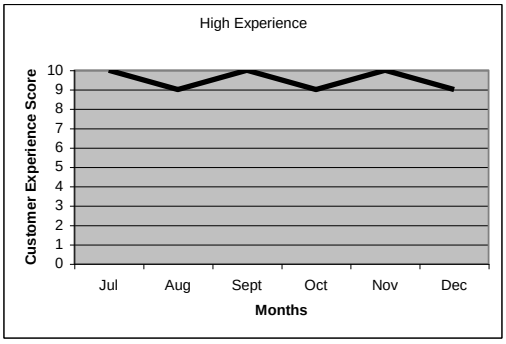
RAPIDLY IMPROVING EXPERIENCE

Jul	2
Aug	3
Sept	4
Oct	6
Nov	7
Dec	9
Average CE	5.17
Slope	1.40
Std Dev	2.64



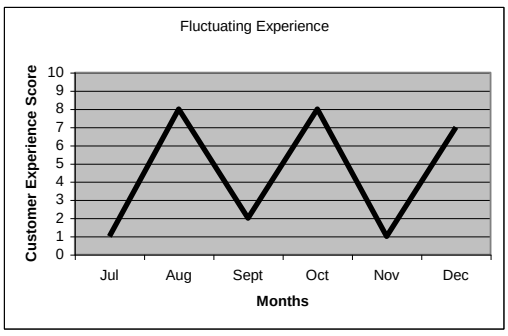
HIGH EXPERIENCE

Jul	10
Aug	9
Sept	10
Oct	9
Nov	10
Dec	9
Average CE	9.50
Slope	-0.09
Std Dev	0.55



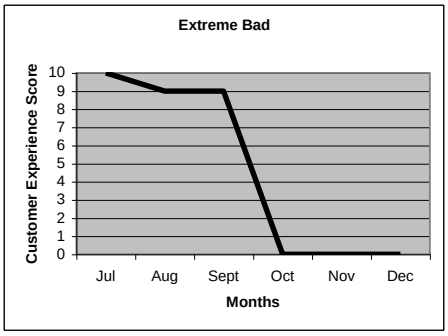
FLUCTUATING EXPERIENCE

Jul	1
Aug	8
Sept	2
Oct	8
Nov	1
Dec	7
Average CE	4.50
Slope	0.43
Std Dev	3.51



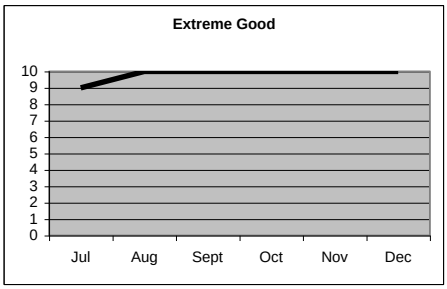
Testing extreme bad

Jul	10
Aug	9
Sept	9
Oct	0
Nov	0
Dec	0
Average CE	4.67
Slope	-2.46
Std Dev	5.13



Testing extreme good

Jul	9
Aug	10
Sept	10
Oct	10
Nov	10
Dec	10
Average CE	9.83
Slope	0.14
Std Dev	0.41



Appendix E - System Scoring Mechanism

SYSTEM SCORING CONSIDERATIONS

RANGES

Key Formulae	Max	Min	Green (low)	Amber (medium)	Red (high)
Slope	2.5	-2.5	> - 0.3	< - 0.3, > - 1.0	< -1.0
Std Dev	5.5	0	< 1	> 1, < 2	> 2
Average Score	10	0	> 8.5	>6.5, < 8.5	< 6.5

PROFILES

Experience profiles	Average Score	&	Slope	&	Std Dev
Low Experience	< 6.5		> - 0.3		N/A
Rapidly Degrading Experience	< 6.5		< - 1.0		> or = 2
Degrading Experience	> or = 6.5, < 8.5		< or = - 0.3, > or = - 1.0		N/A
Critical Incident experience	N/A		< - 1.0		> or = 2
Medium Experience	> or = 6.5, < 8.5		> - 0.3		N/A
Improving Experience	> or = 6.5, < 8.5		> 0.3		N/A
Rapidly Improving Experience	> or = 6.5, < 8.5		> 0.3		> or = 2
High Experience	> or = 8.5		> - 0.3		N/A
Fluctuating Experience	N/A		> - 0.3 or < 0.3		> or = 2

The experience curve occurs as a combination of average score, slope and std dev conditions are met.
The calculations and formulae are being refined as we process real customer data
Nb. A high std deviation can be a positive thing in rapidly improving scenarios

Appendix F -Business Rules

Business Rules

5 STEPS

1. See if Customer value (average across the period) is high or medium (See customer file column = "AA"). If customer value is low stop (i.e. no loyalty action)

2. If customer is high or medium value, match customer's exeprience score and calculated data with the criteria below. If no match end then no loyalty action.

Experience Curve	Average Score	&	Slope	&	Std Dev
Low Experience	< 6.5		> - 0.3		N/A
Low & Degrading Experience	< 6.5		< or = - 0.3, > or = - 1.0		N/A
Rapidly Degrading Experience	< 6.5		< - 1.0		> or = 2
Degrading Experience	> or = 6.5, < 8.5		< or = - 0.3, > or = - 1.0		N/A
Critical Incident experience	N/A		< - 1.0		> or = 2

3. If the criteria match, use customer experience item with the lowest average score for the period.

4. Simply match the item to the experience item (e.g. repairs = Handset)

5. Choose the relevant loyalty action that matches the customer value and the experience category See list below)

Experience Category	Experience Item	High Value Customer		Medium Value Customer
Cost	Cost Competitiveness	Seek to do a competitor price match if small volume of minutes required.		Seek to do a price match, as long as you can begin contract period again.
Cost	Bundle Efficiency	Migrate customer to tarriff that better matches customers average monthly spend		Clarify why customer is only using a low % of their allocated bundle
Handset	Repairs	Exchange old customer handset with a new handset		Exchange old customer handset with a reconditioned handset
Handset	Known Issues	Exchange old customer handset with a new handset		Exchange old customer handset with a reconditioned handset
Coverage	Dropped Calls	Investigate operational issues and if acceptable to customer, exchange handset for a reconditioned handset that has a better radio receiver		Investigate operational issues and advise when better coverage will be available
Coverage	Call Set-up Failures	Investigate operational issues and if acceptable to customer, exchange handset for a reconditioned handset that has a better radio receiver		Investigate operational issues and advise when better coverage will be available
Coverage	Home Coverage	Investigate operational issues and if acceptable to customer, exchange handset for a reconditioned handset that has a better radio receiver		Investigate operational issues and advise when better coverage will be available
Customer Service	Complaint Repetition	Agent to singularly own resolution and feedback to customer		Agent to singularly own resolution and feedback to customer
Customer Service	Complaint Volume	Agent to singularly own resolution and feedback to customer		Agent to singularly own resolution and feedback to customer
Offerings & Promotions	Decrease in voice usage	Ask the customer if there are happy with their mobile experience and progress from customer response.		Ask the customer if there are happy with their mobile experience and progress from customer response.
Offerings & Promotions	Decrease in data usage	Ask the customer if there are happy with their mobile experience and progress from customer response.		Ask the customer if there are happy with their mobile experience and progress from customer response.
Offerings & Promotions	Decrease in promotion usage	Ask the customer if there are enjoying their promotional actvity and progress from customer response.		Ask the customer if there are enjoying their promotional actvity and progress from customer response.
Billing	Billing Complaints	Mention to customer that you have noticed some recent enquiries regarding billing and are they now satisfied. Take customer through their bills on My3		Mention to customer that you have noticed some recent enquiries regarding billing and are they now satisfied. Take customer through their bills on My3

Appendix G - Use Case Tables

Create Customer Experience Profile

Name:	**UC2: Create Customer Experience Profile**	
Triggering Event:	An existing customer makes an enquiry (UC1) or Business Intelligence/Marketing staff request a management report (UC4).	
Brief Description:	The purpose of this use case is to generate a customer experience profile, which is time-bound and comprises of a co-ordinated set of customer experience and customer value scores, summary statistics and summary details of poor experience.	
Actors:	System generated.	
Related Use Cases:	UC1, UC4.	
Preconditions:	The customer is an existing one and has been with Three for 3 months or more.	
Post conditions:	A customer experience profile is generated.	
Flow of events:	**Actor (UC1)**	**System**
	3. Set time period and time chunk for customer experience profile	
		4. Calculate scores for all experience criteria
		5. Check scores against threshold criteria
		9. Generate experience detail
		10. Get the existing peak customer experience score
		11. Check the highest score in profile against existing peak customer experience score
		12. Get the existing critical customer experience score
		13. Check the lowest score in profile against existing peak customer experience score
		17. Calculate experience profile mean
		18. Calculate experience profile standard deviation
		19. Calculate experience profile slope
		20. Calculate average customer value

Exception conditions:	3 If metric exists then calculate the metric 5 If threshold is exceeded then get criteria details 9 If the peak customer experience score is exceeded then revise with new value 12 If the critical customer experience score is exceeded then revise with new value

Determine Loyalty Actions

Name:	**UC3: Determine Loyalty Actions**	
Triggering Event:	Poor customer experience.	
Brief Description:	The purpose of this use case is to determine appropriate loyalty actions that may be taken in relation to poor customer experience (expressed via a given customer profile) via the application of business rules.	
Actors:	System generated.	
Related Use Cases:	UC2.	
Preconditions:	Customer experience profile.	
Post conditions:	Loyalty actions are determined, scored and ranked (and arbitrated where necessary).	
Flow of events:	**Actor (UC2)**	**System**
	6. Customer experience profile	
		7. Apply business rules
		8. Get action associated with rule
		9. Check existing record of loyalty actions taken for customer to see if action has been previously taken
		8. Score available loyalty actions
		9. Rank available loyalty actions
Exception conditions:	10. If loyalty action has been taken then remove from list 9. If loyalty actions exceed a given number [6] then arbitrate to produce shorter list	

Display Customer Profile

Name:	**UC1: Display Customer Experience Profile**	
Triggering Event:	Existing customer makes an enquiry.	
Brief Description:	The purpose of this use case is to display a customer experience profile alongside actions perceived to address poor customer experience and to capture the customer's response to those actions.	
Actors:	Retail store staff.	
Related Use Cases:	UC2, UC3.	
Preconditions:	Customer experience tab selected (in CSIS system).	
Post conditions:	A record of the interaction is created, which captures whether the customer has accepted, rejected or deferred the actions presented by the use case and discussed with them.	
Flow of events:	**Actor**	**System**
		1. Create user interface
		2. Display user interface
	3. Input customer BAN or name, address and telephone number	
		4. Check customer exists
		6. Check customer has been with Three for 3 months or more
		7.1 Generate customer experience profile (*see UC2*)
		7.2 Determine loyalty actions (*see UC3*)
		8. Display customer experience profile and loyalty actions
	9. Input customer response to actions	
		10. Create interaction record
Exception conditions:	5 If customer does not exist display error message 7 If customer has not been with Telco for more than 3 months display error message	

Appendix H – Request for Senior Management Interview & Preparation Notes

CUSTOMER EXPERIENCE - SENIOR MANAGEMENT INTERVIEWS AT TELCO

Polite Request

Would you be able to spare 30 minutes to give your candid answers to a number of questions on Customer Experience please? The output from these interviews and the work already underway will be of considerable benefit to Telco and the teams working to increase retention and champion the cause of the customer.

What is this all about?

Following discussions between Telco and Brunel University during 2008, the joint team concluded that existing cross-sell/up-sell marketing offers could be complemented by an improved understanding of Customer Experience. If the teams are able to identify customers (especially high value customers) that are having a poor experience (and therefore have a higher propensity to churn), "profitable" action can be taken to save these customers. The introduction of a Customer Experience Model would help Telco take action in real time (as is beginning to happen with marketing offers via Epiphany). In addition it is important to assess the organisational context and understand if there are any obstacles inhibiting progress towards better experiences, hence the request for interviews with senior managers.

Why of interest to Telco?

The focus of the work is to deliver a credible foundation and recommendations for how a customer experience indicator could be built and deployed at Telco. Consideration is being given to how marketing interactions are presented and contextualised across different channels (contact centre, retail, handset, Web). It is also intended that the results provide input to the forthcoming POP Driver and Deal Calculator projects where appropriate. The business case for reducing churn amongst Telco's highest value customers appears compelling.

Why of interest to Brunel

Michael Anaman is currently completing involved in completing his PhD. Research (partly sponsored by the Royal Academy of Engineering) at Brunel university, and conducting

interviews with senior managers who are faced with making tough decisions in this area will provide a an additional pragmatic dimension to the research, which has reviewed other mobile research, research on Customer Experience and is currently testing the Customer Experience Model with real customer data.

How will it work?

All the work is subject to non disclosure agreement signed between Telco and Brunel University. Also the response to interview questions will remain anonymous if required. In broad terms the model provides a pragmatic approach to indicating the state of a customer's experience, with these experiences likely to be driven by issues related to handset and devices, value for money, call quality and coverage, customer services and issue resolution. This approach could provide benefits to all of Telco customer communications planning, inbound and/or outbound.

Who will be and has been involved?

- Interviews: Chief Finance Officer; Director of Customer Management; Director of Retail Development, Director of Retail; Chief Technology Officer.
- Collaborative Working Team: Real-time Marketing Manager; Manager of Customer Analytics; Customer Data Analyst; Systems Architect; Marketing Finance Manager.

When?

- Interviews with senior managers – w/c 9^{nTH} March (or earlier subject to diary availability)
- Conclusion of research activity – w/c 23rd March

I will be pulling together a presentation and demonstration of how Telco's existing operation could be improved for inbound and outbound communication, with consideration given to different distribution channels (Contact Centre, Retail, Handset and Web) at the end of March.

Questions – with links back to the CE Literature, CSIS project. Also with comments on how Senior Managers may respond.

Overall the interview exercise is trying to determine:

- Senior manager's thoughts on Customer Experience and how these thoughts align with the prevailing wisdom on how Customer Experience can be enhanced.
- Whether they believe improving the Customer Experience is an aim worth pursuing and what they think the business case looks like.

- Whether they can see the any obstacles to improving CE and what these are.
- What they understand their roles to be in improving Customer Experiences and generally what should be done.
- Understand what things would make them thinking different or more positively about improving the Customer Experience.

How would you define Customer Experience?

Expectations	Relevant Literature
Not sure what to expect. Answers will provide a view of how "developed" and "sophisticated" CE thinking is.	Carbone, Berry & Haeckel (1994) - Balanced view of Humanics & Functional
Hope to reconfirm existing experience items.	Anaman/Lycett CE Model (2009), J.D. Power (2008)
May pick up new customer experience items	N/A
May hear experience described in more static terms	Reichheld (1996) - Mention of the customer Corridor, touch-points
Not sure if people will know how to measure – managers will probably mentioned the explicit market research surveys conduct monthly and with a sample of 400 customers.	Reichheld (2009) – Net Promoter

What are the main obstacles to providing a great experience for customers?

- Test against the limitations
- Capture new limitations
- What are the main ones specific to Telco?

Expectations	Relevant Literature
• Most managers will mentioned that it is early days in the company's life and early stages had to focus on acquisition.	• Meyer, 2007 – money invested in CRM or BI; fear of data; company not tuned into to customer needs.
• Incentives and Rewards – at Telco skewed towards acquisition	• Anaman, Lycett and Love (2008) – incentive and reward system not supportive of retention, organisation could do more cross functionally.
• Company data – Starts with agents not always capturing all information during a customer	• Anaman & Lycett (2009) – company does not have to hand all the relevant data.

interaction or are there systems & systems integration issues?	
• External orientation - Do Telco tend to look inwards or is it outward facing.	• Millard (1996), firms tend to be inward looking and focused on reducing costs. • Agents are trained to keep calls short and sell high margin items that customers do not necessarily need.

• Company communications – is there enough out there to prove that this is a serious subject.	• Crosby & Johnson (2007) - The best organisations spend just as much time marketing to their employees as to their customers
	• Measurement system
	  ○ Total Relationship
	  ○ Touch-point drill-down
	  ○ Event monitoring
	  ○ Internal monitoring

How would you rate Telco's approach to tackling Customer Experience?

- Get managers to score from 0 – 10
- Ask what Telco could do better

Expectations	Relevant Literature
Expect managers to say 7 or 8.	Reichheld (2009) – Net Promoter 9s a 10s are what really drive loyalty and positive word of mouth.

How do you want customer to feel using Telco products and services?

Expectations	Relevant Literature
Comments from these mgrs will be a starter for 10 of what Telco's experience motive should be. Hope this link back to "Telco Story" and company strategy.	Carbone & Haeckel (1994) Engineering customer experience? – Experience motif

How should Telco go about improving its experience?

Expectations	Relevant Literature
Comments from these mgrs will be a starter for 10 of what Telco's experience motif should be. Hope this link back to	Carbone & Haeckel (1994) Engineering customer experience? – A systematic Approach:

Telco story and company strategy.	• Acquisition of service design skills (intuition and perceptiveness) • Data collection and analysis • Service clue design (eliminate negative clues, insert positive ones, test clues and weight its impact, cost and operational consequences. • Implementation and verification
Senior managers may concentrate contact centre and retail store (not web and handset)	• CSIS Anaman, Love & Lycett (2008)- - / multi channel considerations
All managers will say they are supportive of push to increase customer experience, but need to push them to demonstrate exactly how they are doing this with their teams. Action is required to demonstrate organisational buy-in.	• CSIS Anaman, Love & Lycett (2008) - focus on in life servicing, not just pre-sales and pre upgrade.

How would you describe your role in connection with improving Customer Experience?

Expectations	Relevant Literature
May hear talk specific to their function, not as senior managers tackling a cross functional problem.	• Meyer, 2007 – Customer Experience is a cross functional undertaking.
May hear talk specific to their function, not as senior managers tackling a cross functional problem	• Anaman, Lycett and Love (2008) – Cross functional exercise (good working relationship between store staff and Contact Centre helps provide a joined up experience). Clues in Collaboration paper?
May hear talk specific to their function, not as senior managers tackling a cross functional problem	• CSIS - Anaman, Lycett and Love (2008) – Importance of organisational buy-in.

How important is Customer Experience? Why?

Would you say retaining customer is more, equal or less important than acquiring new customers? Why?

- Keen to test business case assumptions
- Keen to test against strategy of the company

Expectations	Relevant Literature
Anecdotal agreement but most managers will not be able to articulate quantitatively what this could mean to the business.	• Hart et al (1990) - Cost to recruit new vs. retain old is 5:1
Anecdotal agreement but most managers will not be able to articulate quantitatively what this could mean to the business	• Reichheld - 5% increase in retention leads to 25 – 95% increase in profits
Do senior managers really believe in the business case? Are they motivated to see customer experience as important (CE is a medium term issues and you can't make significant progress in the short term.	• CSIS Anaman, Lycett and Love (2008) – Importance of organisational buy-in.

If you think there is an in-balance, how do you this should addressed?

- If you had 3 wishes for improving the Customer Experience, what would they be.
- Look for strategies to address the in-balance.

Expectations	Relevant Literature
Do managers feel that staff can be trusted to make the right decisions if given experience and value data and business rules for how to apply loyalty actions?	Berry & Bendapudi (2003) – Employees take note of customer preferences and are empowered to solve problems on the spot.

Appendix I – Senior Management Interviews

Interview with Customer Experience Manager

1. How would you define Customer Experience?

It has to be by definition from the customer's perspective. So it is not what we define it's what the customer defines… and I think that one of the principle parts of customer experience is the emotional outtake from whatever the transaction happens with the organisation. So whether that is a people, written communication or product transaction...it is that transaction and the outtake the customer takes from that and as I say principally emotionally.

There are also factors…process factors…what's the word I'm looking for… there are security factors that come into play, but in reality for the customer it's how they go away feeling and its about feel and touch for me.

2. What are the main obstacles to providing a great experience for customers?

I think that providing a good experience is relatively easy, but what is easier is to make a mistake and make it bad. I think good examples are around….I'm please the way that Chief Financial Officer is describing his customer champion initiative as being consistent…you can raise expectations for a customer and they can experience something good...they can experience something great…but no matter whether they have experienced good or great...if they come back from more and it is significantly different, then either they think first time around they have been short changed or the second time around they have been short changed. Whether that is at the same touch point or at a different touch point, i.e. go into retail and have a fantastic sales person giving you all the time and help they can...go to customer services and get a very different experience and therefore you feel…they this is not what I agree to…or the other way round…I think that wasn't wonderful and now I have something fantastic...why didn't I have fantastic at the first point.

You go to a restaurant and you like a particular dish, you had it before, you have it again...you go back a third time and it like where has my meat and potatoes gone, its like a completely different meal. And I think it same for what experience we are delivering…whether that is a product, whether its handset and then you get another

one...whether its text and you come to use email and they are very different experience you are going to feel different about that …Customer Experience from a organisational perspective as a whole is made up of the component parts…which why you do come to tend to a lowest common denominator…depending on the organisation.

For example if you go to Homebase and you go to B&Q, you might expect to have very similar sorts of experiences...they are in the same sort of class and pattern…but if you go to "just do it" or "just fix it" around the corner you may get a very different experience…so if you are going to fly with BA or Ryannair or shop at Waitrose or Lidel you going to get very different experiences…but you can have good experiences in Lidel you have a good experience in Waitrose…so for a customer perspective its about where you set your expectations and then whether they deliver to it

I was interest to hear you talk about consistency…how do you think organisations arrive at that level of consistently which is then repeatable across all Touch points?

It is interesting that we have these points as I think I'm at slight odds with the Director of the Customer Champion Initiative on this, as we have had this discussion before... I believe you need to be very carefully in the definitions and in managing the delivery of what you are trying to create...so if I want consistency in the business I have to explain to the business that the emotional outtake I want for that customer at that point of contact is X..

So for our business I would expect the customer to go away feeling

- excited…as its an exciting product
- reassured
- satisfied that they got value for money

So from an emotional perspective I'd expect them to go away with those feelings, there might be other emotions that we might define...but you have to define them then you have to work backwards from that definition…so I say I want you to go away feeling excited…how do I translation excitement in Retail, Self Service, Customer Services… and by making that definition you can go back and look at the gap between how we deliver now and how we feel that we should deliver and that need to go back into process….you can't expect the customer to feel reassured if your sales mechanisms are all a bit flaky…"the swipe doesn't work on this machine…I'll just have to run it through on another machine"…..is this a company I want to trust with this experience…of it you call the contact centre and they say "just wait a minute I need to grab a pen and paper as our systems are down"…it already flagging to you…mmmm….so if you ring up to sign up to a

new gas supplier if you had to wait 10 minutes for them to answer the sales call…what on earth is customer service going to be like….if the sales person was less than helpful…what is customer service going to be like… so you need to make sure that consistency is as well if not better trained in than process you put in place...otherwise you have left it to chance.

And when you get to other bits of the business, when you start to look at Customer Experience in terms of what the customer's got to go through to get what they want…is the business delivering what the customer wants or is the business is delivering its functions and making the customer go through all these hoops…so you know "I'll have to pass that onto the logistics team who will call you back and tell you when they can deliver it to you"…well hang on a minute I've called you and I want it delivered at 9am in the morning…I'm prepare to pay for it. As a business we might not want to give hourly delivery, but you have to manage that experience so the customer goes away feeling I've bought into this…it a value product so I'm not going to get door to door service…I didn't go to Waitrose I want to go to Tescos, so I'm going to get a different type of service.

What are the key obstacles?

Let's call them challenges…let's be positive. I think there are huge challenges. I think consistency is going to be one of the major challenges. You can deliver Ryannair experience and people expect Ryannair service as appose to BA or SAS…in the same way if you set that expectation…..so in the same way Telco are doing with service promise (these are the things we are going to promise deliver) that's great…you set your stall out so customers know what you are going to buy… the challenge is to deliver that consistently and that I think is the real piece. And the real challenge for that is making people live and breathe and want to believe that the customer is King…until you REALLY believe that, you are have little…you are delivering by chance.

So let's take the worst case example…customer are buying our product because its different, then the experience is not great so they don't stay. So that investment…you are getting people in the door one end and they are falling out the other end as quickly. Now you can save them by throwing money at them and people in hard economic times may react to that…but the people you save without having to throw money at, are much more valuable to you and those will be based on a number of factors non the lease consistently good experience. It doesn't have to be best experience…it needs be consistently good…it doesn't have to be consistently excellent…consistently excellent is great and it should always be an ambition. But the trouble with terminology can be misread….as you talk about customer satisfaction as soon as you raise the bar...that becomes the new

standard. Whether Telco or a competitor…that is the new standard and we will always be chasing each other. If you look at JD Power people are bunched…you have a few outliers but companies are bunched as that is the now. You have to say how can I move out from the pack?

You spoke about employees needing to believe that the customer is King…why do you think that employees don't believe that?

Because of the demands put on them from others quarters. So if I'm in sales and my targets are around selling…I'm going to be entirely focused on nailing that next sale…I'll tramped all over all the other customers as that's the one that's going to get me my commission. If I'm in the contact centre I might be under pressure for call handling time…or because there as calls waiting or I have to work extra hard on this difficult call so I'll drop this call and move on. Those things happen. But the person that goes the extra mile for the customer will not only feedback about the broken process or the pressures they are under…and will drive that change.

This does not come across by chance you need to embed this in people and recruit the right people. There is a big behaviour piece at the moment:

- Taking ownership
- Leading Properly
- Keeping your word

Those are great those are good grounded basic foundation stones, but in there are not describing how to service a customer, how to deliver a good experience how to focus on the customer. Even someone who has no direct contract with a customer externally, will have internal customers and do things that are focus on our brand so whether you are in accounts payable and you don't do you job as well as you could, then that influences someone externally about whether they should be a purchaser of Telco.

So you believe that we all have internal customers?

Yes we all have internal customers and we have external influence as well and that's very powerful. I think it is very easy to undervalue the impact that every employee can have on the brand as a brand advocate and therefore the experience a customer takes from that.

3. How would you rate Telco's approach to tackling Customer Experience?

- Get managers to score from 0 – 10

It is very difficult to say of Telco, as if you put the summation together of everyone you tend to come back with the lowest common denominator, because of the consistency bit...the customer very quickly forgets the good bits because of a bad experience….so you as an individual…people don't necessarily say "oh it was great great great and then there was a little blip"…they tend to say "it was a dreadful experience" and years of good work can be undone with one bad piece of communication, one bad interaction, one bad touch-point. So on Telco's scale of 0 – 10 …we are in the bottom to middle ground. We have a long journey to go. That is not to say that there aren't pockets of excellence where we are in the 8's and 9's and there are other areas where we are way down…and that would be in its totality, and I would have to say that otherwise we would be at the top of all the scores on everything…and I think the important thing is moving that bar up…so if we have a spiky graph, the first challenge is to get rid of lower spikes, not to worried about the higher peaks…but if you can then get the lower spikes up…and bring yourself up to the peaks ..Understanding why there is a peak...why are we doing so well in that area…why is the experience so well rated.

I was just talking to Director of Logistics about delivery and supply chain and they have just started to deliver broadband dongles via the letter box...they have slimmed down the box so that they can now go though the letter box. So now people don't have to wait in for a courier, they are now no or negligible complaints that deliveries have not been delivered on time…less calls into contact centre…it is costing less to delivers as you don't have to use a courier… so save on cost, save on calls, improve Customer Experience and improve customer satisfaction all in one little change. So that experience has probably peaked, where as before it was a trough. I think that is how we need to look at it…but we shouldn't look at it only at one touch point, but across all our processes.

I developed a matrix:

- Touch points
- Life stage
- Product line (PAYG, Contract, Business, Broadband),they have different requirements and expectations

So I have created the things you need to think about…so are you pay monthly customer, going into retail, early life stage, what sort of communications (face to face, self service, written communication) so you have this multiple matrix that you can work you way through…and you need to get all the things aligned to delivered what you want to do. So we have good and bad pockets.

4. How should Telco go about improving its experience?

I've been talking to Director of the Customer Champion Initiative, but haven't convince her to get onto same page...is that we need a (and I plagiarised this from one of the consultancies that deal in the area), but we need a blueprint. We need a clear map or framework or whatever we want to call it… that sets out what it is we want to deliver in the way of Customer Experience, through which touch point, through which life stage, through which product, which medium and have this clearly defined…and this is a big piece of work… so we either tackle by touch point or life stage...those are from a customer perspective, the key things. You can focus on one area… so I started to focus on retail and started to focus on business in early life stage…as I'm a great believer that if you get the early bit right, then that sets the right tone...if things deteriorate along the line the customer may be more forgiving than if had got off to a bad footing in the first place.

So I think the approach needs to have a framework in place that you can then use to explore the gaps in deliver and then action plan how you are going to close the gap. Simple basic…a lot of things boil down to simple basics at the end of the day… its what in the ingredients that make it work, so..

- Define the Emotional outtake
- Look at the process that deliver that for you
- Improve that process
- Build into the process the experience that will give you that emotional outtake
- And then close the gap
- You can also prioritise...will it have a big impact, will it be low cost…high priority

What do the people that aren't bought into that approach...suggest are the downside of this approach?

They suggest that individuals in the business will take the strategy that is coming and turn that into their operational plan to deliver… I fear from past experience at Telco and elsewhere that actually what tends to happen is business objective (if you are in sales the business objective is to sell) if experience is part of that then it may work, but you have to put a lot of direction into how that experience is going to be shaped and delivered and if you what to make that consistent then you have to have something across the board to make that work.

5. Could you please rank the following categories from highest to lowest in terms of impact on Customer Experience? Cost; Coverage; Handset; Customer Services; Offerings & Promotions; Billing; Image.

1. Customer Services
2. Coverage
3. Handset
4. Cost
5. Offering and promotions
6. Billing
7. Image

6. Focusing on customer service how would you weight its contribution in percentage terms?

- Get managers to ascribe a percentage (e.g. half 50%, Quarter 25%, equal 14.3%)

7. How would you describe your role in connection with improving Customer Experience?

Currently I'm the customer experience manager, but I'll be leaving the company

8. How important is Customer Experience? Why?

Would you say retaining customer is more, equal or less important than acquiring new customers? Why?

Very important. Retaining customer is more important.

9. If you think there is an in-balance between focus on acquisition and retention, how do you this should addressed?

See answers above

10. Is there anything else we have not mentioned or discussed that you would like to add?

No thanks

Interview with Director of Customer Management

1. How would you define Customer Experience?

It's huge!! It's every singe interaction that a customer or potential customer can have with your organisation. Your Brand. It goes from how they see your advertising, your call centre…when they go in store. Customer experience encompasses everything.

2. What are the main obstacles to providing a great experience for customers?

Many. The biggest obstacle is a cultural one. People's head's are not right around providing the right experience for the customers. No matter how many systems, how much money you spend…if people's heads are not in the right place, then you are never going to crack it.

What do you mean by people's heads in the right place?

From the top of the organisation down or from bottom up…people have an understanding of what its like to be a customer and the things that customers want…what makes sense for customers and people motivated to deliver that.

Do you think it is a major obstacle for Telco?

I think it a massive obstacle for us. I was really shocked when I came here and started to understand our customers and some of the things we let slip through the net, that have a detrimental effect on customers and we are ok with that. Less so these days, as I see a change happening. The way we talked about customers and the experiences we were ok with giving them, are absolutely not ok for me.

How would you approach tackling the culture issues?

The consumer champion initiative is good, as it encourages peoples to experience our products and services first hand as customers. It's a step in the right direction. When I joined, I joined as a customer, so I paid my own bill, got telemarketing. It just gives you a much clearly idea.

But my experience is not pure….as I have pulled strings in the background when I have had problems. Other obstacles are that are systems are not up to it. Plus our process and style of execution leaves a lot to be desired. It is that end to end implementation…is the communication clear, the essence of what you want the customer to know understand feel…we are not very good at distilling that down right in the heart of the organisation and sharing that out. Ideally if you've got something to say about a proposition, we should not only be talking about it through all channels. The words we use should be fit for customers. We should not rely on the contact centre or retail to do the translation.

Are you talking about consistency?

Yes

There are loads of different ways of getting an experience of the customer. One is to be a customer, the other is to in places where there is a rich interaction with the customers, so either in store or in the contact centre. Market research is important, but I think customer experience changes when people have a first hand experience of the Customer Experience. It needs to be a transformational journey.

3. How would you rate Telco's approach to tackling Customer Experience?

- Get managers to score from 0 – 10

3

4. How should Telco go about improving its experience?

We talk about doing stuff and making stuff happen. But we don't have a vocabulary about making stuff happen for the customer. When we discuss a proposition with a colleague, we talk in our terms not in the customer's terms. What are the things that matter to customers? Customers want to know:

- What is this thing?
- How does it work?
- When am I going to get my money?

They don't want to know about how the system works…not about our internal process.

We don't talk so much about the customer journey.

Why is this?

I just don't think this has been on our agenda, due to the iterations of leadership regimes. I don't think people really cared about it. There were some very strong commercial drivers…I think people had very different mental models about how the business is going to make money. At a very rudimentary level it was like x people through your door, buys your product delivers y profit. This is a very simple equation. If you drop all your prices and you pile it high and sell cheap, and you give people a really crappy time…you are narrowing your field of potential customers…and we know that we don't have great advocacy rating as a brand, and we know that, a lot of that is because of the poor experiences we have delivered to our customer either in the form of the interaction or the performance of our product when the network has not been up to scratch.

I really like the Reichheld books on the net promoter. It's just a really simple concept of good and bad profits….good profits come from delivering good experiences.

Yes I reference it in my work

What else?

I also think the senior leadership team...I think now we have started on this journey, we need to convert quickly. There needs to be a sea change of people's vocabulary and expectations. Every business plan says we are going to have great customer experience...awesome customer experiences...it use to be great customer service…now its experience. Very few organisations make the commitment.

I'm a great believer in symbolism...and management. And senior managers spending time with customers (contact centre and store) and reflecting that experience back into the business is the way. And just setting that expectation that bodging is not good enough…and that people talk with the customers in their hearts….you can talk processes and stuff, but I just think that you got to believe it.

Do you think that you need a Customer Experience blueprint with a gap analysis?

I believe in some of that…but you can over plan it. But you don't achieve anything unless you set yourselves some goals and you go out to achieve them. You need to be really clear about what it is you are going to tackle and then go out and tackle it. You need to commit and decide the areas where you are going to prioritise, where you are going to change experiences. It needs to be properly programme managed. But you can over plan it.

I don't share the view of the blueprint process...I think it needs to be more hands on. I believe in practical solutions. I don't think it needs to be overly strategised.

I think all the insights we need are in the business. Our people can tell us where our key points of failure are, and they can probably tell us what we need to do to fix them.

It's really hard to do in one sense...but it just blinding simple in another.

Do you think it should be a cross functional initiative?

It's 2 things:
- It's the leadership. Change the pace, change the expectation, and set the bar in a different place. Re-communicate what it is we are going to do, our dedication to it and resource it if required. So it's the style of leadership.
- Then we pick specific points of failure and then address them. You can easily bite of more than you can chew and spread yourself too thinly.

5. Could you please rank the following categories from highest to lowest in terms of impact on Customer Experience? Cost; Coverage; Handset; Customer Services; Offerings & Promotions; Billing; Image.

1. Customer service
2. Image
3. Coverage
4. Cost
5. Handset
6. Promotions
7. Billing

6. Focusing on customer service how would you weight its contribution in percentage terms?

At least a third 33%

7. How would you describe your role in connection with improving Customer Experience?

It's a good one. My role – I still have retention and we now have operational responsibility for retention. We have the contact centre. We have 700 people in India. I have what was

the propositions team which has turned into the lines of business – so we PAYG, Contract Handset and MBB business and what we are trying to do is take an end to end view. One of the areas where we fell down in the past was the propositions team felt there job was just to decide what the pricing was and then hand that off to others. Which meant that nobody had the duty of care for end to end responsibility, for commercials and for the Customer Experience. I wanted to make someone accountable for those things. I don't think we are very good at awarding accountability to people.

Why?

I don't know. Before the current CEO, we emerged for a dark and punishing culture. There was a lot of nastiness and backstabbing. The current CEO came and it was ok to be nice to each other. But now people have mistaken being nice for not being professional. You can treat people with respect but hold them responsible for their accountability. We don't tend to probe for evidence.

E.g. Old conversation – how is PAYG trading going…answer great all going to plan…ok then thanks.

New conversation should be - so tell me about PAYG I'm a customer I just walked into store, what happens to me now!

People think it is ok for people to say everything is fine! This is like a red rag to a bull for me. If people say everything thing is fine…it usually means they have now idea whether it's fine or not.

Is this a maturity thing or a management discipline?
Both

8. How important is Customer Experience? Why?
Would you say retaining customer is more, equal or less important than acquiring new customers? Why?

- Keen to test business case assumptions
- Keen to test against strategy of the company

Is it make or break? Nice to have?

Our customer experience makes our business, so our business is what ever money we are making or not making. This is a wider definition of what Customer Experience is. So in the passive world our business is the experience we deliver and the money they give us. In the conscious world Customer Experience is a discipline which is currently not that salient with the board. We are on a journey.

Is this because Customer Experience is in its infancy?

Probably...it's relatively new

Do you think Customer Experience is a fad? Or is it a real Phenomenon?

It's like CRM in some ways. That was the watch word of the last decade. CE is very noughties! CRM was the nineties. CE is the fad of the noughties. But I don't mean to diminish its importance in that respect. So lots of businesses do business really differently now than they did before we had CRM and the concept was big and important. Lots of people spend money on systems and databases…and the reality was a lot less exciting than the promise was. There are lots of different things that people are doing from an IT perspective to manage customer experience, which we are not doing (with the except of the work on CEMAR), which concerns me to some extent.

Such as?

Would CEMAR provide Real time decisioning engines…so it constantly analyses your customer information…you put a single systems across all you touch-points...you can decide proactively what is the right conversation you need to have with that customer, you can keep centralised records of everything that you have said to a customer…all the conversations you've had?

Yes but CEMAR does not cover the conversation history, but CSIS2 should.

Good

Customer experience should be a bit like going into a corner shop…you always know who will be behind the counter, they know you...they know you bought cheese yesterday and your going to buy a bag of sweet today. When you go in the next day…they know you and they know the conversations….its that corner shop mentality…so even with contact centre with 2000 agents and with a retail store of 300 outlets...and you can only do through systems.

9. If you think there is an in-balance between focus on acquisition and retention, how do you this should addressed?

- If you had 3 wishes for improving the Customer Experience, what would they be?

See below

Would you say retaining customers is more less or equal to acquiring new customers in terms of cost?

It depends what business you are in. So in Telco…..well the old maxim that is costs 4 times as much money acquire a new customer than to keep one is not true in many parts of our business….especially in contract handset...where every 18 months we have to acquire them again anyway...so depending on how you work you commercial model it can be anywhere from the same to 50%..the original maxim does not work in a contract business situation with a commission and subsidy model….the lines become blurred…particular if a customers bought through phones 4 u… who is the customer's relationship with? For Phones 4 u an upgrade is the same as a new connection….for a Telco customer coming back...how are you going to ensure that customer will sell Telco upgrade rather than a competitor?

So we will try and drive as many customers to our direct channels as it's a cheaper way to operate.

So looking at Telco from a direct channel perspective?

It's different now…for retention is our largest transactional channel?

For one big competitor, retention is as big as all channels put together. If every year you sign 100 customers and the stay on average 3 or 4 years. So every year you are upgrading 400 customers but bring 100 new customers through.

Retention is just so important for our business now…it was what helped us hit our budget last year. It was one of the few areas that made budget. Our commercial success was down to retention.

So if we consider direct channels then it's more profitable to keep existing customers than acquire new ones. The ratio is hard to gauge. The difficult part I've got in my head is that ….we want to grow as a business, and the minute you take your foot off the accelerator

on acquisition, you get into net negative growth. Even if you are really good, your are still going to have churn...so it's a difficult balance between acquisition and retention.

I've been pushing this question as I'm thinking of the Incentives for Acquisition and Retention.

We are still growing up as a business. For our business, I think we should differentiate between retention transactions and the things we do for loyalty. Retention transaction is a sales transaction it's trying to get to a very specific outcome, closing out a bit of business. Retention is a bit like calling the ambulance from the bottom of the cliff. This is what it is for many customers.

So customers call up and say, I'll like to upgrade – this is the business we love. It's easy...it's not that costly…customer has already decided they want to stay with you.
But many call us saying, I'm leaving unless you cut me a deal. And this is a sales negotiation.

So retention is massive to us commercially and gets more important as the base grows…but the customer experience question is that customers choose us they join us and they choose to experience our products and services…..our objective is to have as many get to the end of their contract and say actually I want to stay with Telco….and we have not monetised this…intuitively we know it's the right thing, but we keep stumbling over ourselves and finding different ways to piss customers off…and then wondering why we haven't got higher retention rates. We haven't quantified, or made the linkage yet…it's very difficult. There are loads of things that could happen to customers before they get to that point at the end of the contract…so it's difficult.

10. Is there anything else we have not mentioned or discussed that you would like to add?

I do think the commercial aspect of it…the monetising of it….we haven't got that far yet it terms of our maturity. Many other companies have had very success Customer Experience initiatives, but the have spend a truck load of money to do it. So is the right way to design the Customer Experience that will give you the right level of return? So people say I don't think we should charge for this, as the experience is poor...but you can tie yourself in knots.

I'm very clear that what we do around Customer Experience may appear fluffy...but with my retention hat on…it's about making money…and about keeping margin in the business and about attracting margin to the business. I have not seen in my experience anyone do the Customer Experience thing with a good commercial framework. That's the point I'm trying to make!!!!

It's a dilbertism…customers want everything for free! The great Customer Experience. But we are here to deliver something that customers value...and if you can create the value then people will come and they will pay for it. Why can you do something that is so good that people want to pay more for it!

Interview with Director of Customer Champion Initiative

1. How would you define Customer Experience?

No-one has never really asked me that question. I would say that it is the customer perception of the level of service and of how good that service that they receive from you is. It also is their experience of how they are managed by you and service by you across all the touch points. That can be a huge number of potential points of interaction.

So that is not just the traditional touch points like retail, contact centre?

However they choose. It can even be a conversation with some-one who has a perception of the company. Their experience can be affected by a whole range of things. A very woolly answer….

No that's great.

2. What are the main obstacles to providing a great experience for customers?

I'm going to talk specifically about mobile phones now…I think that what has happen in the industry, is that there is still the tendency to focus on acquisition. Some companies have done a better job than others, but it has only been in the past few years that their emphasis has changed. Even in our own company the emphasis has only changed in the last 6 – 9 months.

Why do you think that is?

It's about just keeping the numbers. It's much much harder to keep a customer than to go and get a new one. That's just the way the industry has operated. It's only since we are reaching high levels of market penetration, there aren't the numbers, unless you are churning people from other networks you actually haven't got the acquisition volumes…so its not that suddenly people have said that customers are really important...it more that people have gone oh my god our base of potential market opportunity for new customers is shrinking, so what are we going to do about it. It's almost become tail wagging the dog mentality. But it doesn't matter how you arrive at that …it's a good thing.

Are they any other obstacles within...especially in your new role as Customer Champion Director?

We have got time now. They way we bring customers on….lets face it, it's not clear cut that it you buy from Carphone warehouse or phones for you…you are sometimes aware of what network you have signed up to the process… it is so handset driven. We can't be sure that the customer has been told in store what they have signed up to.

Second issue is historically… and they whole industry has done this...we have used 3rd parties like outbound calling 3rd parties…and the industry has had a legacy and a high incidence of slamming, where the public are really being missed sold. So it started right at the front end.

A key moment of truth for a mobile customer is their first bill. If you have not had the clarity in what you have signed for, the chance are they bill is not going to be clear. You have blown the first moment of truth. It not just about how the bill is written…first bills run are complicated by pro-ration..(we don't have 31 bill runs….we have 6 or 7, so bill may not appear to reflect exactly what you have used). It hard to understand these aspects, then if you add in I'm not sure this is what I signed up to.

We have a classic example of an outbound operator we are using… the sales guys were going to do a test on insurance bundled automatically, but with an opt out. But the way it has been sold by telesales is that it looks like insurance sales have gone through the roof...fantastic!! But in terms of my responsibility for clarity of first bill… it's shocking. Where's the priority? All these things still go on.

The single biggest impacting items for all networks around Customer Experience are:
Network performance, network reliability and perceived extent of the network (i.e. it meets my needs where ever I am). If you don't score highly on that…that has the single biggest impact on Customer Experience.

After that it is things like first call resolution. Compared to my experience of observing contact centres in other companies we have an amazing hierarchy. We have about 8 levels. It's normal to have 3 or 4…5. With those high levels comes complexity, delays...passing things around. So actually part of the structure change is significant change in the contact centre.

Another huge impact on Customer Experience.., its only affects a small amount of customers, but if you get this wrong for them they are substantially more likely to be annoyed with you and want to leave you is handset repair. The whole issue of people being without their phone.

Network is high volume, high impact.
First call resolution is high volume, high impact.
Handset repair is low volume, bit of the Richter scale in terms of impact.

3. How would you rate Telco's approach to tackling Customer Experience?

- Get managers to score from 0 – 10

About a 3.

4. How should Telco go about improving its experience?

Single biggest thing to do is to stop looking at things from our perspective and start looking at things from the customer's perspective. I'll give you an example…where you could go.."is that from our perspective or the customer perspective?" we wanted to update out network policy around mobile broadband, because we wanted to recognise that fact that like all other operators, mobile broadband is not a perfect service, its even less perfect than voice. So there will legitimately be people whom we have been sold to, who have pretty poor coverage. The best thing to do is to let them get out of it. Just get them out it. You could have a minority who create such a poor word of mouth for you...but if you could cost that its 1000 times more expensive than going I'm sorry we should not have sold that to you. So lots of people spend time creating the policy…when it came back it said " we will give you 30 days opportunity to get your money back, but only if you bought mobile broadband contract plan. So my question was what about the people that have spent £99.99 on a starter pack, and what about the people that spent £49.99 on pay as you go, what about them??? You either have a principle where any customer who has no network is treated the same way or you don't. This a great example where we had the right intention, but then our financial nervousness kicked in and we compromised and in compromising we might as well not have bothered.

Would you say that short term financials, as oppose to medium or longer term financials?

Yes totally.

Its almost as though you need to create the environment where it is acceptable for people to say…if I was in the customer's shoes I wouldn't want that to happen. So why do we

have people being passed around the call centre without a resolution. Do people who know that we have 300 customers this month who have been waiting over 30 days to get a resolution, would they find it acceptable if a company treated them like that. Everyone is the eyes and ears of the customer. Everyone in the company has the right to say, I would be really hacked off if that happen to me with any other company.

So by changing that cultural mindset...this would be a big step along the way?

I think it's the only way you can go….we've worked with having a team of Telco people who are called customer experience in marketing and its been a shambles. Because where does customer experience stop and end… it doesn't its every where. Any one could go…"oh I need customer experience to comment on this! Well no you don't actually. So what we decided to do was we disbanded a function called customer experience…we deliberately haven't got anyone in the new structure who is responsible for Customer Experience…actually we'll create the framework for what our customer promise is…we'll tell you the 5 things in the promise that defines us… and its them for every department in the company to prepare how they think they underpin those 5 principles.

Do you the think the functions should drive that change or should there be an element of cross functional working?

There will definitely be cross functional working. So for example what we have decided…most programmes have to run in the normally department way…cross functionally. But what we have decided, because we want to make a sea change on some of the things…the biggest customer impacting issue will be managed by a dedicated programme manager that sits outside any function. I will have a customer champion programme manager, he will have one programme to manage, and he will be totally dedicated...end to end…that will run until it get to a point where it can be seeded back into the business. It will never be fixed, but the principles are that we have broken processes, broken policies, we have lack of communication between people who have key information…let's sort that out…independently of sales, marketing, and customer services. After that they we may pick up first call resolution and make sufficient process, then we conclude we can't take it any further, it has to be taken further in the individual areas.

5. Could you please rank the following categories from highest to lowest in terms of impact on Customer Experience? Cost; Coverage; Handset; Customer Services; Offerings & Promotions; Billing; Image.

In terms of people's perception of their customer experience. I'm doing this with my new hat on (Director of Customer Champion Initiative), if I was doing it with my old hat it would be different.

1. Coverage
2. Customer Service
3. Cost
4. Billing
5. Handset
6. Image
7. Offerings and Promotions

You choose your handset, almost independently of your network provider.

6. Focusing on customer service how would you weight its contribution in percentage terms?

- Get managers to ascribe a percentage (e.g. half 50%, Quarter 25%, equal 14.3%)

Customer Service is 25%

Coverage Is 35%

7. How would you describe your role in connection with improving Customer Experience?

Central

8. How important is Customer Experience? Why?

Would you say retaining customer is more, equal or less important than acquiring new customers? Why?

From the companies point of view… it is absolutely more important to keep an existing customer because financially it is cheaper and more cost effective.

Do you think that the incentive and remunerations mechanisms around the business support that commercial fact that it is commercially better to retain

customers than retain new ones…if you look at things like commissions in store, contact centre..

I think that there is still progress to be made. But having worked for the company, left and come back… there have been an absolute sea change… it is very well understood here now that it is much more beneficial to keep an existing customer. The efforts we make to do the right thing and the way we keep existing customers are formidable even compared to 9 months ago. But there's more we can do…it like a super tanker, you can't change it round overnight.

Why isn't this message spoken more loudly across the company?

There is one complication which is if you look at if purely on the cost to acquire a customer in terms of the handset subsidy, plus also the commission you need to pay to channels and then other things like the risk of fraud that goes with new acquisitions…all of that if you do and, and… there is no doubt that its is better to keep an existing customers…but it is only recently that we have even done the end to end analysis on how much it cost to keep an existing customer, because the way you can an existing customer can impact what that financial assessment is… so if you are keeping that customer like we were in the past, which is give then the kitchen sink, throw money at them, give them fantastic handset, give them lower tariffs…actually you see substantial margin dilution…so it the sophistication in terms of how you keep that customer in a way that minimises margin dilution.

So with the Director of Customer Management coming in from company Y, they have almost single handily been responsible for the sea change and focus the company of how you go about keeping customers without diluting your margin.

9. If you think there is an in-balance between focus on acquisition and retention, how do you this should addressed?

- If you had 3 wishes for improving the Customer Experience, what would they be?

N/A – ran out of time

10. Is there anything else we have not mentioned or discussed that you would like to add?

N/A – ran out of time

Interview with Director of Retail Development

1. How would you define Customer Experience?

Ahhh that's a good question. Well it depends on which way you look at it. First of all there is the outcome in terms of the experience. What does the experience generate? But before you look and understand what you generate, you need to look at the customer intent...what are you trying to get the customer…or what would you like the customer to think do or behave. So for me I'd like to think about it as a multi-level process that first of all addresses the customer from the point of view of what I'm trying to provide, do the experience the vision of what I'm trying to provide in the way I perceive it or expect it to be deliver. Because I think this is half the problem with a lot of organisations today…in that they go out and say they are going to improve the Customer Experience…the CEO goes out and drives a flag in the ground and says "we are going to improve the Customer Experience…everyone in the organisation rallies round and says "WE ARE GOING TO IMPROVE CUSTOMER EXPERIENCE".. and the net outcome is that nothing changes. So you have to ask yourself why is that so…because everyone thinks that they are doing a good job.

At a seminar in Malaysia when people were asked the question "who gives great customer experience"…90% put there hand up. But if you asks their customers who gives great customer experience, you'd be lucky to get 10% of their customers to say that.

So what do I mean by that…errrm…I think the real thing for me is that it's a bit of a feel good factor…so the things you expected have been achieved…so I went to buy a mobile phone, the person who served me was extremely helpful..errmm…but is that enough to differentiate. That's the next question… right because I bought the product...I could have walked in the next store...but the reason I didn't was that my core expectations were met...so that was ok, so I'm happy to proceed, so if I walked out there would I talk about them in a positive way...the answer's no.. I'd probably say it was just another phone store, they helped me and I got what I wanted and they support me how I wanted…but it would not be enough to motivate me to say it was a great experience. A great experience would have to be something very different.

2. What are the main obstacles to providing a great experience for customers?

I think first of all there's a mindset. It's a cultural issue. There's a whole range of things. Are we talking across the board or Retail?

Across the board, but you can then specify for retail

Well if we are talking across the board, one of the things is… it does matter where you are at in society…more often that not…people who are charged with providing a great customer experience, if it's an interface...people to people, that's an important point, because sometimes you can get a great customer experience and you may not even talk to anyone...but if you are talking people to people, the difficulty you have always got in particular if it's a call centre ...is that a lot of the people who work in these environment they themselves do not know what a great customer experience is…its explained to them…so the net outcome is that they treat people to the best they do, by their own standards. So I think this happens a hell of a lot.

That consistently comes up in my mind is…when someone helps you on the phone…you pick up the phone and see the variety of different mannerisms and some of that is culture.

One of the key frustrations with that is if you take the India call centre, the Indian people are very polite…but there politeness can be an aggravation to someone else. So they think they are providing a great experience by being polite, **by being hyper polite**…but in actual fact, they are actually creating a very negative experience by frustrating someone by being overly polite and not going to the core issue. Have you got me?

So there are also scenarios where you go online… you take an online experience…so a great online experience for me is I go online, I have the minimum number of clicks, I find the product as quick as I possibly can, I can pay for it as quick as I possibly can,… so the effort…what I'm trying to do in this perspective I'm actually reducing my effort and take all the complexity away from me.

Online is very different…the same if you take the call centre in telesales located in Scotland. The problem you have there is the difficulty of the Scottish accent.

So you have all these different themes, so I think the Customer Experience thing is really complex and it need to be addressed industry by industry in relation to what you are trying to achieve.

So if you buy a BMW or Mercedes or a Bentley. They like spending lots of lots of time with you so you fully understand the vehicle, you walk away and the first thing you think is wow that was fantastic. They pull everything apart, they show you all the bits and pieces…I can't remember anything, but you know just the way they approach...**They wowed you**...Yes they wowed you.

So you walk away and you talk about that. Right so the net outcome is that you do talk about it, you drive positive word of mouth…so if it's online whatever…you drive positive word of mouth and I think that regardless of what you do, if it's a really good customer experience that's what you want to see.

So do you think that…I think you suggested that you address Customer Experience on an industry sector basis, do you think that there are some common things that translate across all industries.

Yes I think there probably are…coming back to the point no matter where you go you have an expectation before you start, so your expectations are met...so if your expectations are met you get a neutral Customer Experience. It's a simple as you can get it. And if they are exceeded then that's where you go. But to say what met is, you really need to understand the industry.

You have a different scenario when you ring up to organise insurance… everyone has this gate …way of what that really means…so I think that the challenges to industry sectors is to understand their role in meeting and exceeding customer expectations.

The point you made about some of the employees don't know what good customer service is.. What is the best way to overcome that across an organisation?

One of the most difficult problems that most organisations have including this one, comes back to recruitment and training. And the recruitment comes back one stage further to culture. Because for a good Customer Experience…you need to have a mindset…if you think about some of the issues that you would have confronted... some staff think they did a really good job… but then they are not really sensitive or super sensitive to the customer in the right way. For example I can provide you with really lovey dovey customer services…and you think I'll never go in there again…its so over the top…so unnatural...so not in line with your thinking, feeling and behaviours. It's just making sure fundamentally that the culture and the direction from the recruitment side of your staff and the types of customers you are attracting are in synch.

As a classic example…if you go to a surf stop and you stuck me in there where all the cool dudes hang out…they would probably walk out and say this store is crap they hire old wrinklies…but if some cool dude is employed...who's just come back from Hawaii….customers are really impressed, because they are in the zone…and the customers are in the zone and the staff are in the zone…so that's where those two things

meet, it is the utopian view of great Customer Experience.. So the cultures come together, they are aligned…and culture meaning the type person vs. the type of customer are in synch and the types of business and the thinking of the customer are in synch.

Another example of a hi-fi store…you could get a really good person with good customer service skills, but they don't know the product that well. They don't know about decibels and sound quality etc.. Which would probably be a turn off to most customers, but to the audiophile is a must have. So the alignment between the customer and the experience needs to be relative.. that's why I talk about the industry thing, because it doesn't matter what you do you can always pick on that…you can talk generic in terms of what does that mean to John Lewis or M&S…to me a great Customer Experience in a store doesn't always come back to the staff...if could find the tills very quickly, if I can pay for my stuff really quickly or I'm looking for someone for advise and I can find some one and it's as simple as that – great Customer Experience.

Another one Tesco – going to do weekly shopping. I don't want to stand in line for ages…and the lady at the till can't find a price…nothing hacks you off more. Now she may be a really nice person, it's not her fault…but Customer Experience is rubbish! She's trying to do the right thing, you're trying to get out of there really quickly…bad customer experience.

So the Customer Experience changes.

So what are the Obstacles to a great CE at Telco?

In all these scenarios we are saying the obvious…which is get the basics fundamentals right in relation to the customer expectation. So for Telco:

- If I don't have to ring up anyone that's a great CE…because every time I use the product it works every time…ringing up people in customer service is not a great experience, because that means already you are hacked off. So we want to have no one ring up,
- Every body has the ability to enjoy …when they use the product it's reliable and meets their expectations.
- Now exceeds their expectations is where when I go overseas or I go into the basement of a building...wow I've still got coverage. That would be an amazing positive thing.

So it's not about the people in India (Contact Centre)…as contacting them is a result of a failure elsewhere.

3. How would you rate Telco's approach to tackling Customer Experience?

- Get managers to score from 0 – 10

Gee it would be pretty low…even today…I've been in Cornwall on holiday and I couldn't get on Facebook…I'm not a Facebook fanatic, but being on holiday it's a really nice thing to bring people up to speed with...so my experience in Cornwall, and I know we have not built up the network in Cornwall…so I have to be fair when I say this, but being a customer I'd see it would be rubbish.

I'd have to rate it a 1.

But knowing energy to fix it…its 10
Knowing the experience it's a 1

Looking at the Net Promoter for the industry as a whole, it's at (– 3). So you put all this in the right perspective.

So we look at where we are in the form of word of mouth we are more negative than positive, so 1 would be an amazing score. Generally at the moment we are in the negative (at Telco)….looking at the brand, people says it's crap the network is crap and the service is rubbish, so we are net negative…more people talk negatively about Telco than positively.

But let me qualify this…I'm not saying this because I like saying it…I'm saying it because I think it's true.

Yes admission…stop deluding

4. How should Telco go about improving its experience?

Telco are doing the right things, the number one focus must be network. This is the core of the business, because if you don't have that right, nothing else works. The CEO has said this and I agree with him. And if you get the network right…you have less people ringing up customer service…everything else flows from there.

5. Could you please rank the following categories from highest to lowest in terms of impact on Customer Experience? Cost; Coverage; Handset; Customer Services; Offerings & Promotions; Billing; Image.

1. Coverage
2. Customer Service (only ranking highly because it is an outcome of network and all the other stuff).
3. Billing
4. Image
5. Handset
6. Offering & promotions
7. Cost

Above is customer perception. My view would be:

Coverage 1

6. Focusing on customer service how would you weight its contribution in percentage terms?

It's greater than 50% of the contribution to Customer Experience.

7. How would you describe your role in connection with improving Customer Experience?

My role is to help to continue to promote the brand in a positive way, but to be open and honest about the issues we have…and not trying to hide from the facts of where we are today. Reinforcing the core behaviours of the company. How does that translate to saying lets put those things on the table and then ask what are we doing to fix them. And present the picture to business customers saying where we've got to from a customer experience / service perspective…we looked rubbish this year. But that's ok if you acknowledge that you agree with that and we are on a curve where we are trying to address that.

You can't go to the customers with excuses…that goes no where and you lose credibility. I think the openness is the right way. Its shows that you are real about the issues you are facing and that you are doing something about it.

Would you say that the honesty should translate all the way through the organisation to the end user customer?

I'm not sure how to do this yet…but we should be telling people…lots of people don't know what we are doing with the network and so one way or another I think this is part of the problem that adversely impacting out customers…not having the best network. Is not

about blowing hot air...it's about saying have a look at our website. Listen to what the industry are saying about how Telco are tackling the issues. So we need some independent feedback that reinforces the truth….its not about what we saying at the end of phone to the customer…I don't think that will gel. We need to get the PR right, because that the thing is the open honest endorsement or acknowledgement at least that we are on the right path…(i.e. what's the outlook for Telco over the next 3 years…its going to have the best network..) To me it's about saying ok it's not there now, but it's going to be fantastic in the next 18months. Must customer would say…yes I can take that.

8. How important is Customer Experience? Why?
Would you say retaining customer is more, equal or less important than acquiring new customers? Why?

- Keen to test business case assumptions
- Keen to test against strategy of the company

I think there are 3 key strategic things
- Customer champion
- mobilising the internet
- Best network

These 3 pillars working together are the way. It's a real smart move to put customer champion with the head of finance. It makes you think about where you're going to spend your pounds.

Retaining customers is at least equal to acquiring new customers. The more you can retain the base its good because:

1. you don't need to spend money to acquire
2. You build up a base of advocates. Especially if they can see the improvements

When consider the 2 points retaining customers is better.

The incentives mechanisms around the company probably don't support this view. I think if you look from a sales perspective it's not the case. The reasons are late entrant to the market we still see the market as quite large. We have a big investment in terms of infrastructure: networks, stores, telesales, online, bdms. These are all direct costs and fixed costs. So to compensate for these costs, you need to continue to generate incremental sales. On the other hand you need the retention team doing a sales style job.

It's a combination…you have to continue to grow. However looking at the company there have been more focus on retention.

The balance between acquisition and retention…we are working to get it right. We have come along way (retention cost and churn have all dropped.). The tariffs are better and margin our value positioning so we are getting less margin leakage. So we are not getting £35 customer to retain, as this is not the market we are in …its £15 to £20 customer.

9. If you think there is an in-balance between focus on acquisition and retention, how do you this should addressed?

- N/A

10. Is there anything else we have not mentioned or discussed that you would like to add?

One thing I have learned in UK and Australia, is the importance of organisational culture.

If you look at the online experience...you design it on the min number of clicks to get to what you want…you make is easy and exciting. You make it part of the way they think. Say for the person in store or contact centre. Getting that alignment of culture and customer is the thing…the closer you get to that…direct or indirect touch-points always being in tune.

For a mass market, if you know who your target customers and segments, even in a mass market you can get this right.

E.g. Ferrari has had to align their brand to younger footballer market and target that specifically for that group.

If you understand more clearly the users, then you provide the right experience.

Interview with Director of Retail

1. How would you define Customer Experience?

I think for me it's the bit that defines whether some decides to spend money on products or services…it's the components and the joined up sum of the components that either differentiate or don't, but leads someone to feel comfortable purchases products and services from you.

For Telco this is:

- Product i.e. Device
- Proposition – around tariff and cost of the services they purchase.
- How easy, simple and informed is each point of that purchase
- Then after-sales

2. What are the main obstacles to providing a great experience for customers?

The key one is we don't have the joined up visibility of all the key touch-points and a consistent execution. So different people are accountable for different touch-points with inconsistent understanding of what it should be and delivery against those touch points.

If you think of retail, we are the front end of repairs so people walk in with an issue…when the store sending it away to the 3rd party repair company – whose relationship is held be supply chain logistics – not retail)..the customer doesn't think of the backroom engineering stuff…they see the store as being the answer to their problems….the information we give retail to furnish the customer with the right information is not great...and the improvement or lack of improvement in that area is largely where accountability for the service…and the accountability sits outside where the main activity occurs. That would be the one off the top of my head.

The most obvious one we tend to get feedback on is the difference between retail and the contact centre…this is the ability to have consistent execution and consistency of approach as the customer fluctuates between retail and contact centre.

Why?

The accountability has not been good across the organisation...and therefore it has become an excuse and not a big enough priority for people to fix…structure is not the answer to everything, but it can be an excuse.

Summary – Consistency and accountability!

The other thing would be the scale in retail we have 1800 employees, so ensuring that we are able, capable and proficient saying the same thing in order to give the customer that consistent experience is very difficult and when you have a labour turnover of 40% your are constantly training, reconfirming and clarifying what the Customer Experience needs to be and then ensuring you deliver against it. That is really difficult. Plus we have not got transparent policies. Therefore the process tends to be quite grey (not transparent). Then knowing what to improve to make the Customer Experience better is very difficult without this clarity?

Therefore, there is no view of what a good Customer Experience is and what employees should be doing?

Correct.

I think there is a general view as it relatively logical but, from a customer perspective how would I know if I've been short changed...and therefore for an employee point of view the consequences of not delivering against that are not clear.

What should Telco do?

Well, I don't like the word charter, but if we had clear transparent policies that we could communicate to customers and colleagues and then had a way of measuring the ability to deliver against it that would be a huge leap forward.

Would this look like the customer champion – high level vision?

No more granular. For example, "We guarantee that if you come in with a repair, you will get it back fixed in 4 days, and if we can't repair in 4 days we guarantee to give you a new phone". There is no greyness in that and its something that the customer can hold us to account on.

At the moment...we quote 3 days, but if it's more than 3 days there's not consequence. It's a 3 day intention not a 3 day commitment.

So if you think about the interaction that would happen...you walk in on 5th day and the phone is not back, you vent your frustration and the agent is powerless to actually do anything but empathise, but probably will confront emotion with emotion.

Do you think at your senior level – with responsibility for devices helps in this regard?

Well repairs which now sit completely under me…i.e. the front end, the back end the relationship…knowing that we have not adjusted, improved or changed anything in 2 years does not feel right. I'm not saying it wrong…just saying it hasn't had the right level of scrutiny. I'd like to get some cause analysis to see where we can with the 3rd party repair company can improve the Customer Experience or reduce cost. It may be some of the things we are doing which don't make a difference to Customer Experience, which may have a built in cost, which we can pull out. I will now be accountable for that level of scrutiny. Why have I not done something before? I wasn't accountable and often its only when you get time or you are called upon you can impact things outside your level of accountability.

Does your accountability stretch to sign off handsets?

*I think we should have a P&L per handset, not just the cost price but the ongoing cost of handsets that we have had…so when you add in the complaints, repairs, returns, roaming – when you start to make decision of taking a handset, rather than just the colour or price, you measure it against the strategic direction – does it deliver a great internet experience, is it reliable and can we afford it (does it fit the budget).

You can then look at handsets by manufacturer and platform you can pre-judge P&L of new handsets. This allows us to take pressure off CTO in terms of testing, it takes pressure of contact centre in terms of predicting workload and the channels should be comfortable as they know what they are getting.

So is accountability part of processes of achieving results and therefore should be used with Customer Experience?

Accountability is where you are held account for something to somebody. You can be responsible on your own, but you can't be accountable on your own it takes 2 people. I'm accountable to the sales and marketing director.

Before you would have had a number of stakeholders in repairs.
Logistics director accountable to finance director with TRS responsible. I'm accountable to Sales & Marketing Director. People picking the phone up in India reporting into Customer Services Director.

So you can see that their might be a large amount of confusion and complicity built into it, rather than a single point of decision making looking horizontally..

Yes I can see how complexity and extra layers can impact the Customer Experience.

How should Telco tackle getting a consistent experience given you have 40% staff turnover in retail?

You need to make sure the infrastructure is right – having you got the right support mechanism for the stores. So operationally taking out complexity and make it simple. Take out more of processing and admin time, so people can focus on the development of the team and the interaction with customers. Example would be, reducing some of the working time of store staff and the footfall and productivity does not support this. However we will not do this with managers, as we want the first hour of the day, before store is open to be spent on admin. When store is open and you then have time to spend with customers and coaching colleagues.

Good managers do this, but we have not been clear enough and defined that this is the process you should follow. The nub of the recruitment and keeping good people centres on the Telco vision. We recruit to this and not on technical, phone or sales knowledge.

So like Eddie Stobart – hires people for behaviours and then trains them for HGV licence?

Good managers was clear on the vision (i.e.) then she nailed the team. If they are no good, make changes, if good, nurture and coach.

Secret is vision, team and then quick wins.
Vision – clear
Team – right capability
Quick wins and then measurability of quick wins and comfort and pride that we are heading in the right direction

Same with Customer Experience. Vision, right capability and them quick wins and measurability.

3. How would you rate Telco's approach to tackling Customer Experience?

- Get managers to score from 0 – 10

Intention or actual result

Actual = 4
Intention = 9 or 10

Structure changes are brave and symbolic.

CFO is consumer champion – there no barriers, or silo and CFO responsibility for whole company.

Customer approach consistency - all brought together under director of customer champion programme.

Other senior colleagues and peers have end to end responsibility rather than functional responsibilities. So post sale activity and sales activity teams all under same accountability.

Is this different to how it's tackled in other companies?

An electrical company – after 80 years retailing – each chain had a customer service director, but no responsibility for shaping policy or delivery of the policy…its was just a garnish as if to say "we are serious about customer services, as we have a CS director. This is where we were...which was people with customer in the title but no accountability or resources or budget.

So no matter how good you are if you are only an influencer the engagement of the organisation behind you is going to be spasmodic.

Does that lead to better cross functional working?

Before the change people didn't share plans and didn't understand how people could help each other. Now people are in the same time team it forces the issues. Again organisation is not the whole answer, but without it, it can be used as an excuse.

4. How should Telco go about improving its experience?

What else should be happening to improve things (withstanding customer champion).

Best network under CTO. When this is reliable and delivers a great experience, it will reduce some the greyness with customers. (i.e. don't get signal, oh our coverage checker says you do) will be minimised. It does 2 things:
- Great leverage for consumer experience and acquisition
- Will give people confidence of what we have within the organisation and a belief in our product. We are on a journey, people buy into where we are going to get to...but it's a bit rocky.

Individual pockets of poor coverage on the network, mean that people are almost called in to miss selling as people buy a dongle, take it home and it does not work.

5. Could you please rank the following categories from highest to lowest in terms of impact on Customer Experience? Cost; Coverage; Handset; Customer Services; Offerings & Promotions; Billing; Image.

1. Promotions
2. Coverage
3. Handset
4. Customer service
5. Cost
6. Billing
7. Image

6. Focusing on customer service how would you weight its contribution in percentage terms?

Customer service is within all of the above…I guess cost is the only one that does not have an element of customer service. So as a block it's a 4, but it's in all of them. Therefore customer service is 80 – 90% of the overall.

7. How would you describe your role in connection with improving Customer Experience?

Already done.

8. How important is Customer Experience? Why?
Would you say retaining customer is more, equal or less important than acquiring new customers? Why?

- Keen to test business case assumptions
- Keen to test against strategy of the company

If you of think of the strategic directions the four of them, they are all Customer Experience.

- Embracing the internet – it's about allowing customers to do what they want to do at a reasonable price, wherever they want to do it.
- Story – the behaviours – about being clear and therefore has trust with customers. So the feel they can buy from you and you have a relationship with them.
- Best network – coverage plus depth and richness of the signal
- Consumer Champion – is the package of the way we do the other things.

Therefore Customer Experience is central?

Yes

9. If you think there is an in-balance between focus on acquisition and retention, how do you this should addressed?

- If you had 3 wishes for improving the Customer Experience, what would they be?

Two hats on this one. Personally opinion I think retention is more important, but if you look at the way we run the business it's probably 50:50.

If you were Kevin, would you say retention is more?

Yes. Well if you look at our budget it's around retaining more and acquiring less, but when the chips are down or the focus moves to acquisition. So when it comes to retail, people are not interested that we do 20K upgrades a month, which is double what we used to do a year ago.

But what people talk about is productivity they talk in terms of acquisition – how many new contracts have we done. We did in Feb:

- 9k repairs
- 20k upgrades
- 2k disconnections

Which is quite productive...negative productive but productive. But no one talks about this.

So that (short month and snow factor)

- New Acquisition – 23k
- MBB – 7.5k
- MBB PAYG – 9k
- PAYG Handsets – 9k

If you lump it all together it's about 50:50 in term of acquisition and retaining or delivering some kind of tangible service.

So why are people thankful of the 20k upgrades?

The view is that we have the capacity to do upgrades via the contact centre. They while it's a choice for the customer, but actually something that isn't incremental that retail brings (i.e. if we didn't have retail we could deliver the level of retention). This is the shallow financial view of it…the deeper view is:

- Returns rate also zeros and people see, the handsets – therefore experience is better.
- We have opportunities to cross and up-sell (retail has a higher rate of doing this than any other channel).
- .Then you start to build a relationship with people in store as we have help informed the customer's next purchase.

So the overall brand intangible and tangible bit is the advantage of doing upgrades in retail via contact centre.

So why don't people see the business case for this?

People (and I included myself in this) have focused on the short term and not the long term. The strategic reason for direct channel was about cost and customer relationships, however people tend to focus on the short term goals and forget the longer term intent.

If we delivering the acquisition numbers…we would then focus on the brand etc.…but because the expectation has always being very high on retail and the push to create a business in less than 2 years and be performing at the level we intend…since I've been here (2 years) we have:

- Open 250 stores
- Closed 130 concessions stores
- Replace and recruited all regional managers
- Replaces and recruited all the area managers
- Product portfolio has move from only really contract handsets to PAYG, MBB, Laptops, plus 20K upgrades a month (up from 5K)
- Plus taken out 20% of cost

This is a tremendous amount of business changes. Most organisations would never have attempted this.

So 50:50 in terms of retention activity and acquisition. So do you think the business cases are the same?

No. It was only last we that agreed upgrades could be included in the payback of a store. So all the cost of doing upgrades as (but we only just started to allocate the margin of upgrades – as I mentioned earlier people didn't see this as incremental as CC could do this (possibly a cheaper way to upgrade).

So upgrade margin vs. acquisition margin is..

We allocate a different level of margin and I agree this is right…

So incentives for acquisition vs. retention is the same..

*Yes it's almost equal. So the margin dilution on upgrades is factored in to the reward we give to colleagues...so in Feb moved from 10% of people upgrading and staying on the same contract to 40%. This is massive positive impact on margin.

So its must be much easier to do this in retail when you can talk face to face to customers?

Well you say that but contact centre is 55%. We are at 10%, cc went from 20% to 55%...but we expect to overtake that when we get into the groove.

But then repairs. I have the cost of repairs (staff to talk to customers) but if you didn't have a retail business, not everyone would be happy putting their handsets in a bag and posting it away.

10. Is there anything else we have not mentioned or discussed that you would like to add?

Not really.
We touched on:

- Network

- Organisation now set up to improve (right people in right positions) and accountability is clear.

Extra chat:

The director spoke about how the organisation can be a barrier for executing that experience...talking about accountability and how that's a key obstacle in putting things right…it shouldn't be an excuse but it does impact things.