



SCHOOL OF ECONOMICS  
AND MANAGEMENT  
Lund University

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# Innovating Customer Experience

- from a telecom industry perspective

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Master Thesis  
Autumn 2007

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# - ABSTRACT -

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<b>Title</b>	Innovating Customer Experience – from a telecom industry perspective
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<b>Course</b>	Master Thesis in Business Administration, 15 University Credit Points (15 ECTS).
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<b>Tutors</b>	Professor Allan T Malm, Ph.D. Fredrik Häglund
<b>Key words</b>	Customer experience, innovation, telecom industry, industry convergence, communications service providers
<b>Purpose</b>	The purpose of this thesis is to identify and analyze innovative products and services within the telecom industry, letting these findings constitute possible ways for CSPs to innovate the experience of their customers.
<b>Methodology</b>	The research in this thesis was conducted from a qualitative approach and data were collected using primary- (expert interviews) and secondary sources (journals, articles, web sites etcetera). In addition, a research design entailing four sequential steps was created to stipulate and illustrate the logic underpinning the methodological process.
<b>Theoretical perspectives</b>	The theories are divided in three groups. Background theories – these intend to capture the problematic nature of the transforming telecom industry, examples of such theories are; value chain theories and ecosystem theory. Key theories – these provide tools to analyze and enhance the understanding of customer experience, these are; The New Frontier of Experience Innovation and How to Sustain Customer Experience. Complexity perspective – these theories highlight the complexity that customer experience conveys.
<b>Conclusions</b>	All mini cases have partners related to the development of the innovative product or service. Five out of six innovative products or services can be categorized as solutions innovations; one can be categorized as an experience innovation. Two out of the six experiential components presented by Gentile et al. are applicable to all mini cases. However, the other four (emotional-, cognitive-, lifestyle-, relational-) components are applicable only to various extent. Thus, if trying to differentiate when innovating the customer experience, these components ought to be emphasized. Customer involvement is a tendency noticed among the mini cases as an attempt to reduce complexity.

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# - SAMMANFATTNING -

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<b>Titel</b>	Innovation av kundupplevelsen – utifrån ett telekombransch perspektiv
<b>Seminariedatum</b>	2008-01-15
<b>Kurs</b>	Magisteruppsats Strategic Management, 15 hp (15 ECTS).
<b>Författare</b>	Ola Dahlberg, Karl Eckerdal
<b>Handledare</b>	Professor Allan T Malm, Ph.D. Fredrik Häglund
<b>Nyckelord</b>	Kundupplevelse, innovation, telekombranschen, konvergens, communications service providers
<b>Syfte</b>	Syftet med denna uppsats är att identifiera och analysera innovativa produkter och tjänster inom telekombranschen, för att sedan låta dessa utgöra möjliga sätt för CSPs att innovera sina kunders upplevelse.
<b>Metod</b>	Denna undersökning har ett kvalitativt angreppssätt och datainsamlingsmetoden utgörs dels av primärdata (expertintervjuer) och dels av sekundärdata (journaler, artiklar, webbsidor etc.). Dessutom skapades en undersökningsdesign som bestod utav fyra sekventiella steg i syfte att stipulera och illustrera logiken bakom det metodologiska tillvägagångssättet.
<b>Teoretiska perspektiv</b>	Teorierna är indelade i tre grupper. Bakgrundsteorier – dessa är tänkta att fånga problematiken som följt av telekombranschens omvandling, exempelvis; teorier om värdekedjor och ekosystem. Huvudteorier – dessa fungerar som ett analysverktyg för att öka förståelsen av kundens upplevelse, dessa är; The New Frontier of Experience Innovation och How to Sustain Customer Experience. Komplexitetsperspektiv – dessa teorier uppmärksammar den komplexitet som kundupplevelsen medför.
<b>Slutsatser</b>	Alla mini case har partners i utvecklingen av innovativa produkter eller tjänster. Fem av sex innovativa produkter eller tjänster kategoriseras som ”solutions innovations” och en kategoriseras som en ”experience innovation”. Två utav de sex ”experiential components” som Gentile et al. presenterar är tillämpbara på samtliga mini case. Däremot så är de fyra övriga komponenterna (emotional-, cognitive-, lifestyle-, relational-) endast tillämpbara i varierande utsträckning. Således, dessa komponenter borde utgöra fokus om en differentiering eftersträvas vid försök att innovera kunderbjudandet. Att involvera kunden är en tendens som identifierats hos mini casen i försök att reducera komplexitet.

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## - PREFACE -

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Lund, January 2008

Ola Dahlberg

Karl Eckerdal

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## - INTRODUCTION -

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*This chapter outlines the context from which the researched problem originates. It also stipulates the problem formulation, purpose and delimitations. In the end a disposition of the thesis is presented in order to clarify the interrelation between the different chapters.*

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### **1.1 Selection of subject**

The subject of this thesis was initially presented by Professor Allan T Malm during a lecture in the master course Strategisk Ledning. He in turn had been approached by Thomas Schiffer, Director E-Channel at Telia Denmark. The reason was Telia's interest to innovate the experience of their customers. The challenging task awoke our interest and resulted in further discussions with Professor Allan T Malm, Ph.D. Fredrik Häglund and Thomas Schiffer. After several meetings the final subject for the thesis was established.

Telia constitutes the starting point of this thesis, as this is from where the subject initially originates. Therefore, possible ways to innovate the customer experience are researched in relation to what is considered innovative for Telia. However, this thesis takes a broader perspective, not allowing for Telia to take an active part as no in depth research enabling such an approach will be made.

Consequently, the reasoning throughout this thesis takes the perspective of communications service providers<sup>1</sup> (CSPs) in general. Hence, the findings constitutes possible ways to innovate the customer experience extends not only to Telia, but possibly to CSPs in general.

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<sup>1</sup> See definitions of terminology (chapter 1.6) for explanation



## 1.2 Background

Today's telecom industry is experiencing dynamic impulses and increased complexity. Converging technologies and increased competition result in blurring industry definitions and a transformation of the industry as a whole. New entrants constitute an external force, but the transformation of the industry also comes from within. Such examples are the numerous telecom companies that have transitioned from monopolies to market driven companies.

The core competence of these companies was often to install infrastructure and their competitive advantage derived from economies of scale. Today the reality is rather different. The competitive advantage nowadays is likely to come from the number of customers, i.e. the customer base and the core competence lie in launching products. Another difference between old telecom monopolies and today's market driven telecom companies is the issue of pricing. It is no longer about cost recovery; instead a market pricing approach is needed.<sup>2</sup> Sweden is an illustrative example; the fierce competition has forced the price development to decrease rapidly, a development causing problems for the industry. The reason is that the price drops on services, such as fixed communications, not have been compensated through new products or services with a higher profit margin.<sup>3</sup> Thus, the future of the telecom industry entails challenges, but also possibilities:

*“The future of the telecom industry in some ways is certain: continued fall of the costs of communications towards zero, with rapid growth in global bandwidth and access. We can also be sure that wireless communications of all kinds will grow rapidly.”<sup>4</sup>*

One possibility is the new and growing service iptv which enables new services and offerings, hence new sources of income for the telecom industry. However, there are challenges too. The requirement for increased broadband bandwidth in order of getting a high quality iptv service is such an example.<sup>5</sup> In addition, as different services are bundled together at highly discounted prices the margins are slim. A context mainly beneficiary for the customer.<sup>6</sup>

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<sup>2</sup> Peppard, Joe & Rylander, Anna, (2006), “From Value Chain to Value Network: Insights for Mobile Operators”, *European Management Journal*, Vol. 24, Issue 2, p 130

<sup>3</sup> Jerräng, Marcus, “Telekommarknaden stagnerar Raset på fast telefoni förödande”, *ComputerSweden*, nr 123, 2007-12-14

<sup>4</sup> <http://future-of-telecom-industry.blogspot.com>, Accessed 2007-12-30

<sup>5</sup> [http://www.nyteknik.se/nyheter/it\\_telekom/article55835.ece](http://www.nyteknik.se/nyheter/it_telekom/article55835.ece), Accessed 2007-12-30

<sup>6</sup> [http://www.nyteknik.se/nyheter/it\\_telekom/article56396.ece](http://www.nyteknik.se/nyheter/it_telekom/article56396.ece), Accessed 2007-12-30

Essentially, which services to offer and which price to charge for them are questions needed to be addressed. Another question is how the innovation of new products and services should be approached; alone or in partnership with others? The development for many companies has been to transition from an integrated supply chain to become part of a value network:

*“Gone are the days of going it alone. To provide products and services with the functionality and reliability customers expect, telecom companies must pick where they will play and then team up - leveraging what they do best and looking to partners and third parties to round out their offerings.”<sup>7</sup>*

Perhaps the biggest challenge within the telecom industry is to break the pattern of offering bundled content with price as the primary mean of competitive advantage? Perhaps CSPs should focus on divergence instead of convergence?

*“Convergence is about co-packaging, but all real innovation is about diversity: doing things different to serve clients better. [...] Both convergence and divergence are happening at the same time. We need to keep focussed on the needs of ordinary people who want many simple, well-designed, reliable, low cost products - to do different things. We need to encourage diversity, innovation and creative genius, to improve quality of life, solve real problems and make great things happen. Convergence in technology products is important but divergence will drive the future, and survival of every technology company will depend on it.”<sup>8</sup>*

Consequently, there are many new influences permeating the telecom industry and re-shaping its industry landscape, a context posing uncertainties for the future development of CSPs and how they should go about when trying to innovate the experience of their customers.

### **1.3 Problem discussion**

As described in the background the telecom industry is experiencing a transformation, which in extension affects the customers due to increased complexity. Primarily as they have to navigate among multiple choices of products and services i.e. different technologies solve the same problem. For example, ip-telecommunication solves the same problem as fixed telecommunication, although many times allowing for a flexible and cheaper usage<sup>9</sup>.

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<sup>7</sup> <http://whitepapers.zdnet.co.uk/0,1000000651,260270179p,00.htm>, Accessed 2007-12-30

<sup>8</sup> <http://www.globalchange.com/convergence.htm> 2007-12-30

<sup>9</sup> <http://www.pts.se/Sidor/sida.asp?SectionId=2133#Varför%20välja%20att%20ringa> Accessed 2007-12-05

As a result of this development many of today's CSPs offer a similar portfolio of products and services. Thus, they compete with price as a mean of attracting customers; low entrance fees, low monthly fees, low fee per byte and so forth. In extension this leads to increased competition and lower margins for the CSPs. Hence, the need for innovation is continuous in order of being profitable. This poses a challenge for the CSPs; *what are possible ways to innovate the customer experience?* A difficult question to answer as it entails complex dimensions. One dimension being the ambiguous meaning of customer experience and how it is correlated to the abstract notion of value. Another dimension being the uncertainty associated with what the customer will desire in the future, especially as the customer often does not know what he or she wants before experiencing it. A dilemma illustrating the complex nature of trying to anticipate which products and services that will be valued the most among customers.

When researching possible ways for CSPs to innovate the experience of their customers, a logical first step is to study the current state of the telecom industry. Thus; *which are the trends within the telecom industry today?* Taking more of a customer perspective it is also interesting to ask; *which of these trends are believed to create value?* Another interesting issue to address as a contrast is; *which of these trends are believed to cause complexity?*

The future perspective is also important in order of trying to find innovative products and services. An initial question is; *which are possible trends in order of creating value in the future?* As argued previously, this is a difficult question due to its ambiguous nature. Another question is therefore; *could the involvement of customers make these trends easier to detect, possibly increasing the chances of creating a positive customer experience?*

Yet another source of input when trying to innovate could be to look at different innovative CSPs. Thus; *what have successful CSPs done to innovate their products and services? What could be learned from them? Did they innovate alone or did they form partnerships?*

### **1.3.1 Problem formulation**

Derived from the problem discussion we have formulated the following question:

***What are possible ways for CSPs to innovate the experience of their customers?***

## **1.4 Purpose**

The purpose of this thesis is to identify and analyze innovative products and services within the telecom industry, letting these findings constitute possible ways for CSPs to innovate the experience of their customers.

## **1.5 Delimitations**

The focus of this thesis is customer experience from the perspective of private customers within the telecom industry. Thus, aspects related to business to business (B2B) relations are not researched.

No in depth research will be conducted of any CSPs in this thesis. Therefore, no conclusions will be drawn regarding which prerequisites that are needed in order to implement the findings in this thesis.

As different markets entail different opportunities and threats, an industry analysis or similar method should be conducted if the aim is to present findings exclusive for one particular market. Such an approach is not the focus of this thesis.

## **1.6 Definitions of terminology**

- Communications service providers (CSPs) – companies present within any of the following industries; telecommunications, entertainment and media and/or Internet/Web services<sup>10</sup>.
- Innovation/innovative – these concepts are referred to as an acknowledged product or service. Also, a prerequisite for being categorized as an innovation/innovative is a differentiation relative to Telia (see selection of subject chapter 1.1).
- Timeframe – the research is conducted on the basis of recent, current and “in the pipe” innovative products and services.

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<sup>10</sup> [http://en.wikipedia.org/wiki/Communications\\_Service\\_Provider](http://en.wikipedia.org/wiki/Communications_Service_Provider), Accessed 2007-12-13

# 1.7 Disposition of the thesis

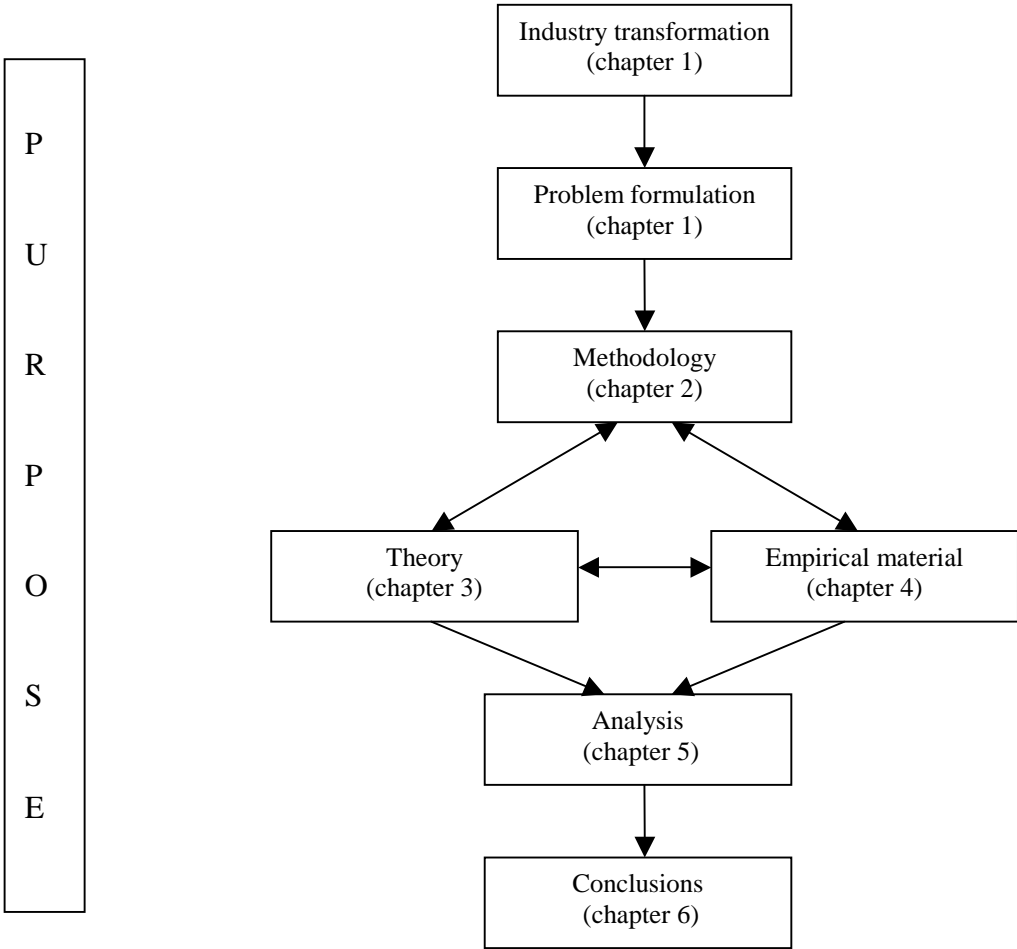


Figure 1:1 Disposition of the thesis

## - METHODOLOGY -

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*This chapter outlines the methodological approach. First, an overview of the research design is given. Second, the motivation behind the decisions regarding the approach, data collection and methodological quality is presented. Third, the theoretical framework is illustrated. Lastly, critique on the methodological decisions is addressed.*

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### **2.1 Research design**

The methodology when conducting research for this thesis can be illustrated in four sequential steps. Each step has a separate purpose, thereafter leading to the next step. Together the four steps constitute the logic applied when doing research for this thesis.

#### **2.1.1 First step**

The first step aimed to gain a general understanding of the telecom industry today and possible future trends. Reading in on the subject in newspapers, journals, articles, internet and other theses was the starting point of this research. Also, material presented by Professor Allan T Malm, Ph.D. Fredrik Häglund and Thomas Schiffer was studied at this point.

In addition, two expert interviews were conducted as part of the first step. These interviews were also intended to help gain a better understanding of the telecom industry. When selecting respondents we approached Thomas Schiffer and asked him who he thought would be most qualified to give this information. Thomas Schiffer suggested Hampus Janzon, Business/Concept Developer in Malmö and Freenasp Mobedjina, Senior Vice President Broadband Services Denmark.

Hampus Janzon and Freenasp Mobedjina were both chosen as respondents for the expert interviews, motivated by their background, knowledge and relevance in relation to the problem researched in this thesis.

### **2.1.2 Second step**

After gaining a general understanding of the telecom industry the next step was to search for innovative CSPs. The aim was to find them and identify their innovative products and services. Thus, allowing for an inventory displaying an overview of the innovative development within the telecom industry. This step was underpinned by secondary data. Internet and search engines such as ELIN (Electronic Library Information Navigator at the University of Lund) and Google were used to find the innovative CSPs.

However, as the findings in this step would influence the continuous research, a selection of relevant key words was used aiming to create a consistent approach. These were terms, concepts and industry related words that had appeared repeatedly in the first step. Consequently; all CSPs have been found using these key words, yet in various order and combinations (appendix 1). As a result of the search process we went through numerous journals and articles and visited numerous company specific web pages. The reason was to make sure that the found CSPs were relevant to this thesis, i.e. finding them innovative via the key words were not enough. Given that the CSPs fulfilled set criteria they were included in an inventory. This inventory (appendix 2), was created throughout the second step allowing for an overview of CSPs and their innovative products and services.

### **2.1.3 Third step**

The third step aimed to make a selection of innovative CSPs letting them constitute mini cases for further research. We argue that any of the CSPs included in the inventory could have been selected, as all of them fulfilled the criteria set in order of being labeled as innovative and relevant to his thesis. However, the inventory was narrowed down to a selection of six mini cases, using two different approaches in an attempt to avoid bias.

The six mini cases were selected by comparing the inventory towards two different web sites; World Communication Awards (WCA)<sup>11</sup> and Telecom Asia Awards (TAA)<sup>12</sup>. The organizations behind these websites (Total Telecom<sup>13</sup> and the Questex Global Telecom Group<sup>14</sup>) represent telecom markets in Europe/US and Asia and award innovative CSPs.

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<sup>11</sup> <http://www.worldcommsawards.com/>

<sup>12</sup> [http://www.telecomasia.net/article.php?id\\_article=4785](http://www.telecomasia.net/article.php?id_article=4785)

<sup>13</sup> <http://www.totaltele.com/About.aspx>

<sup>14</sup> [http://www.telecomasia.net/static.php?section=who\\_we\\_are](http://www.telecomasia.net/static.php?section=who_we_are)

The first three CSPs were selected to constitute mini cases with the prerequisite that they were part of the inventory, and that they had to have been awarded by the websites in categories relevant to this thesis (appendix 3), in the year of 2006/2007. This was the first approach.

The last three CSPs were selected to constitute mini cases with the prerequisite that they were part of the inventory, however **none** of them could have been awarded by the websites in categories relevant to this thesis, in the year of 2006/2007. This was the second approach.

BT	Europe (UK)	Selected via WCA
Orange	Europe (UK/France)	Selected via WCA
PCCW	Asia (Hong Kong)	Selected via TAA
Ringgold	USA	Selected outside WCA and TAA
Globe Telecom	Asia (Philippines)	Selected outside WCA and TAA
SingTel	Asia (Singapore)	Selected outside WCA and TAA

Figure 2:1 Display of the selected mini cases and their selection processes

### 2.1.4 Fourth step

The fourth and final step was to collect additional secondary data about the six mini cases, hence enabling in depth research of them in the analysis to come.

## 2.2 Illustration of research design

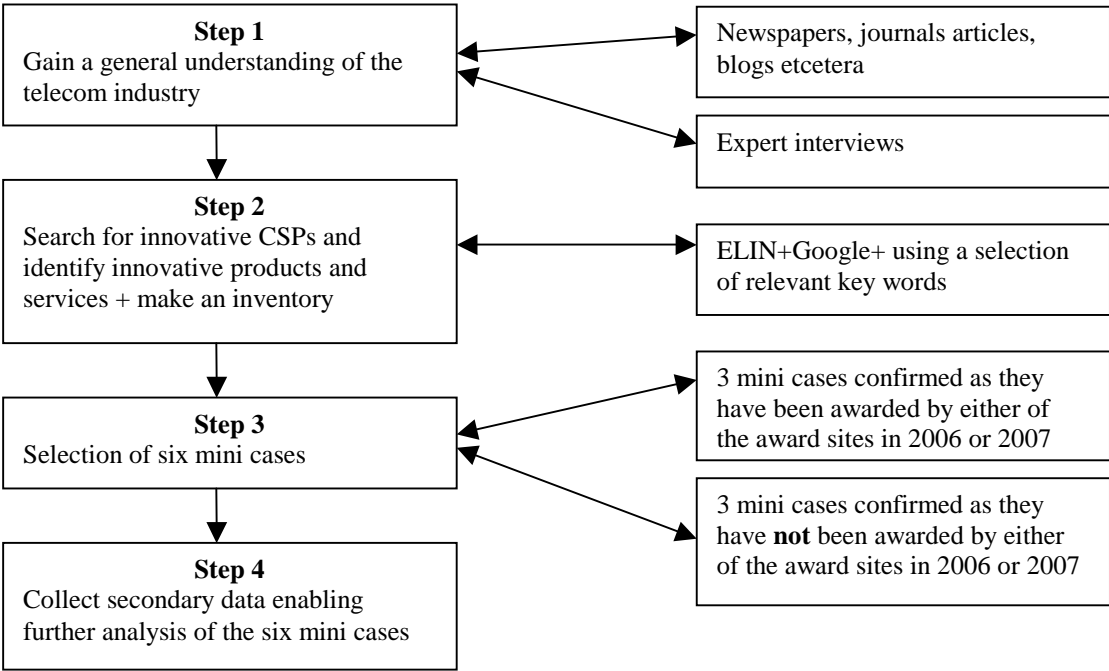


Figure 2:2 Research design



## 2.3 Approach

The first step of this research was to gain a general understanding of the telecom industry. The primary reason was that none of us authors could be said to have deep knowledge about the telecom industry. However, such a scenario is not necessarily negative as the lack of preconceived opinions and/or expectations enhance the chances of an objective research<sup>15</sup>.

The decision of which methodological approach to choose was questioned before starting the research for this thesis. A qualitative approach was chosen, as it was decided to best suit the relation between which kind of information and results that were aimed to be collected and presented<sup>16</sup>. In other words, the qualitative approach was deemed the most relevant as it aims to find words and texts, not numbers, when collecting data<sup>17</sup>.

The research takes its starting point in empirical material. The reason is that relevant theories relative to the problem formulation were limited, i.e. relevant theories to explain how to innovate the customer experience. Hence, the thesis is of an inductive character<sup>18</sup>. However, the relation between theories and empirical material has been of a circular process<sup>19</sup>.

The thesis could also be viewed from a normative and problem solving perspective<sup>20</sup>. The need for CSPs to innovate the experience of their customers constitutes the problem, whereas possible ways to innovate the customer experience constitutes the solution. Therefore, the contribution does not only lie in the data, but in the way it is collected and presented.

Mini cases were used as a method of getting useful information regarding possible ways to innovate customer experience. Though, alternative ways to proceed were considered. Such an example could have been to contact different telecom analysts and conduct expert interviews, with the aim of letting them point out CSPs and their innovative products and services. Another example could have been to send questionnaires to different CSPs, with the aim of letting them identify other CSPs and their innovative products and services. However, mini cases were chosen as this methodological approach could be achieved within the timeframe of our disposal and provide the information needed to fulfill the purpose of this thesis.

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<sup>15</sup> Jacobsen, Dag Ingvar, (2002), *Vad, hur och varför?*, p 35

<sup>16</sup> *Ibid.*, pp 137-138

<sup>17</sup> *Ibid.*, p 154

<sup>18</sup> Bryman, Allan & Bell, Emma, (2005), *Företagsekonomiska forskningsmetoder*, pp 23-25

<sup>19</sup> Andersen, Ib, (1998), *Den uppenbara verkligheten*, p 30

<sup>20</sup> *Ibid.*, pp 21-22

## 2.4 Primary data

The two expert interviews aimed to reveal information and knowledge about abstract concepts such as converging industries and volatile customer behavior. Hence, bring meaning and contextual understanding to these concepts<sup>21</sup>. They also aimed to bring forward the opinions of the respondents regarding these matters<sup>22</sup>. To achieve these purposes an interview guide (appendix 4) was thoroughly prepared, created to reflect the problem formulation of this thesis. Also, it was constructed in order to be as objective as possible, trying not to lead the interviewed persons in any specific predetermined direction<sup>23</sup>. The interviews were carried out in a flexible manner, not letting the interview become entirely structured, i.e. of semi structured design<sup>24</sup>.

The expert interviews were conducted face to face enabling opportunities to interpret the expressions of the interviewed persons. Hence, questions could be rephrased and/or clarified if deemed necessary.<sup>25</sup> The context effect is also considered to have had reduced influence on the content in the interviews as both of them were conducted in the respondent's normal working environment<sup>26</sup>. Additionally, when conducting the interviews one person was primarily responsible for the interview and the other person was actively listening and helping with follow up- and probe questions<sup>27</sup>.

## 2.5 Secondary data

Secondary data was used in all four steps of this research. Fortunately there are many sources providing data regarding the researched problem. Newspapers (Ny Teknik, Computer Sweden, Dagens Industri and so forth.), search engines and articles (ELIN, Google), blogs and web pages (www.lightreading.com, www.techcrunch.co.uk, www.thisismoney.co.uk) are examples of such sources.

Secondary data is collected by others than oneself; hence a number of factors were kept in mind when conducting the research<sup>28</sup>. One such factor was to critically select which sources to use as the reliability of the source is determined in relation to the recipient. Another factor

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<sup>21</sup> Bryman, Alan & Bell, Emma, (2005), *Företagsekonomiska forskningsmetoder*, p 322

<sup>22</sup> Ibid., p 361

<sup>23</sup> Ibid., p 369

<sup>24</sup> Ibid., p 377

<sup>25</sup> Ibid., p 140

<sup>26</sup> Jacobsen, Dag Ingvar, (2002), *Vad, hur och varför?*, p 164

<sup>27</sup> Bryman, Allan & Bell, Emma, (2005), *Företagsekonomiska forskningsmetoder*, p 371

<sup>28</sup> Andersen, Ib, (1998), *Den uppenbara verkligheten*, p 150

determining reliability is the remitter of the source. In this thesis both personal- (material from our tutors) and institutional (articles, journals and so forth.) sources were used.<sup>29</sup>

The newsworthiness was another emphasized aspect while conducting research for this thesis. Due to the rapid changes within the telecom industry the findings bear little contribution if the sources are obsolete. Hence, a vast proportion of the secondary sources were process data i.e. newspapers, articles, internet and other sources allowing publication of recent developments within the telecom industry<sup>30</sup>.

## **2.6 Research quality**

### **2.6.1 Internal validity – credibility**

The two respondents in the expert interviews work on different levels within Telia, representing different departments, different countries and have different backgrounds. Due to their background and professional position we argue that the ability as well as willingness to provide trustworthy information is high<sup>31</sup>. Also, various secondary data is supported by information from the expert interviews, something that strengthens their validity<sup>32</sup>. In addition, the methodological approach when selecting the different mini cases was conducted in the same consistent manner. Hence, we argue that the interviews and secondary sources supporting the mini cases have a high level of credibility.

### **2.6.2 External validity – transferability**

The transferability of the findings in this thesis is primarily affected in two ways. First, the research is quite small due to reasons such as limited time and practical ability. Thus, the transferability is affected as a bigger selection of mini cases and larger size of the research, probably would increase the ability to generalize the findings<sup>33</sup>. Second, the prerequisites stated in the selection of subject presented in chapter 1.1, stipulates a certain direction for this thesis. Hence, the transferability could be regarded as high primarily to CSPs not excluded by these prerequisites.

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<sup>29</sup> Jacobsen, Dag Ingvar, (2002), *Vad, hur och varför?*, pp 209-210

<sup>30</sup> Andersen, Ib, (1998), *Den uppenbara verkligheten*, p 158

<sup>31</sup> Jacobsen, Dag Ingvar, (2002), *Vad, hur och varför?*, pp 260-261

<sup>32</sup> *Ibid.*, p 256

<sup>33</sup> *Ibid.*, p 266

### 2.6.3 Reliability and replication

As described previously, both of the expert interviews were conducted in order to meet the criteria of reliability. Primarily by trying to be as neutral as possible in appearance and conduct and thereby reducing the affect on the respondents. A further measure taken to enhance the reliability was to record both of the interviews in order to avoid own interpretation in a too early stage.<sup>34</sup> When using secondary sources to collect data we as authors systematically analyzed the data individually before discussing it with each other. This way we tried to avoid wrongful interpretations and mistakes, hence reducing the risk of reproducing the data in another way than was intended<sup>35</sup>. Hence, the reliability is argued to be high both in terms of primary and secondary sources. As the different steps of this research are thoroughly described, replication of the methodological approach is possible<sup>36</sup>. However, if trying to conduct the same research, the findings would perhaps differ due to the complex nature and rapid changes within the telecom industry. Therefore, replication in this research extends primarily to the applied methodology.

## 2.7 Theoretical framework

The theoretical framework is divided into three groups consisting of theories and concepts thought best to fit this research. The first group consists of background theories. These address the role of value chains, value webs and ecosystem and are chosen to illustrate the recent development in the telecom industry due to its transformation.

The second group consists of key theories addressing customer experience. Prahalad's and Ramaswamy's *The New Frontier of Experience Innovation* (2003) was found to best suit our requirements regarding customer experience and innovation. The theory emphasizes co-creation of value to enhance customer experience. Though, it is a couple of years old and could preferably be complemented due to today's transforming telecom industry. Attempting to safeguard from this potential problem as well as reaching the theoretical frontier, we searched for newer material within the area. An article by Gentile et al. (2007) was found: *How to Sustain Customer Experience: An Overview of Experience Components that Co-create Value With the Customer*. This article covers the aspects of customer experience and co-creation of value, i.e. the same focus as Prahalad's and Ramaswamy's article. In addition, it presents six experiential components underpinning customer experience, drawing from

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<sup>34</sup> Jacobsen, Dag Ingvar, (2002), *Vad, hur och varför?*, pp 269-274

<sup>35</sup> *Ibid.*, pp 273-274

<sup>36</sup> Bryman, Allan & Bell, Emma, (2005), *Företagsekonomiska forskningsmetoder*, p 48

previous acknowledged literature within the field. Hence, this article fulfills two purposes; it is relevant to this thesis and it is underpinned by the frontier of recent academic advancements within the area. Together the key theories will constitute tools to analyze customer experience. They were both chosen as they are believed to capture the complexity it entails.

The third group represents a complexity perspective serving to discuss innovation drawbacks, conclude the analysis and relate to the background theories.

## **2.8 Critique**

### **2.8.1 Research design**

The methodological approach that underpins this research was implicated by the complexity and abstract nature of the researched problem. The most significant challenges we found were how to reduce the risk of bias while at the same time not miss out on important data. The dilemma was further implicated by transformation of the telecom industry. Consequently, the nature of this research does not necessarily allow for clear cut answers as the complexity convey different perspectives and approaches. Thus, there are aspects up for criticism.

The process of selecting mini cases could be questioned as it could have been done in various ways. For example, the key words when searching for innovative CSPs could perhaps have been different. In addition, using Google as a search engine includes risks. The logarithm sorting the “hits” is dependent on what have been the most searched for previously. This could potentially mean that we have missed innovative CSPs while searching via Google. Consequently, another approach could perhaps have given a different selection of mini cases. However, as argued previously we believe that our way of conducting this research, even though not the only way, is reliable. Especially as gained knowledge from our primary and secondary sources underlies the continuous decisions that have been taken. Hence, the critical approach of this research is argued to have minimized the risks of bias.

### **2.8.2 Approach**

This thesis takes a qualitative approach, however another alternative could have been to combine it with a quantitative approach. Possibly even a good alternative as such an approach critically test itself.<sup>37</sup> Though, due to the abstract nature of the researched problem and limited time available, a combined approach was considered as too comprehensive.

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<sup>37</sup> Jacobsen, Dag Ingvar, (2002), *Vad, hur och varför?*, pp 151-152

### **2.8.3 Data collection**

The respondents in the expert interviews were selected on the basis of their field of work, knowledge and believed contribution in this thesis. However, they were presented by Telia.

Whether or not they were the right selection in terms of width and variation of knowledge and experience can be questioned. There is always the risk that the respondents perhaps were not the best suited to give information relevant for this thesis.<sup>38</sup> In addition the number of conducted interviews can be questioned. However, as argued previously; both expert interviews were intended as a complementary input when trying to gain a general understanding of the telecom industry. Therefore these risks, even though not detected, are argued to have limited impact on the continuous research.

Secondary data provided by Professor Allan T Malm, Ph.D. Fredrik Häglund and Thomas Schiffer in the initial step of this research could be criticized for the same reason as that of the respondents in the expert interviews. Thus, the general quality of using them and the material that they provided must be evaluated in terms of questioning their knowledge and expertise<sup>39</sup>. Internet was also used as a source, primarily due to the quest for newsworthy material. However, this too is a choice encompassing risks. The most obvious probably being that of the origin and validity of the webpage, but also that of securing the timeliness in relation to the research<sup>40</sup>. Lastly, an alternative method of collecting secondary data could have been to use other sources, perhaps other journals, articles and blogs. Essentially, we argue that the first step of this research helped strengthen the relevance of chosen secondary sources. The reason is that a notion of which material that would be useful in this research was formed when looking through the extensive material collected in this step. Hence, all risks presented above were critically considered throughout the research.

### **2.8.4 Theoretical framework**

The choices could be criticized as some of the theories and concepts are new and/or conceptual in nature. However, these theories and concepts were deemed most relevant to this thesis. Especially as the transformation of the telecom industry challenges the traditional rational of how CSPs should compete effectively, a context that is new in itself.

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<sup>38</sup> Jacobsen, Dag Ingvar, (2002), *Vad, hur och varför?*, p 199

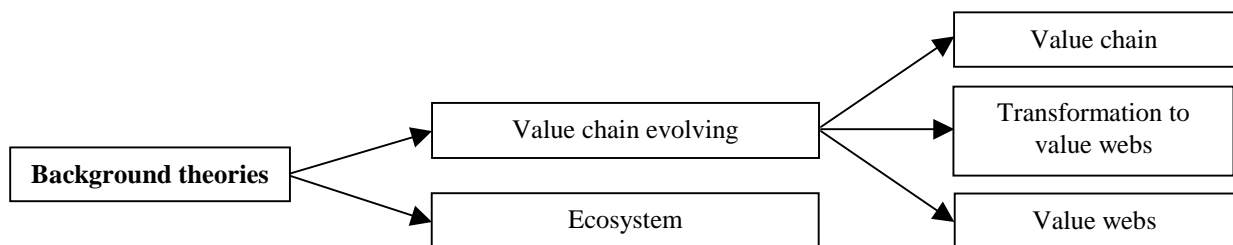
<sup>39</sup> *Ibid.*, p 210

<sup>40</sup> Bryman, Alan & Bell, Emma, (2005), *Företagsekonomiska forskningsmetoder*, pp 517-518

## - THEORY -

*This chapter presents the different theories constituting the theoretical framework of this thesis. First each theory is explained separately, thereafter the theoretical framework is illustrated and focus areas of the theories are summed up intended to give an overview.*

### 3.1 Background theories



#### 3.1.1 Value chain evolving

##### 3.1.1.1 Value chain

The traditional way of categorizing an organization's different activities is by using Porter's value chain. The value chain distinguishes between primary activities and support activities, thereby mapping the different functions in which the organization can create a superior value.<sup>41</sup> The activities that are directly connected to the creation or delivery of products and services represent the primary activities. In order of achieving a greater effectiveness and efficiency of these primary activities, they in turn are connected to support activities (see figure 3:1) Together these activities constitute a model that helps organizations to map which activities that contributes to the value creation and which activities that hinders it.<sup>42</sup>

<sup>41</sup> Grant, Robert, M., (2005), *Contemporary Strategy Analysis*, fifth edition, Blackwell Publishing, pp 145-146

<sup>42</sup> Johnson, Gerry et al., (2005), *Exploring Corporate Strategy*, seventh edition, Prentice Hall, pp 136-140

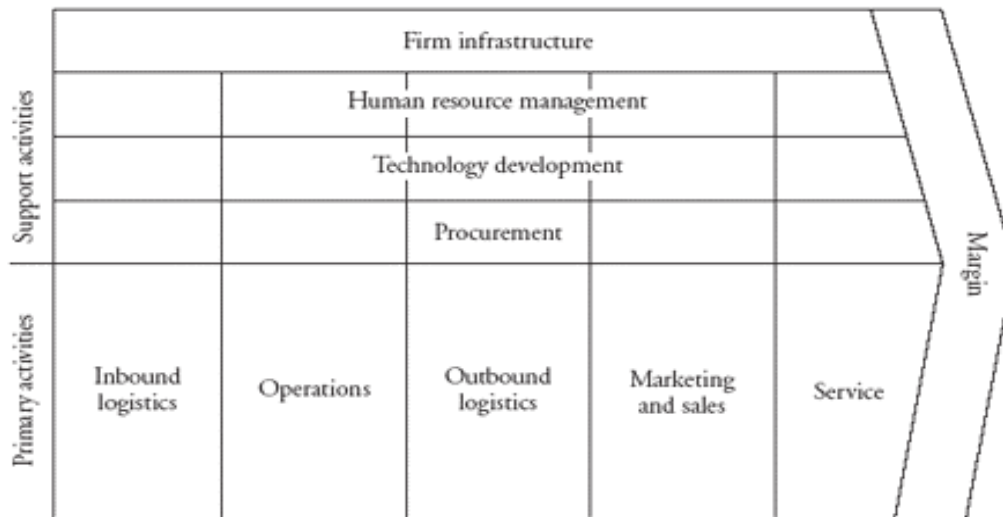


Figure 3:1 Porters value chain<sup>43</sup>

### 3.1.1.2 The transformation to value webs

The traditional view of the value creation as sequential steps of generating activities is questioned as it simply does not account for many of today's industry contexts. The sequential process becomes insufficient as the interrelation with stakeholders is increasingly emphasized, due to the combined efforts of co-producing value.<sup>44</sup>

Andrews and Hahn are among those questioning the concept of value chains and argue the need to transform them into value webs. This is motivated by the development encompassing blurring boundaries between organizations and the need to adapt to this context. Most importantly the value web motivates and allows for members to integrate their infrastructure, this is not the case regarding value chains.<sup>45</sup>

Andrews and Hahn mention two main reasons that cause the transformation of value chains:<sup>46</sup>

- Role changing between the members within the value chain, leading to power shifts.
- Customers demanding a higher degree of customization, leading to increased collaboration between the members within the value chain.

<sup>43</sup> [http://media.techtargert.com/digitalguide/images/Misc/bpc\\_2.gif](http://media.techtargert.com/digitalguide/images/Misc/bpc_2.gif), Accessed 2007-12-23

<sup>44</sup> Peppard, Joe & Rylander, Anna, (2006), "From Value Chain to Value Network: Insights for Mobile Operators", *European Management Journal*, Vol. 24, Issue 2, pp 131-132

<sup>45</sup> Andrews P Philip & Hahn Jerome, (1998), "Transforming supply chains into value Webs", *Strategy & Leadership*, Jul/Aug 1998, p 8

<sup>46</sup> *Ibid.*, p 7



	<b>Value Chain</b>	<b>Value Web</b>
<b>Customer</b>	Focus on customers (Viewed as market segments)	Focus on end consumers (Viewed as individuals)
<b>Environment</b>	Static/Stable	Dynamic/ever-changing
<b>Scope</b>	Domestic or multinational	Global
<b>Focus</b>	Industry-specific	Business goal-specific; linking with relevant partners from other industries
<b>Value Creation Mode</b>	Independent; self-sustaining; leverages own competencies	Partner-based; leverages competencies of all partners
<b>Relationship type</b>	Timid teaming	Strong partnering
<b>Infrastructure integration</b>	Limited integration	Full integration
<b>Infrastructure focus</b>	Separate flows	Integrated flows
<b>Infrastructure thrust</b>	Cost-driven	Value-driven
<b>Infrastructure currency</b>	Reliability and accuracy	Speed and synchronization
<b>Process focus</b>	Improves own processes	Improves joint processes
<b>Profit focus</b>	Increases own profits	Increases profits of all partners
<b>Cost focus</b>	Considers own cost	Considers total cost
<b>Knowledge leverage</b>	Within the enterprise	Across all nodes
<b>Knowledge approach</b>	Hoarding	Sharing
<b>Resource approach</b>	Guarding	Sharing

**Figure 3:2 The shift from value chain to value web<sup>47</sup>**

### **3.1.1.3 Value webs**

The concept of value chains is evidently transforming into concepts taking a broader perspective. In other words, the value chain is viewed as part of a value network, not only acknowledging the internal value chain of the organization but the external value chains of suppliers, distributors and customers. Porter illustrates the value network as necessary links and relations between organizations, allowing the creation of products and services<sup>48</sup>. Thus, Porter's model of a value network helps to identify which activities that are best suited to be performed by the organization and which that are not. Therefore, a prerequisite of a successful value network is to understand the internal value chain of the organization.<sup>49</sup>

### **3.1.2 Ecosystem**

Adner explains the concept of innovation ecosystems as arrangements in a collaborative manner where several companies add their individual offerings, into a consistent solution facing the customer. The cost of coordination has been significantly reduced by information technology. As a result the innovation ecosystems have developed into a central element of growth strategies for companies in various industries.<sup>50</sup>

<sup>47</sup> Andrews, P Philip & Hahn Jerome, (1998), "Transforming supply chains into value Webs", *Strategy & Leadership*, Jul/Aug 1998, p 8

<sup>48</sup> Johnson, Gerry et al., (2005), *Exploring Corporate Strategy*, seventh edition, Prentice Hall, pp 140-141

<sup>49</sup> Ibid., pp 140-141

<sup>50</sup> Adner, Ron, (2006), "Match Your Innovation Strategy to Your Innovation Ecosystem", *Harvard Business Review*, April 2006, pp 98,100

Often a functioning ecosystem is discussed in terms of hyperlinked organizations, value networks, open innovation and key strategies. Adner points out that success for a company not only lie in its own performance but in the performance of its partners. Decisions about timing and resource allocation are often affected when a company is dependent on other partners. Hence, the need to coordinate activities within the ecosystem is of great importance, as the value of one's own product or service could be reduced if this is not emphasized.<sup>51</sup> Analyzing risk in an ecosystem must be done in a systematic way in order to set the company's expectations. Hence, good execution is being diluted by bad expectations. A common mistake among companies is to plan and view the entire content of the ecosystem. An approach neglecting to consider the process of emerging ecosystems and its order.<sup>52</sup>

For a company to succeed with its growth strategies, Adner argues, it is vital to assess the risk of the ecosystem. Risk is divided into three different categories with focus on the last two.<sup>53</sup>

- Initiative risk – any uncertainties in a project that could affect delivering on time and/or to specification. This risk is evaluated by looking at the product, the customer, the supply chain, the competition and so forth.
- Interdependence risk – an innovation that is part of a larger system does not only need to succeed by itself, it is dependent on the successful deployment of other innovations in the system. The risk could be described as the combined probability that partners will live up to their commitment in a predetermined timeframe. Hence, the control of success diminishes as the interdependent risk increases.
- Integration risk – in several ecosystems the intermediaries reside between the final customer and the innovation. When the number of intermediaries increases, so does the uncertainty of market success. As opposed to the aggregated probability of interdependence risk, integration risk adds the intermediaries' timeframe of adoption cycles in order to estimate the potential delay. Adoption of an innovation is decided by an evaluation of payoff, i.e. each adoption step has to be profitable.

The downside of delays is that it can close the window of opportunity. However, the upside could instead be when a company slows down in order for the ecosystem to catch up. A situation in conflict with the dominant logic of rushing to market.<sup>54</sup>

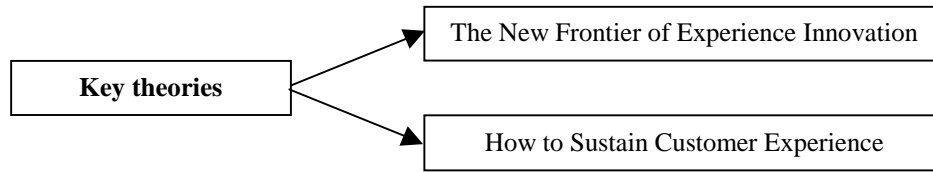
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<sup>51</sup> Adner, Ron, (2006), "Match Your Innovation Strategy to Your Innovation Ecosystem", *Harvard Business Review*, April 2006, p 98

<sup>52</sup> *Ibid.*, p 100

<sup>53</sup> *Ibid.*, pp 100-104

## 3.2 Key theories



### 3.2.1 The New Frontier of Experience Innovation

According to Prahalad and Ramaswamy the magnitude of value creation will escalate in the future. Not only constituting a competitive advantage but possibly even a criterion for surviving in the future competitive landscape. Converging technologies and altering industry definitions facilitates such a development as it opens for new opportunities. However, the concept of value creation is very complex and ambiguous making it a tough task to achieve.<sup>55</sup>

From a historical perspective the rational underlying innovation has been the emphasis on product- and service features. But as the rules of the competitive landscape are changing so is the rational underlying innovation. Value creation is a process too complicated to neglect the interaction with customers. In fact, inviting the customer as a co-creator is argued to be a wise decision in order of achieving successful innovations in the future. However, there is an important distinction between the customer as; helping to develop the product and as; enjoying the experience of co-creation. In other words, the value creation derives from the interaction between the customer, his or her context, and related stakeholders.<sup>56</sup>

To prepare for such a future companies need to meet certain criterions. First, an experience network needs to be arranged with emphasis on continuity and transformability connecting the suppliers, partners and customer communities. Second, a structure of how to manage the experiences needs to be established. If the network is successfully implemented the synergies of the combined competencies could potentially lead to co-created value through innovation. Though, today most companies position their products and services between the product- and experience space, categorized as the solutions space. Thus, leaving them unable to ripe optimal benefits of future value creation.<sup>57</sup>

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<sup>54</sup> Adner, Ron, (2006), "Match Your Innovation Strategy to Your Innovation Ecosystem", *Harvard Business Review*, April 2006, p 105

<sup>55</sup> Prahalad, C.K & Ramaswamy, V., (2003), "The New Frontier of Experience Innovation", *MIT Sloan Management Review*, Summer 2003, p 12

<sup>56</sup> Ibid., pp 13-14

<sup>57</sup> Ibid., pp 15-16

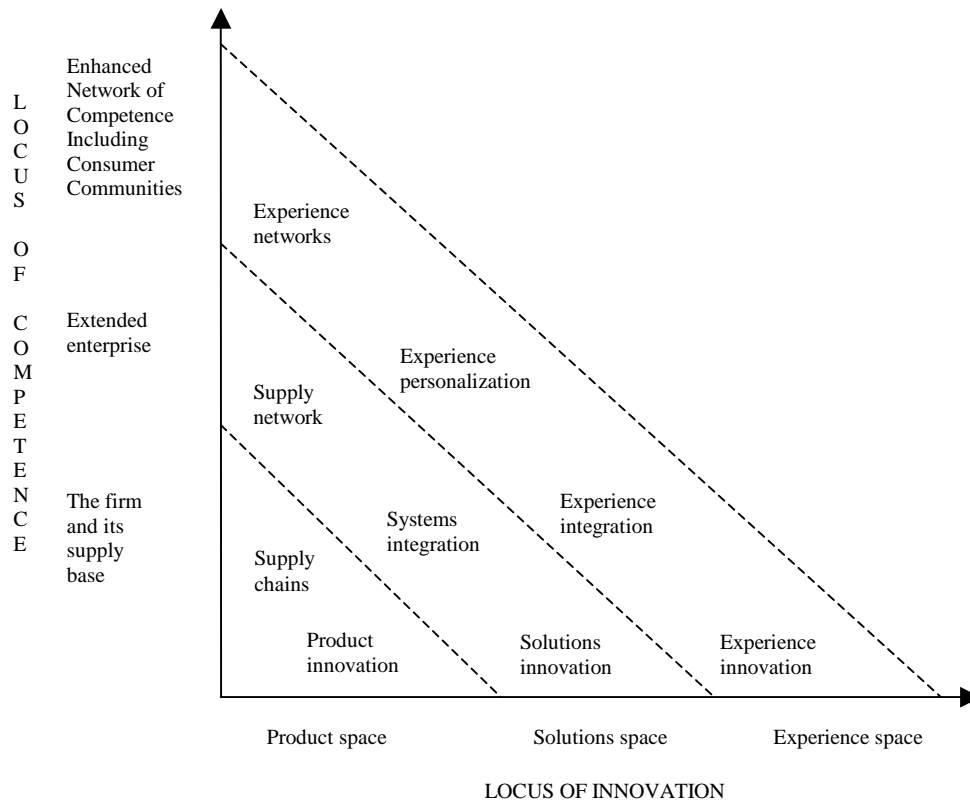


Figure 3:3 The New Competitive Space for Innovation (Modified)<sup>58</sup>

### 3.2.2 How to Sustain Customer Experience

Gentile et al. research customer experience and identify key aspects that need to be addressed in order of setting the right environment, allowing value creation for both the company and its customers.<sup>59</sup> The definition of customer experience that Gentile et al. give is:

*“Customer Experience as an evolution of the concept of relationship between the company and the customer.”<sup>60</sup>*

This relationship is underpinned by interactions between the company and the customer, which in turn amount to value creation. The value is further divided into utilitarian value (the functional approach), hedonic value (the experiential approach) and a balance between the two. These types of value underpin a framework presented by Gentile et al.<sup>61</sup>

<sup>58</sup> Prahalad, C.K & Ramaswamy, V., (2003), “The New Frontier of Experience Innovation”, *MIT Sloan Management Review*, Summer 2003, p 16

<sup>59</sup> Gentile et al, (2007), “How to Sustain the Customer Experience: An Overview of Experience Components that Co-create Value With the Customer”, *European Management Journal*, Vol. 25, No. 5, pp 395-396

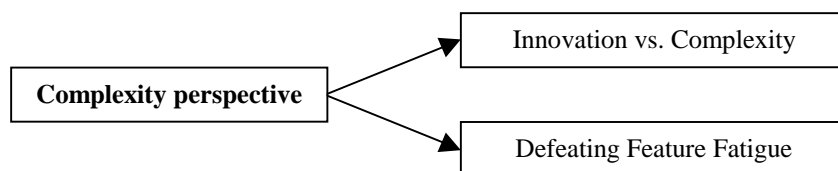
<sup>60</sup> Ibid., p 397

<sup>61</sup> Ibid., p 399

In their framework Gentile et al. further distinguish the hedonic value i.e. experiential value, arguing that it consists of six different components:<sup>62</sup>

- Sensorial component – aims to stimulate the senses through sensorial experiences such as tasting, smelling, hearing, sight and touching. The component thereby stimulates excitement, satisfaction and so forth.
- Emotional component – aims to involve the customer through emotional aspects to generate moods, emotions and feelings and thereby create a relation between the customer and the company and/or products and/or a brand.
- Cognitive component – aims to engage the customer through experiences connected to thinking and mental processes, for example problem solving. The cognitive component could also lead to new ideas of a product or changed mental assumptions.
- Pragmatic component – aims to enhance the customer experience through practicality.
- Lifestyle component – aims to obtain a fit between the values and beliefs of the company and its customers. A confirmation of values can lead to the adoption of certain behaviors and/or lifestyles, thus linking company- and customer value.
- Relational component – aims to create a setting where the customer invites others when using the product or service, i.e. the notion of a community. This means that the customer goes beyond his or her normal context and relationship with other people.

### 3.3 Complexity perspective



#### 3.3.1 Innovation vs. Complexity

One common mistake that companies do when trying to reduce complexity is to address it as a production problem. However, Gottfredson and Aspinall argue that the source of the problem is not production oriented, rather product oriented.<sup>63</sup>

Not only companies with physical production and/or products face the dilemma of complexity. One example is a telecom company that has used information technology to

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<sup>62</sup> Gentile et al, (2007), “How to Sustain the Customer Experience: An Overview of Experience Components that Co-create Value With the Customer”, *European Management Journal*, Vol. 25, No. 5, p 398

<sup>63</sup> Gottfredson, Mark & Aspinall, Keith, (2005), “Innovation vs Complexity: WHAT IS TOO MUCH OF A GOOD THING?”, *Harvard Business Review*, November 2005, p64

leverage its services, by providing several new differentiated options. The logic behind this approach was to fulfill every possible customer's need and thereby increase the revenues for the company. The result was the opposite because of too many options.<sup>64</sup>

To tackle the complexity problem a company, according to Gottfredson and Aspinall, has to start with the way the needs of their customers are viewed. In the majority of cases, companies overrate their customers placed value of having many options. The assumption, that more options are better makes companies proliferate their product offering. Hence, the dominant logic increases complexity and hinders successful innovations.<sup>65</sup>

### **3.3.2 Defeating Feature Fatigue**

A common way of trying to enhance the customer experience is to load the offered product or service with multitudes of features and different choices. Though, is this really the way to go about when trying to increase the experience of the customer? Surely, it is a cheap and easy way of differentiating the product or service, but it also demands more from the customer.<sup>66</sup>

From a customer viewpoint it might be experienced as:

*“...one more thing to learn, one more thing to possibly misunderstand, and one more thing to search through when looking for the thing you want.”<sup>67</sup>*

Evidently there is a complex distinction between what creates a positive customer experience and what hinders it. A survey conducted by Rust et al. shows that customers are attracted by products with many features, but once they have tried it they want a product that is easy to understand. Hence, capability is what triggers the customer experience initially, but usability is what determines the customer experience in the long run. The dilemma is evident; do the organizations want to sell the product or do they want satisfied customers? The answer lies in finding what Rust et al. label the “Happy Medium”. In conclusion, organizations ought to put emphasis on long term relations with their customers. Hence, focus on doing one thing really well, simplify their products and help the customers to choose a suitable product.<sup>68</sup>

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<sup>64</sup> Gottfredson, Mark & Aspinall, Keith, (2005), “Innovation vs Complexity: WHAT IS TOO MUCH OF A GOOD THING?”, *Harvard Business Review*, November 2005, p 65

<sup>65</sup> Ibid., pp 65-66

<sup>66</sup> Rust, T, R., et al., (2006), “Defeating Feature Fatigue”, *Harvard Business Review*, Vol. 84, No. 2, p 100

<sup>67</sup> Ibid., p 100

<sup>68</sup> Ibid., p 102-107

### 3.4 Illustration of theoretical framework

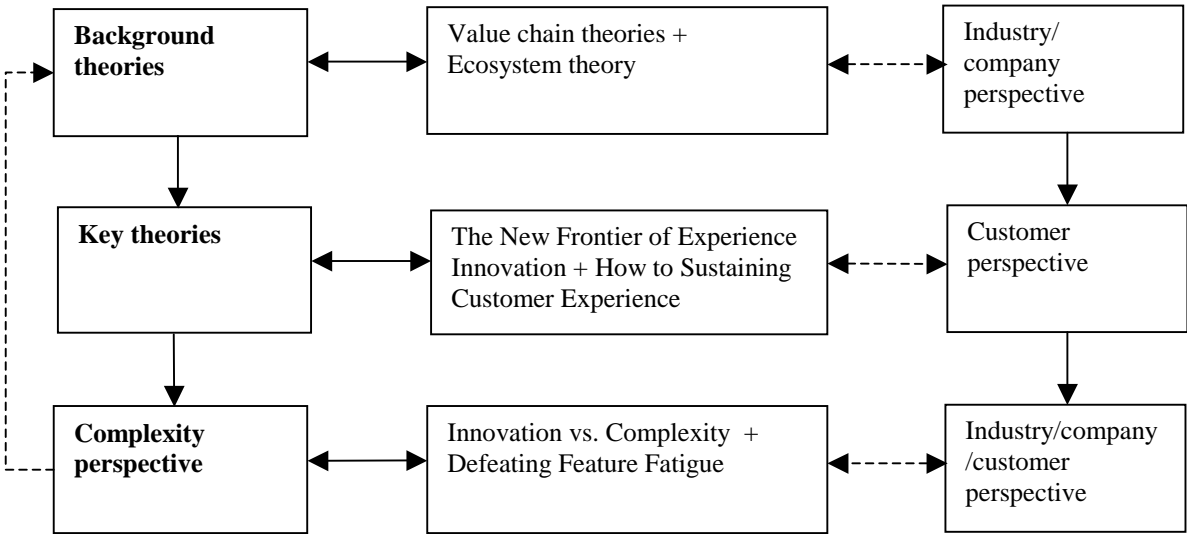


Figure 3:4 Theoretical framework

#### 3.4.1 Theoretical focus areas

Theories and concepts addressing the transformation of value chains are used to illustrate the transformation of the telecom industry and to give a general understanding of how it affects the value creation for CSPs. Porter constitutes the traditional approach whereas Andrews and Hahn represent the recent development within the area. The concept of ecosystems by Adner is used to illustrate the importance of partnerships in relation to the mini cases.

The key theories take more of a customer perspective. Prahalad and Ramaswamy are used as they question the basis for value creation in relation to customer experience. The main contribution is the framework with different criterions allowing for a categorization of innovations. As customer experience is the key area of this research the theory is further complemented by Gentile et al. They question different dimensions of value and the main contribution from this theory is the experiential components. Consequently, the key theories will serve as tools when analyzing the innovative products and services of each mini case.

The concepts presented by Gottfredson and Aspinall and Rust et al. allow for parallels between the transforming telecom industry and how the customer is affected by this complexity. The main contribution is that they question this development. Are multiple options positive for customers? Is there a risk of offering the customer too many options?

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## - EMPIRICAL MATERIAL -

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*This chapter presents the mini cases constituting the empirical material. All mini cases and their innovative product or service is presented individually in a consistent logic.*

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Each mini case starts with a background of the company at hand. The background consists of history and quick facts. Thereafter the product or service selected as innovative is described. In some mini cases quotes are provided in order to get a better understanding.

### **4.1 BT – British Telecom (UK)**

#### **History**

BT (British Telecom) was established in 1846 as The Electric Telegraph Company. It was the first company outside the USA to take advantage of the telegraph. The business was later included in the Post Office Corporation, which had a monopoly on telecommunications in the UK. However, the Carter Committee Report led to the separation of the telecommunications business into British Telecom in 1980, although still part of the Post Office. In 1984 British Telecom was privatized and shares were gradually sold out by the government.<sup>69</sup> The corporate identity of British Telecom changed in 1991 when changing trading name from British Telecom to BT. In the years to come BT made several strategic decisions. First they announced joint ventures with companies such as MCI Communication Corporation and AT&T. Second, they separated the mobile business and gave it the new brand name mmO2.<sup>70</sup>

#### **Quick facts**

- Market & employees – In the UK BT employs over 430.000 people<sup>71</sup>. Besides the UK, BT is present in 50 countries around the world employing more than 30.000 people<sup>72</sup>.
- Strategic alliances – Accenture, Cisco, HP, Intel, Microsoft and NORTEL.<sup>73</sup>

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<sup>69</sup> <http://www.btplc.com/Thegroup/BTsHistory/History.htm>, Accessed 2007-12-11

<sup>70</sup> Ibid., Accessed 2007-12-11

<sup>71</sup> <http://www.btplc.com/Thegroup/BTRegions/BTregions.htm>, Accessed 2007-12-11

<sup>72</sup> <http://www.btplc.com/Thegroup/BTaroundtheworld/BTaroundtheworld.htm>, Accessed 2007-12-11



- Organizational structure – BT Wholesale, Openreach, BT Retail and BT Global Services.<sup>74</sup>
- Product and service categories – Home phone services, Broadband & internet, Mobile, Entertainment, Security, BT Shop and BT Credit Card.<sup>75</sup>

#### 4.1.1 BT Fon

Today many people have access to the internet via broadband. Though, BT has started to cooperate with the company Fon to provide access anywhere and anytime. Together they developed a Wi-Fi internet community for hundreds of thousands of users. By becoming a member customers can get broadband access in the UK and around the world.<sup>76</sup>



How does it work? A requirement to join and use the service is to be an existing BT Broadband customer. Members can then share a proportion of the bandwidth in the wireless hub/router of his or her home to other members within the community, whom are in range of the wireless transmission. Sharing with others should not affect the connection notably.<sup>77</sup> How can sharing be beneficial? In return from sharing with others, customers get access to BT's broadband in the UK and around the world. Any location in the world where another member of BT Fon has a connection is a potential place to get internet access.<sup>78</sup>

As previously mentioned, BT Broadband customers can get access by becoming members. In addition, access can be achieved via a wireless hotspot provided by BT Openzone or customers of Fon. The maximum speed is limited to 512 kbps. In the future customers of other internet service providers will be able to get access to the Wi-Fi community.<sup>79</sup> BT Fon is free for the BT customers who join the community. Revenues come from BT Broadband products and services which is a pre-requirement to be able to use BT Fon.<sup>80</sup>

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<sup>73</sup> <http://www.btplc.com/Thegroup/Strategicpartnerships/Strategicpartnerships.htm>, Accessed 2007-12-11

<sup>74</sup> <http://www.btplc.com/Thegroup/Companyprofile/Companyprofile.htm>, Accessed 2007-12-11

<sup>75</sup> [http://www.productsandservices.bt.com/consumerProducts/displayPnSHub.do?common\\_selectedPrimaryNavIndex=2](http://www.productsandservices.bt.com/consumerProducts/displayPnSHub.do?common_selectedPrimaryNavIndex=2), Accessed 2007-12-12

<sup>76</sup> <http://www.beta.bt.com/apps/openwifi/secure/whatsBTFon.do>, Accessed 2007-12-12

<sup>77</sup> <http://www.beta.bt.com/apps/openwifi/secure/faqs.do>, Accessed 2007-12-12

<sup>78</sup> Ibid., Accessed 2007-12-12

<sup>79</sup> Ibid., Accessed 2007-12-12

<sup>80</sup> <https://www.beta.bt.com/apps/openwifi/>, Accessed 2007-12-26

Larry Dignan at ZDNet comments BT Fon:

*“By combining FON’s hotspots with BT’s WiFi coverage, which is usually found at a McDonald’s or airport, you get to something I’m really sold on. A lot of network hopping.”<sup>81</sup>*

#### 4.1.2 BT Credit Card

This service is based on a normal credit card tied to VISA. Though it is different from other typical credit cards due to its direct linkage with BT’s billing system. The service enables a direct discount service lowering the BT bill in the very moment the card is used. Hence, the more the BT Credit Card is used, the more discount is given.<sup>82</sup> For example, if £200 is spent, £3 can be saved per quarter and if £500 is spent £11.25 will be saved. The potential discount from the bill is limited to £75 per 12 month period.<sup>83</sup> BT Credit Card has similar terms and conditions to other credit cards and no annual fee.<sup>84</sup>



The BT Credit Card service was brought to BT customers through partnering with MBNA Europe (Bank of America)<sup>85</sup>. MBNA was not the only company to take part in the development of the service, consultancy expertise was brought in externally by Diametric<sup>86</sup>. Karen Darby from SimplySwitch.com gives her thoughts about BT Credit Card:

*“This is an innovative move by BT and takes the 'bundling' of services to a whole new level. 'It is quite rare to find any reward scheme operating on a card with 0% balance transfers. This is a strong indication that BT's pushing the boat out to retain its existing customers. 'One of its best features is that if more than one BT credit card holder lives at the same address, they can all earn a discount off their shared bill.”<sup>87</sup>*

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<sup>81</sup> <http://blogs.zdnet.com/BTL/?p=6517>, Accessed 2007-12-11

<sup>82</sup> <http://www.productsandservices.bt.com/consumerProducts/displayCategory.do?categoryId=CON-BT-CCARD-I>, Accessed 2007-12-13

<sup>83</sup> <http://www.productsandservices.bt.com/consumerProducts/displayTopic.do?topicId=16849>, Accessed

<sup>84</sup> <http://www.mbna.com/europe/creditcards/othercards.html>, Accessed 2007-12-26

<sup>85</sup> [http://www.lightreading.com/blog.asp?blog\\_sectionid=384&doc\\_id=127601](http://www.lightreading.com/blog.asp?blog_sectionid=384&doc_id=127601), Accessed 2007-12-12

<sup>86</sup> <http://www.diametric.biz/news/2007>, Accessed 2007-12-12

<sup>87</sup> [http://www.thisismoney.co.uk/credit-and-loans/article.html?in\\_article\\_id=421740&in\\_page\\_id=9](http://www.thisismoney.co.uk/credit-and-loans/article.html?in_article_id=421740&in_page_id=9), Accessed 2007-12-12

### 4.1.3 BT Vision

BT Vision is a digital TV service that is available for BT broadband customers. The functionality is divided in three categories: Freeview, On Demand and Recordings. Freeview enables access to watch over 70 channels for free, both TV and radio. Examples of free TV channels are BBC News 24 and Sky Sports News. On Demand provides TV programs and films when convenient, at a price ranging from 29p to £2.99. Recordings provide functionality to record TV and radio programs and allow pausing and rewinding when watching live TV.<sup>88</sup>



The content in BT Vision's Freeview is divided into Film and Radio and the On Demand category is divided into Film, TV, Music and Kids. These subcategories all include information of what is to come and the editor's choice to guide the user. Different offerings bundling different subcategory content are provided, for example tailored offerings for sports enthusiasts and kids.<sup>89</sup>

Apart from the previously described categories customers can also play games with the remote control. Three games for 24 hours or a day pass are such examples. The remote control also enables access to phone numbers, residential- as well as business phone numbers. This service is free and is called The Phone Book.<sup>90</sup> Additional functionality is provided in what is called Know How. This is educational and informative programs covering fields such as beauty, health and car maintenance.<sup>91</sup>

The products and services of BT Vision have been developed in cooperation with Microsoft and Philips. The service was built upon iptv technologies from Microsoft TV. The hardware, i.e. the set-top box was developed by Philips.<sup>92</sup>

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<sup>88</sup> [http://www.btvision.bt.com/vision/whats\\_btv/howitworks.htm](http://www.btvision.bt.com/vision/whats_btv/howitworks.htm), Accessed 2007-12-13

<sup>89</sup> [http://www.btvision.bt.com/vision/whats\\_on\\_btv/entertainment.htm](http://www.btvision.bt.com/vision/whats_on_btv/entertainment.htm), Accessed 2007-12-13

<sup>90</sup> [http://www.btvision.bt.com/vision/whats\\_on\\_btv/interactive.htm](http://www.btvision.bt.com/vision/whats_on_btv/interactive.htm), Accessed 2007-12-13

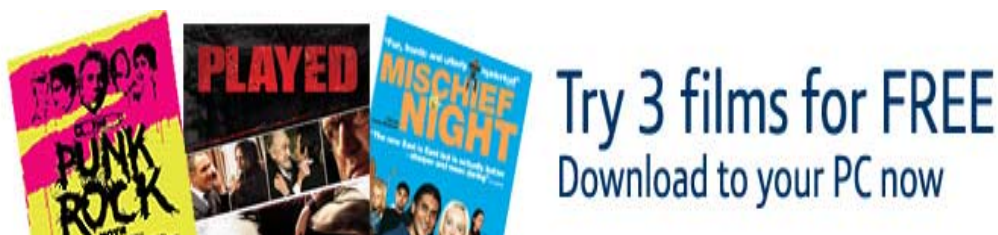
<sup>91</sup> [http://www.btvision.bt.com/vision/whats\\_on\\_btv/knowhow.htm](http://www.btvision.bt.com/vision/whats_on_btv/knowhow.htm), Accessed 2007-12-13

<sup>92</sup> <http://www.microsoft.com/tv/content/Press/PressReleases/BTUKLaunch.aspx>, Accessed 2007-12-13

An analyst from Jupiter Research gives his thoughts of BT Vision:

*"I'm more impressed than I thought I'd be," said Nate Elliott, senior analyst at Jupiter Research. Mr Elliott said BT Vision had a "great" line up of content for film fans and children and the deal to offer live Premiership matches should satisfy many sports enthusiasts."*<sup>93</sup>

The previously described On Demand service allows customers to download films and programs from the BT Download Store.<sup>94</sup> In the end of November 2007 BT launched a three month trial offering to existing customers of the Download Store. The offering contained three free films that could be downloaded to the PC and used for a month; Mischief Night, Played and The Punk Rock Movie. Customers are required to install a software application and anonymously fill in their personal information so that ads can be matched to their profile. Each time a film is viewed different ads will appear. The offering was developed by BT in cooperation with Intel Corporation, Fremantle Media Enterprises and Hiro Media.<sup>95</sup>



## 4.2 Globe Telecom (Philippines)

### History

Globe Telecom has its roots in an American company, Robert Dollar Company, which started its operations in the Philippines in 1929 and was incorporated as Globe Wireless in 1934. In 1956 Globe Wireless merged with Mackay Radio forming GMCR (Globe Mackay Cable and Radio Corporation).<sup>96</sup> In 1991 Islacom (Isla Communications Co. Inc) became controlled as a partly owned company by GMCR. By the year 2001 the company became a fully owned subsidiary of Globe telecom, which had changed its name from GMCR to Globe Telecom (Globe) three years earlier.<sup>97</sup> Ayala Corporation controls Globe in a strategic partnership with SingTel of Singapore. Ayala is currently the largest conglomerate in the Philippines.<sup>98</sup>

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<sup>93</sup> <http://news.bbc.co.uk/2/hi/technology/6213960.stm>, Accessed 2007-12-12

<sup>94</sup> [http://www.btvision.bt.com/vision/whats\\_on\\_btv/downloadtopc.htm](http://www.btvision.bt.com/vision/whats_on_btv/downloadtopc.htm), Accessed 2007-12-13

<sup>95</sup> [http://www.lightreading.com/document.asp?doc\\_id=140622](http://www.lightreading.com/document.asp?doc_id=140622), Accessed 2007-12-13

<sup>96</sup> <http://www.angelfire.com/pq/telecommunications>, Accessed 2007-12-23

<sup>97</sup> [http://en.wikipedia.org/wiki/Globe\\_Telecom](http://en.wikipedia.org/wiki/Globe_Telecom), Accessed 2007-12-23

<sup>98</sup> <http://www.totel.com.au/philippines-telecommunications-research.asp?toc=2058&cid=PH>, Accessed 2007-12-23

## Quick facts

- Market & employees – The Philippines is the main market and the Globe group employs approximately 5200 people.<sup>99</sup>
- Strategic alliance – SingTel Singapore.<sup>100</sup>
- Organizational structure – Globe is organized around key customer groups like mass markets, youth, overseas Filipinos, frequent travelers and professionals.<sup>101</sup>
- Product and service categories – Mobile, Landline and Broadband.<sup>102</sup>

### 4.2.1 G-cash

The G-cash service allows customers to make payments and transfers (send and receive) money by sending a text message. The service enables mobile banking whilst it turns the mobile into an electronic wallet. The service is available for Globe and Touch Mobile (trademark within Globe) customers.<sup>103</sup> The payment functionality of G-cash offers bill payments, online purchasing, donations and so forth. All functions and services can be used by sending different text messages.<sup>104</sup> The text messages sent via G-cash are protected by a user password (M-PIN) that is masked and no text messages are stored in the phone.<sup>105</sup>



Online purchasing enables shopping online and paying with the G-cash service. The service is combined with KABAN, a company providing internet payment solutions. When buying an item online the mobile number is entered and a text message will be received with the purchase details. If the information is correct a confirmation is to be sent and followed by a message of a successful transaction. If the payment information is not confirmed, the transaction will automatically be cancelled after five minutes.<sup>106</sup>

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<sup>99</sup> [http://www1.globe.com.ph/uploads/Globe\\_2006\\_SEC17A.pdf](http://www1.globe.com.ph/uploads/Globe_2006_SEC17A.pdf), Accessed 2007-12-23, p 30

<sup>100</sup> <http://www.totel.com.au/philippines-telecommunications-research.asp?toc=2058&cid=PH>, Accessed 2007-12-23

<sup>101</sup> [http://www1.globe.com.ph/uploads/Globe\\_ARandFS.pdf](http://www1.globe.com.ph/uploads/Globe_ARandFS.pdf), Accessed 2007-12-23, p 11

<sup>102</sup> <http://www1.globe.com.ph/contentrn.aspx?sid=1>, Accessed 2007-12-23

<sup>103</sup> <http://www1.globe.com.ph/contentrn.aspx?sid=1&artid=37>, Accessed 2007-12-23

<sup>104</sup> <http://www.nextbillion.net/remittances-mobile-globe-cash>, Accessed 2007-12-23

<sup>105</sup> <http://www.mobilephonebanking.rbap.org/article/articleview/54/1/16>, Accessed 2008-01-07

<sup>106</sup> <http://www.kaban.com.ph/gcashfaqs.html>, Accessed 2007-12-23

To reload the G-cash account with money customers have to visit a Globe business centre or an authorized G-cash partner. Globe receives their revenues of this service from transaction fees dependent on the size of the transferred amount. Transactions below Php 1000 will cost Php 10.00 and transactions above Php 1000 will cost 1 % of the amount in the transaction.<sup>107</sup> There is a limit of Php 10000 as of how much G-cash can be held in the mobile and transaction limits are set to Php 10000. A further restriction is a maximum transfer of Php 40000 per day and subscriber.<sup>108</sup> The G-cash service is used by 1.3 million customers and Globe handles approximately \$100 million in transactions per day.<sup>109</sup> G-cash was developed by G-XChange Inc (GXI) a subsidiary of Globe Telecom.<sup>110</sup> Another service tied to G-cash is G-pass, which enables payment for the metro using a card with RFID technology. The card can be loaded by transferring money from the G-cash account. The G-pass service is brought to Globe customers in partnership with Hypercash.<sup>111</sup>

### **4.3 Orange (UK/France)**

#### **History**

As part of the France Telecom Group, the Orange brand was launched in 1994 in the United Kingdom, within mobile communications. By 1996 Orange plc was listed on the stock exchange in London as well as on the American NASDAQ market.<sup>112</sup> In 1997 Orange had over 1 million customers and was expanding into markets such as Switzerland and Belgium in the years to come. The Orange brand was previously used for mobiles only but has now extended to also include internet and business operations. Today Orange has 17 million customers in the UK; 2 million internet customers and 15 million mobile customers.<sup>113</sup>

#### **Quick facts**

Facts about France Telecom in which the Orange brand is included.

- Market & employees – Major markets: France, UK, Spain and Poland. Over 191.000 employees.<sup>114</sup>
- Partnerships – Some examples include Ericsson, Siemens, Alcatel, Nortel, Motorola, Thomson, CEA, Nokia, Intel, Objectweb and Fujitsu.<sup>115</sup>

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<sup>107</sup> <http://www.nextbillion.net/remittances-mobile-globe-cash>, Accessed, 2007-12-23

<sup>108</sup> <http://www.yugatech.com/ringtones/globe-telecoms/what-is-globe-g-cash/>, Accessed 2007-12-23

<sup>109</sup> [http://www.fastcompany.com/magazine/113/open\\_5-globetelecom.html](http://www.fastcompany.com/magazine/113/open_5-globetelecom.html), Accessed 2007-12-23

<sup>110</sup> <http://www.bwtp.org/asiamicrofinance/documents/JohnOwensRBAP.pdf>, Accessed 2007-12-23, p 2

<sup>111</sup> [http://www1.globe.com.ph/uploads/Globe\\_ARandFS.pdf](http://www1.globe.com.ph/uploads/Globe_ARandFS.pdf), Accessed 2007-12-23, p 7

<sup>112</sup> <http://pressoffice.orange.co.uk/content/detail.asp?NewsAreaID=26&ReleaseID=643>, Accessed 2007-12-14

<sup>113</sup> Ibid., Accessed 2007-12-14

<sup>114</sup> [http://www.francetelecom.com/sirius/RA2006/intro\\_uk/ftira\\_uk.htm](http://www.francetelecom.com/sirius/RA2006/intro_uk/ftira_uk.htm), Accessed 2007-12-14

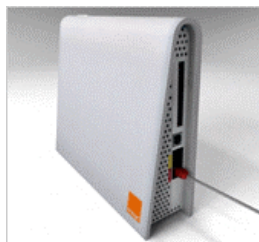
<sup>115</sup> <http://www.francetelecom.com/en/group/rd/activities/partenariat/industriel/index.html>, Accessed 2007-12-14

- Organizational structure – Personal, Home and- Enterprise communication services.<sup>116</sup>
- Product and service categories – Mobile phones and plans, SIM only, Broadband & home phone, Dial-up and Accessories- and Downloads shop.<sup>117</sup>

### 4.3.1 Livebox

Livebox is a combined service that enables usage of wireless broadband, making telephone calls and use online gaming from one gateway. The wireless broadband offers functionality to connect a maximum of six computers wirelessly to a home network and to the internet. In the future, functionality to connect a printer to Livebox and print from any computer connected to the network will be available. Telecommunication is the second category of functionality and it provides free calls to UK landlines, free international landline calls to 30 destinations and free calls to mobiles operated by Orange. Though, the functionality is only provided given that customers call via Livebox. Online gaming makes it possible to connect PlayStation 2, Xbox and Xbox 360 to Livebox and play games online. Livebox can also be accessed wirelessly through PlayStation 2 and Xbox 360.<sup>118</sup>

In the future Livebox will provide additional functionalities in the UK market and be updated automatically. Examples of new services are Live Music and Livezoom. HiFi Live Music will give the possibility to listen to stored music on the computer. Livezoom is a service that connects a Wi-Fi enabled camera to Livebox making it possible for customers to watch their home when away. The camera can be accessed using both mobile phones and computers.<sup>119</sup>



In the French market, Orange supplies additional services for Livebox, such as digital TV, liveradio, live tele surveillance and liveplug.<sup>120</sup> Digital TV offers almost 200 channels, the possibility to make digital recordings and on demand movies and programs 24/7.<sup>121</sup>

<sup>116</sup> [http://www.francetelecom.com/sirius/RA2006/intro\\_uk/ftra\\_uk.htm](http://www.francetelecom.com/sirius/RA2006/intro_uk/ftra_uk.htm), Accessed 2007-12-14

<sup>117</sup> <http://shop.orange.co.uk/shop/index?WT.hplink=CHh>, Accessed 2007-12-14

<sup>118</sup> <http://www.orange.co.uk/time/livebox/>, Accessed 2007-12-15

<sup>119</sup> <http://www.orange.co.uk/time/livebox/updates.htm>, Accessed 2007-12-15

<sup>120</sup> <http://www.orange.fr/bin/frame.cgi?u=http%3A//abonnez-vous.orange.fr/residentiel/livebox/HautDebit.aspx>, Accessed 2007-12-15

<sup>121</sup> [http://www.francetelecom.com/en/financials/journalists/backgrounders/att00038884/Orange\\_and\\_TV.pdf](http://www.francetelecom.com/en/financials/journalists/backgrounders/att00038884/Orange_and_TV.pdf), Accessed 2007-12-15

Liveradio allows customers to listen to radio wirelessly. Live tele surveillance is a service aimed to protect the home of customers in cooperation with security companies. It informs when an emergency has encountered.<sup>122</sup> Finally, liveplug takes away the need to use cables between the set-top box (digital TV) and Livebox, connecting the boxes via Wi-Fi.<sup>123</sup>

Livebox can be bought in two different bundles. A third bundle is also offered but without Livebox functionality, i.e. a normal wireless broadband modem. The bundles are called Home Starter, Home Select and Home Max. *Home Starter* has a wireless modem for broadband access, UK landline calls in the evenings and weekends and services for e-mail and PC security. *Home Select* contains Livebox, in addition to Home Starter it also has faster broadband speed, unlimited usage and a second line for internet calling. *Home Max* has all the functionality of Home Select and the UK landline calls in evenings and weekends available in the Home Starter. Additionally, the rental of the telephone line is included in Home Max.<sup>124</sup>

Orange revenues come from the monthly fees charged for the different bundles.<sup>125</sup> In France products such as the liveplug is charged as a one time fixed price and services such as live tele surveillance is being charged as a monthly fixed price.<sup>126</sup>

A program called Livebox labs exists with the aim of developing further products and services for Livebox. It is a cooperation with the entrepreneur club of France Telecommunications. The purpose of the program is to evaluate ideas from partners and members of Livebox labs with the aim of developing new products and services for Livebox.<sup>127</sup> Examples of companies tied to the program are Thomson and Sagem, both producing two different versions of Livebox.<sup>128</sup> Microsoft is another company involved in the development of Livebox.<sup>129</sup>

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<sup>122</sup> <http://www.orange.fr/bin/frame.cgi?u=http%3A//abonnez-vous.orange.fr/residentiel/livebox/HautDebit.aspx>, Accessed 2007-12-15

<sup>123</sup> [http://www.francetelecom.com/en/financials/journalists/backgrounders/att00038884/Orange\\_and\\_TV.pdf](http://www.francetelecom.com/en/financials/journalists/backgrounders/att00038884/Orange_and_TV.pdf), Accessed 2007-12-15

<sup>124</sup> <http://www.orange.co.uk/time/compareall.htm>, Accessed 2007-12-15

<sup>125</sup> <http://www.broadband-finder.co.uk/broadband-directory/orange-broadband/>, Accessed 2007-12-26

<sup>126</sup> <http://www.orange.fr/bin/frame.cgi?u=http%3A//abonnez-vous.orange.fr/default.aspx%3Fid%3D6773>, Accessed 2007-12-26

<sup>127</sup> <http://www.liveboxlab.com/html/modules/wiwimod/index.php?page=le+livebox+lab+c+est+quoi>, Accessed 2007-12-15

<sup>128</sup> [http://www.liveboxlab.com/html/modules/wiwimod/index.php?page=rt\\_livebox&back=info+livebox#a1](http://www.liveboxlab.com/html/modules/wiwimod/index.php?page=rt_livebox&back=info+livebox#a1), Accessed 2007-12-15

<sup>129</sup> <http://download.microsoft.com/download/7/7/5/775cb839-a749-49a7-b735-edaf05ca1501/spcsfforrester.pdf>, Accessed 2007-12-26, p 3



Parks Associates about Livebox:

*“It is offering an innovative residential gateway called the Livebox (now in more than three million households), which can provide an a la carte package of entertainment and communication services including digital TV, VoIP telephony with FMC features (fixed-mobile convergence), electronic surveillance, wireless photo transfer, and Internet music services.”<sup>130</sup>*

## 4.4 PCCW (Hong Kong)

### History

PCCW has its roots in the Hong Kong branch of Cable and Wireless founded in 1934.<sup>131</sup> In 1988 Hong Kong Telecom (HKT) was formed as a result of the merger between Hong Kong Telephone Company and Cable and Wireless. The new company was listed on the New York and Hong Kong stock exchanges.<sup>132</sup> HKT was renamed to Cable & Wireless HKT in 1999 and in the same year Pacific Century Group acquired control over Tricom Holdings, a Hong Kong listed company. The new constellation became Pacific Century CyberWorks (PCCW). The following year Cable & Wireless HKT was bought by PCCW through a merger.<sup>133</sup>

### Quick facts

- Market & employees – The markets consist of Hong Kong, Asia, Greater China, North America and Europe and the company has approximately 15.400 employees.<sup>134</sup>
- Strategic alliance – China Netcom Group.<sup>135</sup>
- Organizational structure – The business areas are TV & Content, Telecommunications Services (TSS), Mobile, PCCW Solutions and Pacific Century Premium Developments Limited (PCPD).<sup>136</sup>
- Product and service categories – Broadband Internet & TV Services, Residential Telephone Services, International Telephone Services, Mobile Services, Shopping with PCCW, Connect Zone (Wi-Fi) and No. 1 Club (Member Club).<sup>137</sup>

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<sup>130</sup> <http://www.homeelectronics.jp/whitepaper/534.pdf>, Accessed 2007-12-15

<sup>131</sup> [http://en.wikipedia.org/wiki/Cable\\_&\\_Wireless](http://en.wikipedia.org/wiki/Cable_&_Wireless), Accessed 2008-01-08

<sup>132</sup> <http://www.pccw.com/eng/AboutUs/CompanyProfile/Milestones.html>, Accessed 2007-12-22

<sup>133</sup> Ibid., Accessed 2007-12-22

<sup>134</sup> <http://www.pccw.com/eng/AboutUs/CompanyProfile/FastFacts.html>, Accessed 2007-12-22

<sup>135</sup> <http://www.pccw.com/NASApp/cs/ContentServer?pagename=PCCW/COMMON/newspopup&pageid=1106040774944&pagelang=eng>, Accessed 2007-12-22

<sup>136</sup> [http://www.pccw.com/NASApp/cs/BlobServer/20070418\\_annual\\_eng.pdf?blobtable=FinancialUpload&blobcol=urlfile&blobkey=id&blobwhere=1176712783392&blobheader=application/octet-stream&wtsection=investors](http://www.pccw.com/NASApp/cs/BlobServer/20070418_annual_eng.pdf?blobtable=FinancialUpload&blobcol=urlfile&blobkey=id&blobwhere=1176712783392&blobheader=application/octet-stream&wtsection=investors), Accessed 2007-12-22

<sup>137</sup> <http://www.pccw.com/eng/Products/ForYourHome.html>, Accessed 2007-12-22

#### 4.4.1 Snaap!

snaap! is a service that combines multiple platforms to form a cross functional multimedia album.<sup>138</sup> It enables sharing and viewing video clips and pictures through a mobile phone, fixed line terminal, computer or through a designated channel on the TV. If uploading pictures and/or video clips to a central archive, using either a mobile or a computer with internet access, customers can watch and share the content from any of the four devices.<sup>139</sup>



Access to the service is possible by using a snaap! account or mobile number.<sup>140</sup> After signing up for snaap!, customers will be asked to activate the service for access on the TV and WAP platform access via the mobile phone. Phones that are compatible to use with the snaap! platform are Nokia phones (N60, N70, N80 and N91) and any phones with models built upon the Symbian OS with version 6.03.<sup>141</sup>

A first step is to upload pictures or video clips to the central archive. When that is accomplished customers are able to share the content with friends. To do so the friend must be invited and his or her mobile number and e-mail must be registered. The invited person will receive a text message, informing that they now have access to a new album of photos and/or video clips. Sharing can be with friends or to everyone, making it a public album.<sup>142</sup> In August 2007 a Premier League football competition was held. The task was to make creative albums by “snaaping” favorite teams and players wherever they were spotted. The most creative album was awarded a trip to England to watch a live Premier League game.<sup>143</sup>

A requirement to use snaap! is to be an existing PCCW customer using two of their services. The snaap! service has two options; one free- and one upgraded version. The free version

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<sup>138</sup> <http://snaap.netvigator.com/main.html>, Accessed 2007-12-22

<sup>139</sup> [http://www.pccw.com/NASApp/cs/BlobServer/20070418\\_annual\\_eng.pdf?blobtable=FinancialUpload&blobcol=urlfile&blobkey=id&blobwhere=1176712783392&blobheader=application/octet-stream&wtsection=investors](http://www.pccw.com/NASApp/cs/BlobServer/20070418_annual_eng.pdf?blobtable=FinancialUpload&blobcol=urlfile&blobkey=id&blobwhere=1176712783392&blobheader=application/octet-stream&wtsection=investors), Accessed 2007-12-22

<sup>140</sup> [http://snaap.netvigator.com/snaap2.0/landing\\_popup.html](http://snaap.netvigator.com/snaap2.0/landing_popup.html), Accessed 2007-12-22

<sup>141</sup> <http://snaap.netvigator.com/main.html>, Accessed 2007-12-22

<sup>142</sup> Ibid., Accessed 2007-12-22

<sup>143</sup> [http://snaap.netvigator.com/html/event2/Eng/landing/event\\_eng2.html](http://snaap.netvigator.com/html/event2/Eng/landing/event_eng2.html), Accessed 2007-12-22

enables customers to store pictures and/or video clips at a maximum of 100 MB. The upgraded version enables storage space of 5GB and 20 free photo prints each month. The price for the upgraded version is 38 HK\$ per month.<sup>144</sup> Thus, revenues for PCCW originate from sales of the upgraded version and fees from services that are prerequisites to use snaap!

The snaap! service is brought to customers by PCCW IMS Limited, a subsidiary of PCCW Limited<sup>145</sup>. The software used on the PC/Mac and in the mobile was created by Zensis.<sup>146</sup> This is a company based in Hong Kong that specializes in software and technology development in the area of digital imaging.<sup>147</sup>

## **4.5 Ringgold Telephone Company (USA)**

### **History**

Ringgold Telephone Company (Ringgold) was established in 1912 by Jim Evitt Sr., a pharmacist working at the local drug store. The business started with eight telephones and was in 1950 the first independent company to replace manual telephones. In the 1970's the company expanded, taking a new approach when providing one-party customer service.<sup>148</sup> In 2000 Ringgold was the first company in the state of Georgia to offer its customers DSL internet access. The year after, 2001, Ringgold launched an interactive digital video service called NexTv. By this time only six companies in the world had launched a similar service.<sup>149</sup>

### **Quick facts**

- Market & employees – Georgia (USA) is the main market and the company has approximately 100 employees.<sup>150</sup>
- Product and service categories – Internet, Voice, NexTv and Solutions.<sup>151</sup>

### **4.5.1 Customer Care & Local Commitment**

The key competence of Ringgold is the customer care that permeates the company. Call centers are open 24/7 and delivers a high quality to its customers, when contacting the call centre Ringgold customers can expect response in a matter of seconds.<sup>152</sup>

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<sup>144</sup> <http://snaap.netvigator.com/main.html>, Accessed 2007-12-22

<sup>145</sup> <http://www.google.com/search?hl=en&q=%22through+subsidiary+PCCW+IMS%22>, Accessed 2007-12-22

<sup>146</sup> <http://www.zensis.com/news.html>, Accessed 2007-12-22

<sup>147</sup> <http://www.zensis.com/zensisoverview.html>, Accessed 2007-12-22

<sup>148</sup> <http://www.rtctel.com/staticpages/index.php?page=History>, Accessed 2007-12-20

<sup>149</sup> <http://www.rtctel.com/staticpages/index.php?page=History2>, Accessed 2007-12-20

<sup>150</sup> Wilson, Carol, (2006), "The most innovative telco in America?", *Telephony*, May 2006, pp 23-24

<sup>151</sup> <http://www.rtctel.com>, Accessed 2007-12-20

<sup>152</sup> Wilson, Carol, (2006), "The most innovative telco in America?", *Telephony*, May 2006, p 26

Examples of customer feedback published on the company's website. December 4<sup>th</sup> 2007:

*"It seems that the "Legendary Customer Service" is alive and well at RTC. On behalf of my mother and my immediate family, I want to offer the most sincere gratitude to your company, and most notably Dawn Kafka and Bradley Chambers. [...] This is "tire meets the road" Customer Service, and is very rare these days in any industry. RTC has set the standard for Customer Service that is untouchable by anyone else, anywhere. My Mother thanks you, and I thank you! Way to go guys!!"<sup>153</sup>*

December 4<sup>th</sup> 2007:

*"After I signed up for DSL, I had a couple of minor issues. I called Becky Smith and also Will Foster, and they both were very helpful. Will was so patient and kind in helping me resolve the issues. Becky was not only helpful, but sympathetic. She even called me the next day to make sure that the issues had been resolved and that I had received the help I had requested."<sup>154</sup>*



Ringgold's local profile underpin the local commitment, the company also run their own website for local information and produce local content for NexTv 2. Local content accessible on NexTv 2 covers programs like Catoosa County Commission Meetings, Catoosa in Focus, Ringgold City Council Meetings, Kookin with Kimberly, Getting Fit with Anita Knight and Restorative Yoga with Lori Bilbrey.<sup>155</sup> Local programs (NexTv 2) is a free service. Revenues originate from subscriptions for NexTv.<sup>156</sup>

In addition, most products and services are produced locally by Ringgold. Though, suppliers such as CopperCom provide soft switches.<sup>157</sup> Ringgold's local commitment also includes sponsorships of charities and events. Such examples are the Boynton Recreation Department,

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<sup>153</sup> <http://www.rtctel.com/testimonials.php?page=2>, Accessed 2007-12-20

<sup>154</sup> <http://www.rtctel.com/testimonials.php>, Accessed 2007-12-20

<sup>155</sup> <http://www.rtctel.com/staticpages/index.php/nextv2>, Accessed 2007-12-20

<sup>156</sup> <http://www.rtctel.com/staticpages/index.php/nextv-packages>, Accessed 2007-12-20

<sup>157</sup> Wilson, Carol, (2006), "The most innovative telco in America?", *Telephony*, May 2006, pp22-26

Catoosa County Children's Fund and Catoosa County Schools.<sup>158</sup> The Evitt Foundation sometimes sponsors these events, a foundation in memory of the company's founder.<sup>159</sup> Ringgold revenues originate from their products and services. The customer care call centre that is open 24/7 is included in the sold products and services.<sup>160</sup>

## 4.6 SingTel (Singapore)

### History

The roots of SingTel lie in the adoption of telephone services in Singapore 1879. British interests controlled the telephone services until the 1950's, thereafter exclusive rights to operate telephone services in Singapore were granted the Singapore Telephone Board. In 1988 SingTel began its international expansion by setting up a subsidiary, Singapore Telecom International. A couple of years later, 1993, the company went public in an IPO.<sup>161</sup> The market was liberalized in the year of 2000.<sup>162</sup> Today the SingTel group has significant investments in other telecom companies, for example in India, Philippines, and Pakistan. In India the investment is in Bharti Telecom Group and in the Philippines in Globe Telecom.<sup>163</sup>

### Quick facts

- Market & employees – SingTel operates in 20 countries with Singapore and Australia as their main markets. The company employs 19000 people.<sup>164</sup>
- Strategic alliances – Bharti (India), Globe Telecom (Philippines), Ais (Thailand), PBTL (Bangladesh) and Telkomsel (Indonesia).<sup>165</sup>
- Organizational structure – Major subsidiaries and joint ventures/major associates. Both groups are divided in the subgroups of Singapore and overseas.<sup>166</sup>
- Product and service categories – IDEAS (video on demand etc), International Calls, Telecommunications & Paging, Internet and Mobile.<sup>167</sup>

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<sup>158</sup> <http://www.rtctel.com/staticpages/index.php?page=Community>, Accessed 2007-12-20

<sup>159</sup> <http://www.rtctel.com/staticpages/index.php?page=EvittFoundation>, Accessed 2007-12-20

<sup>160</sup> <http://www.rtctel.com/staticpages/index.php?page=Contact>, Accessed 2007-12-20

<sup>161</sup> [http://home.singtel.com/about\\_singtel/company\\_profile/milestones/companypro\\_milestones.asp](http://home.singtel.com/about_singtel/company_profile/milestones/companypro_milestones.asp), Accessed 2007-12-23

<sup>162</sup> Ibid., Accessed 2007-12-23

<sup>163</sup> [http://home.singtel.com/about\\_singtel/company\\_profile/default.asp](http://home.singtel.com/about_singtel/company_profile/default.asp), Accessed 2007-12-23

<sup>164</sup> Ibid., Accessed 2007-12-23

<sup>165</sup> [http://home.singtel.com/about\\_singtel/company\\_profile/vision\\_n\\_mission/companypro\\_visionmission.asp](http://home.singtel.com/about_singtel/company_profile/vision_n_mission/companypro_visionmission.asp), Accessed 2007-12-23

<sup>166</sup> [http://home.singtel.com/about\\_singtel/board\\_n\\_management/organisation\\_structure/boardmgmt\\_orgstructure.asp](http://home.singtel.com/about_singtel/board_n_management/organisation_structure/boardmgmt_orgstructure.asp), Accessed 2007-12-23

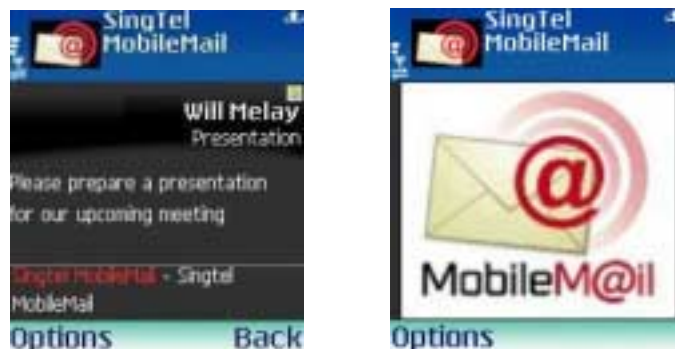
<sup>167</sup> [http://home.singtel.com/consumer/consumer\\_default.asp](http://home.singtel.com/consumer/consumer_default.asp), Accessed 2007-12-23

#### 4.6.1 MobileM@il

MobileM@il is a service that is used via the mobile phone in order to access e-mail. Normal e-mail functionality, such as sending and receiving e-mails and attached files are offered. The service enables the customer to use several different e-mail accounts. E-mail services that are available in MobileM@il are SigNet (SingTel), Hotmail Plus, Gmail and Yahoo.<sup>168</sup>

To use the MobileM@il service a text message is sent to receive instructions on how to proceed. E-mail account information must be provided and the terms must be accepted, thereafter software is downloaded and installed in the mobile phone. MobileM@il comes at no registration fee, no monthly charge and no data traffic charge. The revenues originate from ads. Customers must accept ads in the e-mail to be able to use the service. The only fee that will be charged is when managing account settings- and/or clicking on links.<sup>169</sup>

Ads in the e-mail can come in two different shapes; as a text showed at the bottom or as a full screen picture. The received ads will be placed in a folder called *Advertisement* thereby allowing customers to go back and view the ads later. The pictures below show what the ads can look like; to the left - text at the bottom, to the right - a full screen ad.<sup>170</sup>



The software for the MobileM@il service was developed by Consilient, a company specializing in software for multimedia, advertising and e-mail in mobile phones. The software called Push is equipped with capability for running ads in the e-mail. The service is free for SingTel's customers and initiates a new channel for the company's advertising partners when trying to reach customers and create value.<sup>171</sup>

<sup>168</sup> [http://www.ideas.singtel.com/messaging/m\\_e-mail\\_messaging/findmore.jsp](http://www.ideas.singtel.com/messaging/m_e-mail_messaging/findmore.jsp), Accessed 2007-12-23

<sup>169</sup> Ibid., Accessed 2007-12-23

<sup>170</sup> [http://www.ideas.singtel.com/messaging/m\\_e-mail\\_messaging/SingTel%20MobileM@il%20Client%20-%20User%20Guide\\_2517.3-34\\_12Sep.pdf](http://www.ideas.singtel.com/messaging/m_e-mail_messaging/SingTel%20MobileM@il%20Client%20-%20User%20Guide_2517.3-34_12Sep.pdf), Accessed 2007-12-23, pp 41-42

<sup>171</sup> <http://www.consilient.com/media/press/singtel-free-mobile-e-mail.php>, Accessed 2007-12-23

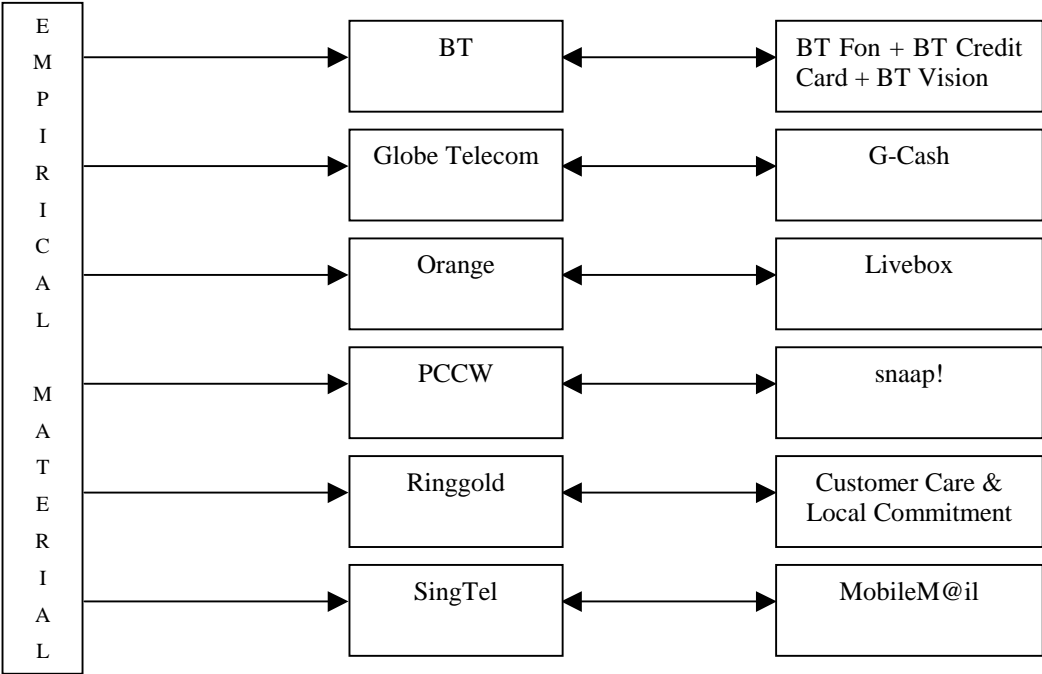
Below are some quotes to highlight some different aspects of the MobileM@il service. A Senior Marketing Manager at KFC Singapore says:

*“KFC is both excited and honoured to partake in this cutting-edge technology pioneered by SingTel Mobile. This is an exciting new medium that we believe provides us with an innovative way of reaching out to our target audience. Currently, every advertiser is fighting to use the same pool of mediums. We are confident that armed with this new medium, it will allow us to cut through the clutter and communicate more effectively to our target consumers.”*<sup>172</sup>

The head of Sony Ericsson's market unit for Singapore says:

*“Sony Ericsson is very proud to be part of this initiative by SingTel. As a leading player in the industry, Sony Ericsson is constantly exploring creative and impactful channels to reach out to our consumers. We believe this new service will enable us to interact with them and to understand their needs better.”*<sup>173</sup>

**4.7 Illustration of empirical material**



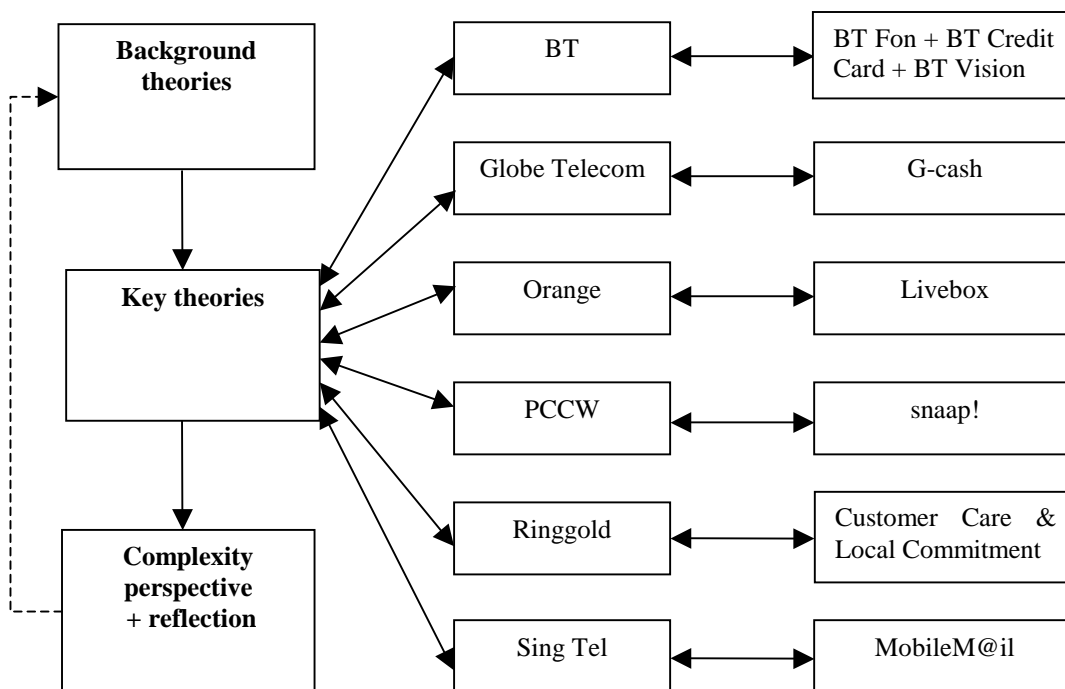
**Figure 4:1 Empirical material**

<sup>172</sup> <http://www.consilient.com/media/press/singtel-free-mobile-e-mail.php>, Accessed 2007-12-23  
<sup>173</sup> Ibid., Accessed 2007-12-23

## - ANALYSIS -

*This chapter aims to analyze the empirical findings by questioning and challenging the empirical material, using the theoretical framework presented previously.*

The background theories are used to discuss and analyze the transformation of the telecom industry, also giving examples from the mini cases. Thereafter, each mini case is analyzed using the key theories. Lastly, the complexity perspective is used to discuss the concept of complexity and tie back to the background theories. Thus, a circular logic is applied.



**Figure 5:1 Overview of the analysis**



## **5.1 Background theories**

### **5.1.1 Value chain evolving**

An aspect that conveys difficulties for innovation within the telecom industry is the complex shifts of value perception, by customers indeed, but also by the CSPs. The traditional approach presented by Porter is questioned as being too sequential and insufficient for today's telecom industry. For example, past price calculations can be obsolete as today's products or services sometimes are free of charge. BT Fon is such an example. Perhaps the value chain was more useful when analyzing monopolies with more stable environments due to independent value creation? BT constitutes such an example having transformed from a monopoly to a market driven company.

Consequently, value chains have often transformed into value webs as a result of the transforming telecom industry. Andrews and Hahn mention customers demanding a higher degree of customization as a reason for such a development. Orange's Livebox is an example of an innovation implemented through a value web approach i.e. a collaboration with partners such as Thomson, Sagem and Microsoft. In addition, Livebox provide customization through different packages containing different services and so forth.

### **5.1.2 Ecosystem**

The ecosystem aims to create value through collaboration and thereby enable the exploitation of synergy effects. Hence, the value creation leveraged by an ecosystem is greater than what a single firm could create alone. The concept further underline the need to focus outside the company as other stakeholders has to be taken into account. In other words, a company has to adjust to the other stakeholders in the ecosystem.

These adjustments are risks associated with being part of an ecosystem. Such a risk is interdependence, which in essence refers to the importance of timing. SingTel and their service MobileM@il is an example exposed to this risk. As their service is dependent on other CSPs such as Yahoo and Google, the importance of co-coordinating activities is crucial. Essentially SingTel must see to that they have accurate timing with the companies providing funding through advertisements, but also in terms of launching new features of the service. Without funding the development of new features are hindered, perhaps leading to a gap between SingTel and other companies involved in MobileM@il. A situation that could lead to risks of missing out on new market trends.

To summarize; the transformation of the telecom industry affects many stakeholders. Perhaps some of the most apparent aspects are the challenges of value creation, altering value chains, and strategic decisions concerning whom to collaborate with and within which areas. Challenges that in extension play a big part determining the experience of the CSP's customers.

## **5.2 Key theories**

When using the key theories to analyze the six mini cases, the same sequential logic have been applied in all mini cases. The initial part is the three spaces of innovation underpinned by Prahalad's and Ramaswamy's illustration; product space, solutions space and experience space (see figure 3:3). According to Prahalad and Ramaswamy:

*“Value will increasingly have to be co-created with consumers, and innovation must be focused on their co-creation experiences.”<sup>174</sup>*

The motivation behind, is the difficulty in competing for value on the basis of product differentiation. Each mini case and its innovative product or service will be analyzed using the concept presented by Prahalad and Ramaswamy. The aim is to find out in which of these three spaces the innovative product or service could be argued to belong.

The last part serves to further enhance the understanding of what customer experience entails. A framework developed by Gentile et al. is used. The concept is consistent of two types of value; utilitarian (functional) and hedonic (experiential). The hedonic (experiential) value is emphasized as it underlies the customer experience. Thus, the innovative product or service of each mini case will be analyzed using the six experiential components. The aim is to find out which of these experiential components that could be argued as applicable to the innovative product or service, and which that could be argued as not applicable.

### **5.2.1 BT**

#### **BT Fon**

Products and services for accessing the internet have been a primary focus within the telecom industry, it started as dial-up connections and then increased speed was introduced, thus bringing broadband to the market. An additional development has been to use broadband

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<sup>174</sup> Prahalad, C.K & Ramaswamy, V., (2003), “The New Frontier of Experience Innovation”, *MIT Sloan Management Review*, Summer 2003,p 13

connections wirelessly via Wi-Fi. According to Prahalad and Ramaswamy this could be seen as traditional product features and the traditional logic for value creation.

BT Fon is a new service for getting Wi-Fi access to the internet. It is different from a traditional Wi-Fi in the home environment as BT's customers share and uses one another's broadband access. Therefore, it could be argued that the customers form a network built around BT and their partner Fon. Each customer that joins BT Fon becomes a part of the network. This means that the more customers that join, the wider the network becomes and also the opportunities to use Wi-Fi.

The value creation of this service takes place when any member decides to connect to the internet at a location where BT Fon is accessible. Prahalad and Ramaswamy emphasizes that the value is created in the interaction between the customer, the context and the stakeholders. In this case BT and Fon are the related stakeholders providing the service, the customer is the person that wants to use the internet, and the context is the place where the person is right now and where another user enables a connection. The interaction that co-creates value will take place between customers. The person trying to access the internet will initiate the value creation. However there is another party involved facilitating the co-creation, the person who's broadband router will be used for accessing the internet. This person can also be seen as a co-creator of value. The person does not need to be at home, or for that matter take an active role in the co-creation service. He or she is a co-creator just by being a member of the BT Fon Wi-Fi community, i.e. a part of the experience network.

Prahalad and Ramaswamy view the experience network as one dimension of value creation whereas the other dimension regards facilitating the value creation. As previously mentioned, traditional Wi-Fi usage could be argued to belong in Prahalad's and Ramaswamy's product space. However, as BT Fon enables internet access via co-creation between customers it could be argued to belong in the solutions space. Though, it is questionable if BT Fon could be argued to belong in the experience space. The reason is that using other customer's broadband connections to access the internet mainly creates value for the frequent user. Thus, it is questionable what the rare user gains. He or she, more or less, only enables internet access for others. Therefore, BT Fon is not argued to belong in the experience space.

Below is an analysis of BT Fon using Gentile et al.'s experiential components:

- Sensorial component – this component is partly applicable to BT Fon as the customer can see whether he or she is connected to the internet.
- Emotional component – this component is not applicable as emotional links are hard to find in BT Fon. It is doubtful if accessing the internet via BT Fon strengthens the emotional link between the customer and BT. Perhaps there could be emotional links related to what the internet access allows for? However, the internet access in itself does not evoke any emotional links.
- Cognitive component – this component is applicable. The motivation behind is the ability to access the internet almost anywhere. Problem solving in everyday life can be achieved for the customers and thereby increase the usage of the service. Hence, BT Fon has the potential of affecting the cognitive thinking process.
- Pragmatic component – this component is applicable as the usability of BT Fon does not differ from normal internet connections considered to have high usability.
- Lifestyle component – this component is partly applicable to BT Fon as the service enables internet access at several places. This could potentially result in a common value ground between “customers-on-the-move” and BT.
- Relational component – this component is not applicable to BT Fon. The reason is that it is doubtful if BT Fon could initiate a Wi-Fi community. As BT Fon customers are anonymous it could rather be viewed as a large network.

### **BT Credit Card**

BT Credit Card could not be argued as a traditional product or service since it enables new ways of co-creation. For example, when using the credit card to pay for a product or service it automatically generates a discount on the BT bill. Thus, the customer could be argued as a co-creator. The BT Credit Card also has similarities with a CRM solution as it is integrated with BT's billing system. Hence, BT Credit Card could be argued to belong in the solutions space. However, the service could not be categorized as an experience network since the service does not have a customer community tied to the network. The situation could instead be seen as an extended enterprise, i.e. a supply network. What differentiates BT Credit Card from traditional loyalty systems is that the loyalty bonus is transformed into a discount instead of member points. Interaction or co-creation within communities is not the focus of the service, it could rather be viewed as a new type of discount service. Hence, an integrated solution. These are reasons why BT Credit Card could not be argued to belong in the experience space.

Below is an analysis of BT Credit Card using Gentile et al.'s experiential components:

- Sensorial component – this component is partly applicable as the credit card can be seen and felt.
- Emotional component – this component is applicable as the BT Credit Card has the potential of a strengthened emotional link. The motivation behind is using a credit card labeled with the BT logo, while at the same time receiving a discount. Also, the loyalty program initiating a common value ground between the customer and BT.
- Cognitive component – this component is not applicable as the service does not raise new ways of thinking or solving problems.
- Pragmatic component – this component is applicable to BT Credit Card due to its ease of use. The service of receiving a discount is executed automatically each time the credit card is used.
- Lifestyle component – this component is not applicable as the service merely is a discount solution, not tied to the experience of the products and /or services.
- Relational component – this component is not applicable as BT Credit Card does not involve other people when using the service.

### **BT Vision**

The development of BT Vision and the content distribution is enabled through collaboration within BT's network. Thus, the development of the service is underpinned by the competence of several companies. However, BT offers the service as their own, distinguished from the content providers. Hence, the experience network for BT Vision could be argued more similar to what Prahalad and Ramaswamy categorize as a supply network. BT Vision is a digital TV service, offering a wide range of content and functionality. To an extent it is a normal product or service with the possibility to watch TV programs, listen to radio programs and so forth. Features that would place the service in the product space. If analyzing whether or not BT Vision belongs in the solution space, it is necessary to identify if any co-creation of value exist. There are some features that could be said to live up to these criterions. For example, On Demand is a program delivery approach that could be argued to potentially co-create value. The underlying motivation is that when a customer decides what he or she wants to see, an interaction takes place enabling a customization of the experience for the customer. Another example is the trial of downloading free films to a personal computer. In this case the content can not be customized, but the decision of when to watch films can. These examples could be argued to support the placement of BT Vision in the solutions space.

Perhaps BT Vision even could be argued to belong in the experience space? The company has a focus on co-creation. However, due to the structure of the service, there are limits to what and how much of the value that is co-created. In other words, there is not enough support to entirely place the service in the experience space. The service should arguably be seen as an entertainment solution, thereby placing it in the solutions space.

Below is an analysis of BT Vision using Gentile et al.'s experiential components:

- Sensorial component – this component is applicable to BT vision since the service is possible to see, hear and touch.
- Emotional component – this component is not applicable. The reason is that the emotional link could be questioned. Is it directed toward the service, towards the content provided, or a mix of the two? However, it is more likely that the content evoke emotional feelings rather than the service in itself.
- Cognitive component – this component is applicable to BT Vision as the perception of watching film could change due to this service. For example, the assumption that movies must be paid for or illegally downloaded to be watched, could be challenged via the free film trial provided as part of the BT Vision service.
- Pragmatic component – this component is applicable to BT Vision as the service enables a high level of usability. It provides options to interact with the remote control, features for pausing programs, and the ability to download movies to a computer and watch them at one's own convenience.
- Lifestyle component – this component is not applicable. The provided content could perhaps reflect the lifestyle and values of the customer. However, this does not link the customer to BT as BT's values not necessarily are the same as the customers.
- Relational component – this component is partly applicable to BT Vision. The reason is the potentially ambiguous usage pattern. Some people could be encouraged to engage others in consuming the service, whereas some people could have the opposite desire, i.e. to be on their own when consuming the service.

## **5.2.2 Globe Telecom**

### **G-cash**

G-cash provides functionalities such as money transfers, regular payments and billing. However, this is not just a regular product or service, G-cash could be considered what Prahalad and Ramaswamy categorize a solutions innovation. For instance; the service enables

customers to shop online paying with the mobile phone instead of going to the store, it also enables managing various monetary arrangements with the mobile phone instead of having to go to the bank. These service features are enabled via system integration with G-cash partners, providing the ability for customers to load their G-cash account. Thus, underpinned by the examples above it could be argued that G-cash exceeds what Prahalad and Ramaswamy categorizes as the product space and instead belongs in the solutions space. Though, can G-cash be claimed to fulfill the criteria of the experience space and thereby constitute an experience innovation? Is the focus for G-cash significantly concentrated on the experience of their customers? This is questionable. Also, was G-cash developed within a community serving to gain from one another's competence? This too is questionable. When developing the G-cash service Globe have probably gained competence from other companies within the network, such as KABAN and different G-cash partners. However, the main emphasis has probably not been to create an experience innovation, i.e. is G-cash really that different from other payment cards? The biggest distinction is probably the fact that G-cash is managed via the mobile phone. A feature which in itself is convenient as the mobile phone is a device most people take with them when going somewhere<sup>175</sup>.

Thus, to claim that G-cash is part of an experience network is doubtful. For example, the aim of G-cash is to make it convenient for customers by managing various monetary arrangements using the mobile phone. Though, it is questionable if it is convenient having to visit a G-cash partner to load the G-cash account. Especially due to the limitations regarding the amounts allowed using the service, something that conveys an increased complexity for the customer. Although, if G-cash was developed further within a large experience network, making the service easier to personalize, perhaps then it could be argued as more of an experience innovation? An example could be to offer the possibility of loading the G-cash account using the mobile phone, thereby making the service more convenient. Another example could be to establish additional partnerships, such as that of the G-pass. This would enable customers to choose in which areas to use the G-cash service based on their interests, hence making the service more personalized. The result could potentially be a co-created experience innovation, as it would enable a broad personalized usage in a convenient manner.

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<sup>175</sup> [http://www.mobiento.se/news/news\\_swe\\_136.html](http://www.mobiento.se/news/news_swe_136.html), accessed 2007-12-29

Below is an analysis of G-cash using Gentile et al.'s experiential components:

- Sensorial component – this component is partly applicable to G-cash as the service allows for seeing and touching when receiving and sending text messages.
- Emotional component – this component is applicable to G-cash. For example, if a customer does not have money for the metro, a quick G-cash transfer to the metro card could evoke positive emotions strengthening the relation to Globe Telecom.
- Cognitive component – this component is not applicable to G-cash as the service currently demands too much work from the customer. This reasoning is underpinned by the fact that the customer can not use the mobile phone to load the G-cash account with money, making it difficult for the G-cash service to change the cognitive perception among its customers.
- Pragmatic component – according to Globe Telecom the G-cash service is easy to download and use, all managed via text messages. This would mean that the pragmatic component is applicable to G-cash due to its ease of use.
- Lifestyle component – this component is partly applicable to G-cash. The reason is that the use of the G-cash service potentially could result in a common value recognition between the customers and Globe Telecom. Such an example could be “customers-on-the-move” or customers with little time to spare.
- Relational component – this component is not applicable to G-cash as the service targets individual customers. The fact that the service focuses on monetary arrangements also makes it hard to form communities, due to such issues as trust.

### **5.2.3 Orange**

#### **Livebox**

Livebox offers the customer different features and options. However, the competence and skills underpinning the development of the service is not entirely connected to Orange. Multiple companies have been involved in a continuous project called Livebox labs. A project where different companies collaborate in developing products and services for the Livebox platform. Some companies such as Thomson and Sagem take part in developing the hardware, i.e. the box, whilst other companies such as Microsoft take part in developing the software.

The different companies behind the development of Livebox form a network of competencies. The question is if the network of competencies forms an experience network from a customer perspective. Livebox enables several different computers to be connected to a wireless



network, in a sense facilitating interactions between different people. This is probably too distant in order to constitute a community. Instead, the possibility to use Livebox together with Xbox or PlayStation online could be argued to constitute a community. The reason is that the service initiates interaction between different customers when playing games. Hence, it could be viewed as an experience network. Consequently, Prahalad's and Ramaswamy's criterion for an experience network for co-creating value is met in this last example. The possible interaction between customers when playing games is only one of the services available in Livebox. Another service, the liveradio, does not invite the customer to interact with others in a community. Nor does the Livezoom service which enables home surveillance. If viewing the services available in Livebox as a whole, it is more reasonable to view it as a supply network. Therefore it is not argued to constitute an experience network.

If dismantling the Livebox into conceptual parts, each feature or function could be viewed merely as a product or service. For example, liveradio is a radio product and Livezoom a camera with a software service attached. This would motivate placing Livebox in Prahalad's and Ramaswamy's product space. However, as the products and service in the Livebox are integrated as a whole, it no longer constitutes traditional products or services. Hence, it is a solution and thereby it could not be argued to belong in the product space. Livebox and the different parts are integrated as a solution. The box in itself is the hub connecting the different products and services. For example, the liveradio is connected via the box to the internet, thus enabling listening to internet radio. The Xbox and PlayStation consoles are also connected to Livebox, enabling games to be played at home or online with other people. Livebox is a fully integrated service platform and could therefore be argued to belong in the solutions space. As previously mentioned, the gaming functionality provided by Livebox potentially allows for interaction within the customer community. It also allows for a customized experience. However, as argued previously; the possibility to interact when playing games is only one feature out of many provided via the Livebox. Therefore, if viewing Livebox as a whole the service could not be argued to belong in the experience space.

Below is an analysis of Livebox using Gentile et al.'s experiential components:

- Sensorial component – this component is applicable to Livebox since it addresses touch, hearing and sight. For example, the playing consoles enables touch, the liveradio enables hearing and the digital TV service enables sight. In addition the box (the hub) in itself can be viewed as a design product.

- Emotional component – this component is not applicable to Livebox. Positive feelings can not be linked to Orange or Livebox in any direct way. The content provided via the digital TV is an example more likely to create emotional feelings.
- Cognitive component – this component is not applicable. The service could be argued to enhance the creativity for customers that play games, though it is doubtful that Livebox could change the perception customers have regarding the service.
- Pragmatic component – this component is applicable. The motivation behind is that the usability of Livebox could be argued as high, since it provides a number of integrated services via one central device.
- Lifestyle component – this component is not applicable. The reason is that it is doubtful that a person using Livebox would share the same values as those of Orange simply due to the service. Thus, it is probably more likely that the customer would find a common value ground with the provided content than with the service.
- Relational component – this component is partly applicable to Livebox. The reason is that the online gaming opportunity encourages usage together with other people. From this perspective the service could initiate a relational link. However, other services do not enable such possibilities and therefore no relational link is apparent.

## 5.2.4 PCCW

### **snaap!**

snaap! is underpinned by technological systems, created by PCCW in collaboration with their own subsidiaries and Zensis. In addition to these competencies, snaap! is tied to a customer community of users that share pictures and video clips, thereby forming what Prahalad and Ramaswamy categorize an experience network. The technological systems are all integrated in order of providing the quadruple-play service. They are also compatible with other devices developed by other companies, thus snaap! solves the problem of having different devices not “talking” to each other. snaap! could thereby be argued to have exceeded Prahalad’s and Ramaswamy’s product space, also upholding the criteria set in the solutions space. As the primary intention and focus of snaap! is to create an experience for the customer, perhaps the service could be argued to belong in the third space; the experience space? snaap! deploys new technologies in a convenient way making it easy to involve the customer as the different devices are integrated and used interactively. Such efforts are in line with the criteria set by Prahalad and Ramaswamy, in order for an innovation to belong in the experience space.

There are a couple of parallels to be drawn if analyzing snaap! from the perspective of the experience space. The possibility of creating a personalized multimedia album could be argued to withhold such parallels. This is achieved by utilizing the capabilities of interlinking the TV, fixed phone, mobile phone and computer (internet). The service permits flexibility for the customers in terms of what could be done with the content and which media to use watching or sharing the content. Such an example is the possibilities when taking a picture; the computer could be used to retouch the picture, and the TV, mobile or fixed phone could be used to view the picture in different formats at different locations. In addition, the customer can share the picture with friends and family. These are possibilities at hand for the customer, making the interactive part a choice regarding how involved he or she wants to be.

Consequently snaap! is an innovation that emphasizes co-creation and has the potential to enable a positive customer experience. Thus, snaap! is argued to belong in the experience space of Prahalad's and Ramaswamy's illustration.

Below is an analysis of snaap! using Gentile et al.'s experiential components:

- Sensorial component – this component is applicable to snaap! as the service includes the dimension of touch, sight and hearing. For example, when pictures are taken the service allows seeing these in various formats and if it is a video clip the aspect of hearing could also be addressed.
- Emotional component – this component is applicable to snaap! primarily through the possibility of sharing pictures and videos. For instance; if a customer is traveling and takes pictures, the service allows his or her family and friends (presupposed that they are snaap! customers) to download and see the pictures anytime and anywhere. Such a feature would potentially evoke positive feelings in terms of a “visual diary” enabling family and friends to follow the trip.
- Cognitive component – this component is partly applicable to snaap! An example is the fact that the TV can fill a new purpose in terms of constituting a type of photo album. However, the linkage is not evident as the devices within the quadruple play service could perform these tasks before. Instead, it is the way snaap! and its devices are interconnected that potentially could change the perceptions among customers, i.e. the feature enables a network of devices “talking” to each other.
- Pragmatic component – this component is applicable as snaap! simplifies the sharing of pictures, video clips and so forth.

- Lifestyle component – this component is applicable and could be related to the emotional component. The motivation behind is the positive feelings snaap! could evoke, hence contributing to the creation of a common value ground regarding snaap! customers and PCCW. The behavior of “snaaping” pictures could become a part of a lifestyle, thus linking customer and brand (company) values together.
- Relational component – this component is applicable to snaap! as the service promotes and allows for sharing pictures and video clips with others. Moreover, snaap! has the potential of creating communities. Such an example is that of the Premier League contest, “snaaping” famous football players competing for the most creative album. This contest convey the sharing of pictures and networking among people (snaap! customers), thereby initiating communities.

### **5.2.5 Ringgold**

#### **Customer Care & Local Commitment**

Ringgold’s focus is to provide customer care with a personal touch. The fact that the company is quite small could be argued to facilitate the focus of being locally involved and having a close relationship with the customers. This intention is made possible through Ringgold’s employees, as they have a close connection with their customers and to the community in which they operate. A context argued to create an experience for Ringgold’s customers.

According to Prahalad’s and Ramaswamy’s concept of experience network, there should be a competence network larger than the extended enterprise, also including communities. This could be viewed as different companies providing different types of skills, tied to a customer community creating an experience network. In the case of Ringgold the supply base is very limited, they also produce a lot of their products and services in-house. Therefore, it is possible to categorize Ringgold as a traditional supply chain from the perspective of competence locus. Although, there is an alternative way to categorize Ringgold’s experience network, namely that the experience Ringgold’s customers could receive, is underpinned by a virtual experience network. The network consists of the different parts of the community, with which the company interacts. One example is the local differentiation of the produced TV content. Another example is the support and charity activities that the company takes part in. These activities could be argued to enhance the competencies tied to Ringgold.

The second dimension of Prahalad's and Ramaswamy's concept covers how a company is structured to facilitate innovation and if customer value is co-created. Taking a starting point in the product space, Ringgold offers traditional products and services such as internet connections, telecommunications and associated services. Therefore, Ringgold could be argued to have a traditional approach of value creation if just viewing the provided products and services. Customer care is a service that often is included in the products and services provided by a company. In the case of Ringgold it is not only included, it could be argued to be what they actually sell. As with many other companies; the experience of Ringgold's customers is affected by the difficulties when trying to install the products or services they have bought. In this matter Ringgold is probably not better than the average company as their products and services could be argued as advanced. However, when it comes to solving problems, Ringgold has a different approach. By being committed to help their customers, Ringgold view the task of delivering a positive customer experience as their primary focus. The customer is the primary focus and not Ringgold, the customer's problem is at focus and not the cost of supporting the customer. In addition, Ringgold customers could be argued to take an interactive part and co-create value together with the support staff when calling the customer care call center.

In order of placing Ringgold in the experience space there has to be an interaction between Ringgold and their customers in terms of communities. Ringgold does indeed interact with its customers when creating value and experience for the customer. The customers and Ringgold both interact with the community (Ringgold Georgia). However, the community is not the same as what Prahalad and Ramaswamy categorizes as a customer community. Hence, Ringgold could not be argued to belong in the experience space. Consequently, from the perspective of Prahalad and Ramaswamy Ringgold is argued to belong in the solutions space.

Below is an analysis of Customer Care and Local Commitment (Ringgold) using Gentile et al.'s experiential components:

- Sensorial component – this component is partly applicable to Ringgold. The reason is that hearing is addressed when talking to support staff. Though, the service does not address examples such as touch, smell and sight.
- Emotional component – this component is applicable as positive feelings could evoke when a customer gets a problem solved. What started as a problem could thereby turn out to have a positive ending. Such an example could strengthen the Ringgold brand.

- Cognitive component – this component is not applicable to Ringgold. The reason is that the skills needed by the customer in order of solving the problem, does not increase as a result of interacting with Ringgold. In fact, Ringgold’s staff becomes better at solving problems, not its customers.
- Pragmatic component – this component is applicable. The reason is that customers get their problems solved in an effective manner, hence the usability of the customer care service and the local commitment could be deemed as high.
- Lifestyle component – this component is partly applicable to Ringgold. The company is an integrated part of community and could thereby potentially tie company and community values together. Community values could in this perspective be seen as customer value.
- Relational component – this component is not applicable as the service does not allow for any relational interactions with other people. Indeed there are interactions between Ringgold’s customers in the community, but that could not be credited to Ringgold.

## **5.2.6 SingTel**

### **MobileM@il**

MobileM@il is a service free of charge that enables customers to get their e-mail sent directly to their mobile phone (push mail). The software developed for MobileM@il is integrated with other systems and created in collaboration with Consilient and SonyEricsson. A context argued to what Prahalad and Ramaswamy would categorize as a supply network. Though, as no customer communities are tied to the service it could not be argued as an experience network. The service enables customers to receive and send e-mails from different e-mail accounts. The examples above; integrated systems and network partners, are arguments categorizing MobileM@il as a solutions innovation, thereby exceeding the criteria set by Prahalad and Ramaswamy regarding the product space.

If analyzing MobileM@il from the criteria of the experience space it is doubtful if the service could be argued as an experience innovation. MobileM@il could not be described as personalized as the features of the service are set, nor could it be argued as part of an experience space as the service in itself is not interactive. Surely, the MobileM@il provides the opportunity for customers to interact in terms of visiting links sent via advertisement in the e-mails. However, as soon as the customer engages actively by doing so, the service is no longer free of charge, this only applies to the received e-mails.

Consequently, as the interactive potential of MobileM@il not is free of charge, the focus is not entirely on the customer. Therefore, the service should not be characterized as an experience innovation, instead it is argued that the service belong in the solutions space.

Below is an analysis of MobileM@il using Gentile et al.'s experiential components:

- Sensorial component – this component is partly applicable to the MobileM@il service as it allows for sight and touch while sending and receiving e-mails.
- Emotional component – this component is not applicable to MobileM@il. The motivation behind is that the service does not evoke positive feelings or emotions that could be linked to SingTel, thus strengthen the relation between the company and the customer.
- Cognitive component – this component is not applicable to MobileM@il as the service not necessarily changes the perception among its customers. Especially as there is an alternative way of checking e-mail accounts via the mobile phone (even though it is not for free). This would be to connect to the internet via the mobile phone and thereby visit the e-mail accounts one at a time.
- Pragmatic component – according to SingTel the MobileM@il service is easy to download and use. This would mean that the pragmatic component is applicable to MobileM@il due to its ease of use.
- Lifestyle – this component is partly applicable to MobileM@il as the service potentially could create a common value ground between the customers and SingTel. The motivation underlying this argument is primarily that the service is free of charge. Thus the customer is offered a convenient way of integrating different e-mail accounts with the push mail feature. Hence, customers could check their e-mails for free while on the move.
- Relational component – this component is not applicable to MobileM@il as the service not has the potential of initiating communities or usage together with others.

### **5.3 Complexity perspective**

It is evident that the selected mini cases have a significant focus on innovations, a notion strengthened by the fact that this was the criterion, on which they were chosen to be part of this thesis. Hence, each mini case has developed and launched a product or service that is argued as innovative. However, what are possible downsides of innovations?

### **5.3.1 Innovation vs. Complexity**

The various innovations occurring in the telecom industry today primarily serve to gain a competitive advantage. However, Gottfredson and Aspinall argue that companies too often innovates products and services that are too complex. This context could be viewed from two contradictory perspectives if relating it to the different mini cases.

First, each product or service from the mini cases has a technologically advanced software and/or solution underpinning its functionality. Therefore, the technology could be viewed as complex. Also, installing the product or service as well as what it is capable of doing might give a complex impression to some people. Second, most of the innovations provided by the mini cases primarily intend to make it more convenient for the customer i.e. solving a problem more conveniently, interlinking different devices and so forth. Thus, from this perspective it could be argued that the complexity is reduced.

One example is the service Livebox provided by Orange. This service is technologically advanced combining different media via integrated systems. For example, it allows customers to use a wireless internet connection, make phone calls, play games and interlink external devices provided by other companies, such as Xbox 360 by Microsoft. Consequently, if relating Livebox to the first perspective it could be viewed as a complex innovation. However, from the second perspective it could be viewed differently. All the features described above are enabled using one device (Livebox) provided by one company (Orange). Thus, for the customer seeking the features provided by Livebox the convenience is evident.

### **5.3.2 Defeating Feature Fatigue**

Rust et al. argues that there is a dilemma for companies selling products and services. What initially attract a customer are the performance and numerous features of a product or service, however the usability is what makes for a satisfied customer in the long run. Thus, companies need to find the “Happy Medium” in order of staying competitive.

Ringgold could be argued to challenge this dilemma through their innovative service of customer care and local commitment. Ringgold sell products and services similar to those of their competitors, thereby with the same degree of complexity. However, the primary focus of Ringgold is to help their customers with potential problems assuring that they are satisfied.



Consequently, Ringgold could be argued to attract customers with similar advanced products and services as their competitors. However, they provide a service which in extension enhances the usability and thereby makes for a satisfied customer in the long run.

## **5.4 Reflection**

This part aims to reflect on findings in the analysis, also linking the complexity perspective with the background theories, thus creating a circular logic.

There are interesting theoretical observations discovered in the analysis. Such an observation is that the analysis supports a linkage between the key theories presented by Gentile et al. and Prahalad and Ramaswamy. *snaap!* is one example indicating such a link. All of the components (one partly) presented by Gentile et al. is applicable to the service and it belongs in Prahalad's and Ramaswamy's experience space. However, the linkage is also supported by the other innovative products and services, as fewer components are applicable to them and they reside in the solutions space. Thus, there are different types of innovations even though all of the analyzed products and services are argued as innovative. In other words, some products and services are argued as solutions innovations rather than experience innovations.

Another interesting theoretical observation discovered in the analysis is the somewhat contradictory relation between the key theories and the complexity perspective. For example, from the perspective of Prahalad and Ramaswamy and Gentile et al.; BT Credit Card has few applicable components and is argued to be a solutions innovation. Thus, the service is not argued to generate the most value to the customer experience. Though, from the perspective of Rust et al. and Gottfredson and Aspinall; BT Credit Card could be argued as an innovative-yet not complex service. In other words, BT Credit Card is used as a regular payment card and a discount is automatically drawn from the BT bill whenever using it. Thus, from this perspective the service could be argued to increase the value generation of the customer experience due to its ease of use.

The analysis has shown that there is re-occurring emphasis on innovations aiming to make it easier and more convenient for the customer. Such a strive is also supported theoretically, as complex innovations convey risks in terms of reduced value for the customer and a slowing innovation process for the companies. From a broader perspective it could also be argued to affect the industry as a whole. A development that has resulted in companies trying to attract

customers on the basis of price as this is easier to communicate to the market. Thus, the development towards using price as a mean of competitive advantage is reinforced. Therefore, it could be suggested that perhaps the theories of Prahalad and Ramaswamy and Gentile et al. ought to be complemented by an additional dimension; ease of use. Surely, Gentile et al. have a similar dimension (utilitarian value) contributing to the value perception. However, it is not included as an experiential component, thus separated from the customer experience. A separation we argue to be unrealistic in today's transforming telecom industry.

Another interesting observation is that all of the mini cases have partners related to the development of their innovative product or service. Most of the products or services are also promoting customer involvement. The underlying logic is to increase the experience and enhance the chances of developing targeted products and services in the future. Hence, an interesting parallel could be drawn to Adner's concept of innovation ecosystems. Adner discusses three types of risks, however none of these risks concern the involvement of the customer as part of the innovation process. Perhaps the ecosystem should be complemented with an additional type of risk? A risk directly related to customer involvement as this logically would encompass negative- as well as positive aspects. Consequently, this context could be related to the transforming telecom industry and the uncertainties it withholds for CSPs. Perhaps customer involvement is the key to survive a context of transforming value chains and fierce competition forcing the formation of ecosystems? In other words, if the customer is successfully involved in the value creation, this could enhance the chances of focusing the skills within one area and thereby become an important actor within the ecosystem. A notion strengthened by Porters argument that a company needs to know its own value chain in order of succeeding within a value network.

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# 6

## - CONCLUSIONS -

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*This chapter will use two charts to present and discuss the findings from the analysis and conclusive remarks are given continuously. Thereafter the findings will be concluded as general contributions. Suggestions of future research end the chapter.*

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### **6.1 Discussion**

#### **6.1.1 Categorizations vs. the innovations**

Underpinned by the analysis it is concluded that a majority of the innovative products and services belong in Prahalad's and Ramaswamy's solution space, thereby constituting solutions innovations. This confirms Prahalad's and Ramaswamy's arguments that most companies position their products and services in the solutions space.

<b><u>Case – Product/Service</u></b>	<b><u>Prahalad/Ramaswamy</u></b>
BT – BT Fon	Solution space
BT – BT Credit Card	Solution space
BT – BT Vision	Solution space
Globe Telecom - G-cash	Solution space
Orange – Livebox	Solution space
PCCW – snaap!	Experience space
Ringgold – Cust. care/local c.	Solution space
SingTel - MobileM@il	Solution space

**Figure 6:1 Conclusions from using Prahalad and Ramaswamy**

PCCW's service snaap! distinguish itself. This service enables co-creation of value through customer interaction, thereby initiating an experience network in terms of customer communities. snaap! also bundles various products and services, emphasizing the customer perspective and thereby enables a personalization underpinning the customer experience.

**6.1.2 Components vs. the innovations**

The framework developed by Gentile et al. indicates similarities between some of the mini cases. Such an example is that the sensorial- and pragmatic components are applicable- or partly applicable to all mini cases. Posing an interesting perspective as these components could be argued as features of traditional products and services. Thus, these components could be linked to the traditional approach of developing and launching products and services.

If viewing the emotional-, cognitive-, lifestyle- and relational- components, the result is different. This is underpinned by their complex nature; in fact these components are only applicable/partly applicable in a few of the mini cases and to various extents. Conclusively, these components constitute dimensions of the customer experience that are difficult to address for CSPs. The reasons are argued to be twofold:

- First, in order of addressing these components, CSPs are required to take a customer perspective instead of a company perspective. This approach conveys creating value with primary focus on the customer experience. Hence, a fundamental strategic shift.
- Second, these components are not easily distinguishable. They overlap and interlink in ways that are difficult to detect and understand due to their complex nature. Thus, it is difficult to continuously focus on- and work with these components constructively.

Case	Sensorial	Emotional	Cognitive	Pragmatic	Lifestyle	Relational
BT Fon	(X)		X	X	(X)	
BT C.Card	(X)	X		X		
BT Vision	X		X	X		(X)
G-cash	(X)	X		X	(X)	
Livebox	X			X		(X)
snaap!	X	X	(X)	X	X	X
Ringgold	(X)	X		X	(X)	
MobileM@il	(X)			X	(X)	

X= applicable, (X) = partly applicable, Blank = not applicable

**Figure 6:2 Conclusions from using Gentile et al.**

PCCW’s service snaap! distinguish itself. When analyzing the different mini cases using the framework presented by Gentile et al., snaap! was the only service where all the components could be argued as applicable (one partly applicable). Conclusively, snaap! generates a customer experience underpinned by all experiential factors.

## **6.2 General contributions**

A conclusion drawn from the analysis is that the mini cases and their innovative products and services constitute different ways of innovating. Thus, the empirical findings are potentially beneficial influences for CSPs when trying to innovate the experience of their customers.

It is concluded from the analysis that all mini cases have partnerships. Thus, this is argued as a vital strategy to consider for CSPs. The underlying motivation is to gain competencies, achieve synergies and take part in a value creation larger than otherwise possible.

The analysis has shown that the components presented by Gentile et al. are applicable to various extents depending on the innovation. Though, if CSPs quest differentiated innovations they need to take a customer perspective and emphasize the emotional-, cognitive-, lifestyle- and relational components. As a result they could exceed the solutions space where a majority of products and services reside and distinguish their innovations as experience innovations.

The danger of developing too complex innovations is another interesting observation. A potential way to reduce the risk associated with complexity could be to involve the customer, another tendency noticed among the innovative products and services.

## **6.3 Future research**

One interesting thought that came to mind while writing this thesis, would be to conduct an industry analysis and use the framework of Gentile et al. to question if different components attract different customer segments. In extension this could perhaps help CSPs to steer focus towards specific components, depending on which customer segment they aimed to reach?

Another interesting thought could be to research CSPs that have products and services argued to belong in the solutions space; how should they go about to fulfill the criteria set in order to exceed this space and position their products and services in the experience space instead?

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Zensis, [www.zensis.com](http://www.zensis.com)



- APPENDIX -

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**8.1 Appendix 1 – Key words**

- Innovative
- Telephone companies
- Telecommunications industry
- Telco
- Carriers
- Telecom
- Telecommunications
- Mobile
- Broadband
- Telephony
- Communication service provider
- Communications
- Operator
- Most (used in order of narrowing the search results)

## 8.2 Appendix 2 – Inventory of innovative products/services

<u>Company</u>	<u>Source</u>	<u>Keywords</u>	<u>Product/Services</u>
Ringgold USA	ELIN	Innovative AND telecom	NexTv (local programs), Customer care
Orange (France Telecom) UK/FR	ELIN	Innovative AND telecom	Livebox (Gateway)
BT UK	ELIN	Innovative AND telecommunications	BT Fon (WiFi Community), BT Credit Card, BT vision (Free film download)
AT&T USA	ELIN	Innovative AND telecommunications	Blackberry services
Verizon USA	ELIN	Innovative AND telecommunications	TiVo, Mobile & Video clips
ZAIN (former MTC-Vodafone) Kuwait	ELIN	Innovative AND telecommunications	Kuwait University SMS Registration, Smartwatch (financial paging service).
Apple USA	ELIN	Innovative AND mobile	IPhone
KDDI Japan	ELIN	Innovative AND mobile	Osaifu-Keitai (Financial services)
NTT Docomo Japan	ELIN	Innovative AND mobile	Osaifu-Keitai (Financial services), I-mode
Skype USA	ELIN	Innovative AND telephony	Skype
AAPT Australia	Google	innovative telco	Mobile cap (Mobile and fixed phone bundled with no-lock in contract and included calls).
Nokia Finland	Google	most innovative telecom	Mobiles
SingTel Singapore	Google	most innovative telecom	IDEAS (Free MobileM@il), Whizz tutor's secret (Homework help)
FarEasTone Telecom Taiwan	Google	most innovative telecom	i-style (Entertainment, financial, information services)
InterSwitch Nigeria	Google	most innovative telecommunications	MobilePAY (Financial services)
Sprint USA	Google	innovative AND broadband AND telecom	Sprint power vision (Content packages for mobiles: TV, Music, Navigation, Access)
Globe Telecom Philippines	Google	innovative service AND telecom AND asia	G-cash and BDO Cash Card (Financial services)
CSL Hong Kong	Google	innovative service AND telecom AND asia	Call Filtering Service, BubbleTalk (Voice instead of text message).
PCCW Hong Kong	Google	innovative AND broadband carrier	snaap!
HKBN Hong Kong	Google	innovative AND broadband carrier	NetMeeting (Sharing of: application, clipboard, whiteboard, chat and file transfer).

### **8.3 Appendix 3 – Award categories and winners 2006/2007**

#### **World Communication Awards 2007<sup>176</sup>**

Best content service – MINICK Group  
Best customer care – BT Group  
Best managed service NTT Communications  
Best mobile operator – Bharti Airtel  
Best new service – Spinvox

#### **World Communication Awards 2006<sup>177</sup>**

Best Customer Care: Vanco  
Best Managed Service: iPass Corporate Access  
Best New Service: BT Fusion  
Best Content Service: Interoute; Media Manager  
Best Mobile Operator: Orange

#### **Telecom Asia Awards 2007<sup>178</sup>**

Best Asian Telecom Carrier – SK Telecom (Korea)  
Best Mobile Carrier – SK Telecom (Korea)  
Best Broadband Carrier – PCCW (Hong Kong)  
Best Managed Services Provider – BT Asia-Pacific (UK)  
Best Satellite Carrier – AsiaSat (Hong Kong)  
Best Competitive Carrier – Maxis Communications (Malaysia)

#### **Telecom Asia awards 2006<sup>179</sup>**

Best Asian Telecom Carrier SK Telecom (Korea)  
Best Mobile Carrier NTT Docomo (Japan)  
Best Managed Services Provider BT Asia-Pacific (UK)  
Best Broadband Carrier PCCW (Hong Kong)  
Best Satellite Carrier PanAmSat (USA)  
Best Competitive Carrier True Corp (Thailand)

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<sup>176</sup> <http://www.worldcommsawards.com/>, Accessed 2008-01-03

<sup>177</sup> Ibid., Accessed 2008-01-03

<sup>178</sup> [http://www.telecomasia.net/article.php?id\\_article=4814](http://www.telecomasia.net/article.php?id_article=4814), Accessed 2008-01-03

<sup>179</sup> [http://www.telecomasia.net/article.php?id\\_article=3576](http://www.telecomasia.net/article.php?id_article=3576), Accessed 2008-01-03

## 8.4 Appendix 4 – Interview guides

### Intervjuguide Hampus Janzon

#### Riktlinjer för intervju

- Inspelad intervju
- Offentlig handling
- Syfte med intervju
  - Nuläge och framtid för telekom generellt och Telia
  - Förbättra förståelsen (trender och konvergens)
  - Konsumentperspektiv (privatkunder, hemmamiljö)
  - Typ av marknad (“Danmark”)
  - Tidshorisont (upp till 5 år)

#### Innovationsperspektiv

- *Vilka, anser du, är de mest innovativa aktörerna inom telekom idag?*
- *Tror du att det kommer att vara samma företag inom en snar framtid, om inte, varför och vilka företag kommer det i så fall vara?*

#### Konsumentperspektiv

- *Vilka, anser du, är trenderna för konsumenter i deras hemmamiljö?*
- *Tror du att dagens konsumenter kommer att skilja sig åt från framtidens konsumenter, om så är fallet, hur?*
- *Tror du att konsumenter kommer att vara delaktiga i skapandet av framtida produkter och tjänster, om så är fallet, i vilken utsträckning?*

#### Allianser för att möta konsumenternas önskemål

- *Vilka allianser tror du är möjliga inom telekom i framtiden?*
- *Vilka allianser tror du är möjliga för Telia i framtiden?*
- *Vilka följder skulle sådana allianser kunna få?*

#### Uppsummering

- *Av det som diskuterats i denna intervju, vilka teman och aspekter tror du kommer att få störst inverkan för Telia och telekom i framtiden?*
- *Har du några ytterligare funderingar och/eller frågor?*

## **Interview guide Freenasp Mobedjina**

### **Interview guidelines**

- Recorded interview
- Public document
- Purpose of the interview
  - Present and future within telecom and Telia
  - Enhance understanding (trends, convergence and innovation)
  - Consumer perspective (private customers)
  - Reference market (“Denmark”)
  - Timeframe (up to 5 years)
- *Could you please tell us short about yourself and your background?*

### **Innovative perspective**

- *Which do you think are the most innovative telecom actors today?*
- *Why are these the most innovative ones, i.e. in which way do they create value?*
- *Do you think it will be the same companies within the near future, if not, why and which will they be?*

### **Consumer perspective**

- *Which current products and services do you think creates the most value for the consumers?*
- *Which current products and services do you think creates the least or no value for the consumers?*
- *Do you think consumers will be involved in the creation of future products and services; if so, to what extent?*

### **Strategic partners to meet consumer demand**

- *Which do you think could be possible alliances within the telecom industry in the future?*
- *Which do you think could be possible alliances for Telia in the future?*

### **Summarization**

- *Do you have any additional thoughts and/or questions?*