Antti Sonninen

**Digitalization strategies for retailers – a consumer research approach**

Master’s Thesis
Espoo, October 28, 2013

Supervisor: Professor Eila Järvenpää
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<td>Työn nimi: Digitalisaatiostrategioita vähittäiskauppiaille – kuluttajatutkimusnäkökulma</td>
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<td>Title in English: Digitalization strategies for retailers – a consumer research approach</td>
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<td>Sivuaine: International Design Business Management</td>
</tr>
<tr>
<td>Opetusyksön (ent. professuuri) koodi: TU-53</td>
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<tr>
<td>Työn valvoja: Professori Eila Järvenpää</td>
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<td>Työn ohjaaja: Anssi Smedlund, TKT</td>
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| Päivämäärä: 28.10.2013 |
| Kieli: englanti |
| Sivumäärä: 60+7 |

| Avainsanat: vähittäiskauppa, älypuhelin, Internet |
Abstract of the Master’s Thesis

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<th>Aalto University School of Electrical Engineering</th>
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<td>Author: Antti Sonninen</td>
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<td>Title: Digitalization strategies for retailers – a consumer research approach</td>
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<td>Title in Finnish: Digitalisaatiostrategioita vähittäiskauppiaille – kuluttajatutkimusnäkökulma</td>
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<td>Major subject: User-Oriented Telecommunication Technology</td>
<td>Minor subject: International Design Business Management</td>
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<td>Chair (code): TU-53</td>
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<td>Supervisor: Professor Eila Järvenpää</td>
<td>Instructor: Anssi Smedlund, D. Sc. (Tech)</td>
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<td>Abstract: Already in the times before internet, the consumption habits of mankind have been influenced by several needs and certain behavioral patterns arising from the said needs. The literature review of this thesis suggests that these needs would be utilitarian, hedonic and social. The information technology revolution brought us web shops, virtual goods, social media and digital distribution of music as well as video. This thesis examines the changes presented by the digital age and what kind of opportunities the said age poses to traditional retailers. The research methodology includes a literature review, a survey and an interview. The results of the research suggest that the digital retailing of material goods can be considered as an extension of the physical retailing of the same goods. Based on the results, the thesis presents recommendations to traditional brick-and-mortar retailers.</td>
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<tr>
<td>Date: 28.10.2013</td>
<td>Language: English</td>
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<td>Keywords: retail, smartphone, Internet</td>
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Foreword

I met Anssi Smedlund for the first time at a farewell party of a mutual Japanese friend, Yasuo, in 2010. Yasuo had been a visiting researcher at Aalto University and it was time to say goodbye. With Yasuo returning to Tokyo, the evening had a feeling of an era ending to it. Luckily, that evening was also a start of a new era for myself.

Anssi told me that his research group had been discussing a new TEKES funded retail innovation research project. They were looking for a master’s thesis worker to support the project as well as their collaboration with Tokyo Institute of Technology – Tokyo Tech. In late 2011, I joined their KM-retail project and traveled to Tokyo to start my master’s thesis at Tokyo Tech in the laboratory of professor Kyoichi Kijima. Ever since graduating from high school, I had been working actively in different projects in addition to my academic pursuits and this time as well I had just started working at a rapidly growing entertainment company, Rovio. My days in Tokyo were full with exciting tasks from the academia as well as the industry and I was balancing the two roles daily.

Anssi was very supportive during the writing process. Eila also kindly lent her experience to me in the later phases of the thesis when it was time to make ideas and visions concrete. This thesis taught me how to dive deep into academic research and improved my understanding of retail in the Internet age.

Completing this thesis represents a very important step for me in my life and I am expressing my heartfelt gratitude to everyone who helped me complete this giant leap: Anssi Smedlund; Eila Järvenpää; Minna Autio; Jaakko Autio; Otto Mäkelä; Naoto Nadayama; Kyoichi Kijima; Maria Kulse, Tuomas Sahramaa; Luyi Yang; everyone at ME310; Eerik Puska; Ilona Mäkinen; Peter Vesterbacka; Henri Holm; all of my great colleagues at Rovio; Vili Lehdonvirta; Sonia Jain; Kasimir Lehväslaiho; Miikka Lehtonen and the Jabupro team; Tomoko Miya; my family members; parents; brothers and sisters; many other people along the way. I stand here thanks to your support.

Antti Sonnininen
October 28, 2013
1. Introduction

1.1. Research problem

This thesis sets out to explore what kind of new strategic opportunities digitalizing consumption is bringing traditional retailers. In everyday life people exchange objects and services with each other to collectively benefit from balancing unevenly distributed resources in society. A skilled massage therapist may have the capacity to deliver more massages than he or the people around him need so he can choose to give massages to the public in exchange for goods, services or monetary value. A farmer may be able to harvest crops more abundant than he or the people in his extended family need so he has the opportunity to exchange his produce for other resources available in his community.

Berman defines retailing in the following way “Retailing comprises the business activities involved in selling goods and services to consumers for personal, family, or household use. It is the last stage in the distribution process”. (Berman 2010) Morris (1979) defines the concept “retail brands” as “consumer products produced by or on behalf of, distributors and sold under the distributor’s own name or trademark through the distributor’s own outlet”. According to Betancourt and Gautschi (1988) retail systems “provide consumers with goods and services for consumption or purchase activities”. These three descriptions of retail all seem to agree that (1) retail targets consumers and (2) retail comprises of physical products and sometimes services. With the rapid development of information technology and smartphones, the concept of retail may need to be revised at regular intervals due to the changes these technologies bring to consumption patterns.

The point of having a company is to have a business. While business itself is an achievement, most companies are looking for a sustainable business. In essence, the job of the strategist is to understand and cope with competition (Porter 2008) or to make competition irrelevant by creating a new market lacking competitors (Kim & Mauborgne 2005). For most companies the key to building a sustainable business is innovation, be it incremental or radical.

According to Eric Jackson in an article on Forbes in April 2012, the rate at which technology develops is all the time getting faster. (Jackson 2012) He suggests that the Internet world has had 3 generations: web 1.0 between 1994-2001, web 2.0 in 2002-
2009 and mobile starting from 2010. Web 1.0 was represented by companies like Netscape, Yahoo!, AOL, Google, Amazon and eBay. Google, established in 1997, (Google Inc. 2012) was able to arrange the information chaos of the Internet better than companies like Altavista, Excite and Lycos. Then web 2.0 companies like Facebook, LinkedIn and Groupon realized the importance of social connections. MySpace connected music lovers, Facebook college students and LinkedIn the white-collar professionals. However, Jackson argues that few web 1.0 companies have so far been able to properly adapt to the social space of web 2.0. He, for example, calls Google’s attempt at web 2.0, Google+, a “ghost town”. In his article, the mobile generation is represented by companies like Instagram that have made use of the growing penetration of App Store compatible smartphones in a new way: they have viewed mobile devices as their primary and the desktop Internet as a secondary priority. Jackson (2012) claims few web 2.0 companies that built their original success with desktop computers have been able to successfully transition to the mobile space. As an example he mentions Facebook, the company that had the largest initial public offering (IPO) of $16 billion in the history of the ICT field. (TechCrunch 2012) Facebook had $3.1 billion in revenues in 2011, but none of this revenue was from mobile although more than half of its users access Facebook through mobile. (Los Angeles Times 2012)

All companies looking to build sustainable business, including retailers, need to innovate. A mobile revolution is dramatically reshaping the strategic playfield with a quickly growing number of people daily using smartphones for leisure as well as utilitarian tasks. This research aims to find out what kind of opportunities the transition to mobile phones able to install and run applications brings to traditional retailers of physical goods, and what kind of strategy these retailers could pursue to keep their business healthy – or to disrupt the market. How companies are able to adapt to these new trends will ultimately determine the winners and losers of retail in the digital age.

The retail landscape has changed dramatically through the years. However, recent research on retail is lacking in the domain of smartphones, apps or the motivations, that affect the spending of people in this digital age. Therefore, given the fast development of smartphones, their effect on retail business models and the general lack of scientific research in this area, there is a clear a need for research on the issue.
1.2. Research questions

This thesis aims to provide a framework to identify the best digital strategies for traditional brick-and-mortar retailers. To accomplish this we will first need to understand what factors affect the behavior of the modern consumer – why we buy, what is consumption and how it has developed all the way to the present. The gist of this thinking is formulated in the first research question.

1. What are the underlying drivers behind human consumption?

Technology and business innovation has affected how people exchange value with each other. How does technology interact with the drivers behind human consumption? Exploring the opportunities created by digital devices and strategies is essential to establish an understanding of what kind of a playfield modern retailers are operating in. This notion is reflected in the second question.

2. How do digital and physical aspects of consumption affect the behavior of consumers?

Once we have identified the opportunity space, we will use the research methods presented in chapter 3 to design a framework to guide physical retailers when they are sketching their digital strategy. This is reflected in the third research question articulated below.

3. What kind of digital strategy should a traditional brick-and-mortar retailer have?

1.3. The composition of this thesis

This thesis will be divided in the following chapters

1. Introduction – This part provides the background information that justifies the research questions presented in this same chapter.
2. Literature Review – This chapter goes through existing research in traditional brick-and-mortar retail and digital technology to lay the foundation for the research.
3. Research Methodology – The methodology of the research will be described in detail
4. Results – The results of the research will be presented
5. **Devising a framework based on the results** – The findings of the research will be combined with existing information to create a concrete solution that answers the research questions.

6. **Discussion** – The results, chosen approach and execution of the research will be assessed to document what the thesis contributes to the academia and industry, why this structure was chosen for the thesis and what implications for future research arise.
2. Literature review

The purpose of this literature review is to provide the basic information of the trends in existing research within the scope of this thesis so that the reader has a better understanding of the premises of the empirical research following in chapter 3.

Shopping is a commonplace activity in modern society, but how did it come about? Why do we buy? There are many reasons and opinions in different fields. Psychologists have studied different human needs and have found cues on how the body and the mind influence our behavior, sociologists have observed how societies and nations develop, marketers have been looking at the best ways to communicate and deliver their offerings to customers, while engineers have strived to make the lives of the masses more convenient through technologic innovation. Shopping – and on the flipside retailing – has taken many forms throughout time. This chapter will go through the history of consumer culture as well as physical, psychological, societal and technological theories that explain how it got here.

2.1. Origins of shopping

2.1.1. History of trade and currency

Trade and currency are thought to play a big role in the history of shopping and the thesis will thus examine their development. A list of radical innovations that affected the way humans exchange value will also be made.

During caveman times it was every man for himself. The first man would pick up a stick and if another man would want to have the same stick, a fight would occur. The invention of barter alleviated the problem since cavemen were then able to trade goods and services with each other. Some parts of the world would trade with tea, others with fur or tobacco and some with rice. However, problems arose when a person had something you wanted, but you didn’t have the exact goods that the said person was looking for. Around 2500 BCE the Egyptians and Mesopotamians are said to have used metal rings as neutral currency, the precursors of coins that surfaced in Lydia in 687 BCE. (Klaffke 2003)
Coins were practical in small everyday purchases, but slightly inconvenient to carry around when it came to large purchases. China produced the world’s first paper money during the Tang dynasty (618-907 CE). In 1275 Marco Polo wrote about paper money after visiting China although hundreds of years would pass before the West first adopted paper money as currency; Sweden was the first in 1661, America followed in 1690, France in 1720, England in 1797, and Germany in 1806. (Klaffke 2003)

The cash register was invented in 1878 when Dayton, Ohio saloon owner James Ritty was suspecting that his staff members were stealing part of the proceeds from customers. With the help of his brother, Ritty invented and patented the fist mechanical cash register called “Ritty’s Incorruptible Cashier”. (Klaffke 2003)

The shopping cart was first two wire shopping baskets attached to a folding chair on wheels in the original contraption of Oklahoma City grocer Sylvan Goldman in 1936. Goldman patented her design in 1940 and received competition in 1946 when Orla E. Watson made his version of the shopping cart that could be stored by pushing one cart into another, much like the shopping carts of today. In 1949 Goldman handed over the patent to Watson in exchange for licensing rights. (Klaffke 2003)

The bar code was originally devised in 1948 by Bernard Silver and Norman Joseph Woodland – two grad students at the Drexel institute of Technology in Philadelphia. They overheard a conversation between a grocery retail chain president and a Drexel dean on speeding things up at the check out counter. The patent was issued in 1952 and the invention was put in commercial use in 1967 when a grocery store in Cincinnati adopted the technology. The bar code revolutionized the shopping process. (Klaffke 2003)

Credit cards were born on the night that Frank McNamara, the founder of Diners Club, left his wallet in another suit in 1949. The embarrassing situation at Major’s Cabin Grill in New York City got him thinking of ways consumers could tap into a line of credit with a restaurant instead of carrying cash. In February 1950 McNamara was back at Major’s Cabin Grill presenting the first universal credit card when the check came, a dinner referred to in the industry as “The First Supper”. In 1951, oblivious to the influence his invention would have in decades to come, he distributed 200 cards that were valid at 27 New York restaurants. Even before McNamara’s invention some
companies had metal cards for their preferred customers and employees. However, McNamara expanded the concept by allowing consumers to pay at different merchants. (Klaffke 2003)

**Barter** is no longer the standard method to most transactions, but it is still alive and well in the age of checks, credits cards and ATMs. A commercial artist looking for office space may offer logo design services free of charge in exchange for a free desk at an agency.

What are the next radical innovations of trade? **Computers? Smartphones? The Internet? RFID tags?** We will go deeper in to the recent developments technology of retailing in the following sections of this chapter.

### 2.1.2. Why do we buy?

One of the largest brick-and-mortar retailing companies, Walmart, had a yearly revenue of $419 billion in 2011 (U.S. Securities and Exchange Comission 2012) and a workforce of more than 2 million employees in a chain of 10,130 retail units in 27 different countries serving customers more than 200 million times per week. (Wal-Mart Stores Inc. 2012) On the other hand, Amazon.com is one of the largest online retailers with a yearly revenue of $48 billion. (U.S. Securities and Exchange Comission 2012)

Retailing is clearly a big business. But why do we buy? What are the underlying drivers behind human consumption?

Kotler, a widely cited researcher in the field of marketing, posits that everyone has biogenic and psychogenic needs at any given time. Examples of biogenic needs are physiological states such as hunger, thirst and discomfort, while psychogenic needs allude to esteem, belonging and the need to be recognized. (Kotler 2000: 94)

Several psychologists have also developed theories explaining human motivation. Sigmund Freud’s theory stresses that there are many unconscious forces shaping human behavior and that there are several layers of abstraction for each need. A technique called laddering can be used to trace a person’s motivations from the instrumental to the terminal one. (Figure 1) The technique breaks down the question “Why is that important to you?” into attributes (A), consequences (C), and values (V) (Reynolds 1988)
Abraham Maslow studied the mechanism of particular needs at particular times. In his view people have a stack of needs prioritized based on their importance at each time from the most important to the least important. (Figure 2) To give an example to demonstrate the point the need for food overrides the need for a meaningful and satisfying occupation. With hunger looming a person is likely to accept a boring but sufficiently paying job if a more interesting job is not available so that he/she is able to eat. The most important needs are physiological needs followed by safety; love, affection and belongingness; esteem; and self-actualization. (Maslow 1990)

Frederick Herzberg distinguished between satisfiers delighting and dissatisfiers distressing the individual. He argued that the sole absence of dissatisfiers does not motivate consumers enough to purchase a product, but their presence may inhibit buying behavior. Based on Herzberg’s theory marketers should avoid dissatisfiers as well as identify and focus on the most important satisfiers to win consumers from other marketers. (Herzberg 1973)

![Figure 1: Example of the laddering technique described by Reynolds (1988)](image)
2.1.3. Utilitarian and Hedonic Shopping

Traditional consumer research suggests that there is a basic duality driving most human behavior, including shopping: “(1) a utilitarian outcome resulting from some type of conscious pursuit of an intended consequence and (2) an outcome related more to spontaneous hedonic responses”. (Babin 1994). Shoppers in Victorian England were among the first to view shopping as a hobby – a relaxed social activity without set objectives. Many scholars propose the Great Exhibition of 1851 during Queen Victoria’s long reign as a turning point for shopping practice and attitude. The event is widely reported to have been overwhelming by its scope with exhibitors from 32 different countries showcasing goods from all over the world at the Crystal Palace. The Great Exhibition was a consumer paradise, which is believed to have affected shopping habits and consumer culture. While the event was not a marketplace it introduced the concept of browsing and strolling through a selection of goods to the visitors. Never before had the public been aware of so many things they would want or need. (Klaffke 2003)

The majority of traditional consumer research has focused on the utilitarian aspects of shopping (Bloch and Bruce 1984). Utilitarian consumer behavior is goal-driven,
deliberant, and efficient – it incorporates a mentality similar to a profession. Christmas shopping appears to some consumers as a chore, which requires substantial effort to accomplish. The notion of accomplishment is interesting also since a utilitarian shopper may find value in the shopping process only if the chore is completed successful. (Babin 1994)

On the other hand, the hedonic value of shopping has been studied less often. (Sherry 1990a) Hedonic value is more subjective and than its utilitarian counterpart and results more from fun and enjoyment than from task completion. (Holbrook and Hirschman 1982) Thus, hedonic shopping is closer to entertainment than problem solving and in this respect hedonic shopping is free from the work-like undertone of utilitarian consumption. Some have also pointed out that hedonic shopping bears similarities to the task orientation of utilitarian shopping motives, only the “task” is concerned with hedonic fulfillment, such as experiencing fun, amusement, fantasy, and sensory stimulation (Babin 1994).

Common denominators can be found in the results that different researchers have got. Herzberg’s concept (Herzberg 1973) of dissatisfiers and satisfiers bears similarities to Babin’s utilitarian and hedonic shopping. Utilitarian shopping is goal-driven and aims to solve problems – or eliminate dissatisfiers – where as hedonic shopping is pleasure seeking and oriented towards obtaining satisfiers. In the Maslow’s hierarchy of needs model, the lower levels such as physiological and safety needs are closer to dissatisfiers than satisfiers since their function is to ensure survival rather than delight a person.

In this respect, traditional consumer research suggests that shopping primarily serves to (1) solve our problems and (2) entertain us.

2.2. Technologic advancements in modern consumer culture

Back in the days, coins, shopping carts and credit cards revolutionized the way we shop. More recently, digital technology has brought many changes to the sites, processes, subjects, and objects of consumption. Chapter 2.2 aims to give the reader a rudimentary understanding of the technological advancements that affect retail.

Lehdonvirta suggests that “three distinct waves of digital consumption” have emerged: “the online shopping wave”, “the participatory consumption wave”, and the “virtual
consumption wave”. (Lehdonvirta 2012). The “online shopping wave” refers to the first successful e-commerce solutions that emerged in the mid-1990s. The “online shopping wave” was mostly built on a paradigm called Web 1.0, which will be discussed in more detail in chapter 2.2.1. The mid-2000s introduced the manifestation of “the participatory consumption wave”, Web 2.0, that made Internet surfers co-creators of content and gave rise to services like social media. Web 2.0 and its influence on consumption will be covered in chapter 2.2.4. Chapter 2.2.6 will focus on topics related to “the virtual consumption wave” where the consumption objects themselves have become digital as described by Lehdonvirta (2012). Chapter 2.2.8 will introduce the changes that the growing smartphone installed base has brought to consumption.

2.2.1. Web 1.0

The Internet took its first steps in the 1960s when a group of researchers of USA-based ARPA – Advanced Research Projects Agency – discussed connecting computers to form a “Galactic Network”, but it wasn’t before the mid-1990s before consumer Internet had established a permanent foothold in society. (Leiner et al. 1997)

The early stages of mainstream Internet were based on a paradigm called Web 1.0, a hierarchical publishing model where content on the Internet was consumed by masses, but created by few. (O’Reilly 2005)

The first applications of electronic commerce (e-commerce) surfaced in the mid 1990s. The earliest applications focused on business-to-business (B2B) selling when order forms, delivery schedules, pricing and availability could be centrally processed for convenience and efficiency. Many of the transactions were standardized and repetitive, which first resulted in very simplistic website design. (Underhill, 2000)

One of the most famous business-to-consumer (B2C) examples of e-commerce started in 1995 when Jeff Bezos discovered the rapid growth of Internet usage and decided to start selling books online. He created a company called Amazon.com (www.amazon.com) and decided to focus on service, selection and price. The site was successful right from the beginning due to its focus on books and efforts to maintain the largest selection available anywhere. Analysts believed that Amazon.com’s approach had several distinctive advantages in its user interface. Later on Amazon.com expanded
from books to also electronics, small appliances, a bridal registry, toys, and even diamonds. It is now the world’s largest online retailer. (Berman 2010)

Early on scholars identified that the strong points of shopping online were limitless selection, price comparison, convenience, speed and availability of information. The most suited application areas of webshops were thought to be simple transactions that didn’t require extensive touching and feeling of the products to be purchased. (Underhill 2000) In this sense the first form of online shopping was seen as a problem solver and dissatisfier remover rather than a vehicle of hedonic needs.

On the flipside, online shopping was criticized for failing to provide the sensual and social benefits of traditional store-based retail. According to Underhill there are “three big things that stores alone can offer shoppers”: “touch, trial or any other sensory stimuli”, “immediate gratification”, and “social interaction”. Underhill also hints that online shopping is more about “orderly, planned acquisition of goods” as opposed to “sensual, experiential aspects of shopping” (Underhill 2000: 218).

The rise of e-commerce made it increasingly challenging for brick-and-mortar retailers to operate with the traditional toolset of enticing customers with broad assortments, low pricing, and extended store hours and the entertainment aspect of retailing. “Entertailing” and “shoppertainment” gained ground as a key competitive tool in the 90s. The threat of Internet-based shopping made many retailers leverage the “brick-and-mortar” advantages that online shopping was unable to provide: higher levels of service, highly trained staff, and an entertaining and fun retail environment. Nike has been close to the experience business with its Niketown stores, the main aim of which has been to build the brand image and stimulate buying at other retail outlets (Burke, 1997; Pine II & Gilmore 1998). The atmosphere of many retailing spots started shifting from venues of orderly acquisition of goods towards exciting event spaces (Buss, 1997).

Later on, Denegri-Knott and Molesworth’s study of eBay (2010) revealed how consumers use the massive selection of goods of the site to stimulate imagination and fashion daydreams. In fact, they noted that most purchases in online sites are only taken as far as the checkout stage, and cancelled just before any payment occurs. In this sense, far more people stroll around the digital shopping arcades than actually spend money on them. From a managerial point of view, this may sound as if digital shopping sites are
failing to fulfill the needs of consumers, but from a hedonistic perspective, the observation suggests that digital shopping sites have psychological significance beyond their immediate economic impact. The first wave of digitalization supported rational buying behavior, but recent research implies that people have later discovered how to adapt digital shopping for their hedonistic purposes.

2.2.2. The Long Tail phenomenon

Chris Anderson highlights the fact that the online world has (1) changed manufactured “hit culture” to a more organic “niche culture” in shopping and (2) revolutionized distribution of digital goods (Anderson 2004).

Hit culture

Previously marketplaces needed to be geographically relevant as they were only able to serve a clientele within a physically convenient reach. Physical retailers of music CDs are only able to carry albums that sell at least a specific number of copies each year in order to be able to cover the rent of shelf space. This creates a culture where retailers are forced to drop obscure titles that sell some, but not enough to cover the rent for shelf space. In the mind of a perfectly logical retailer, hit franchises clear the bar of expected sales easily and are thus safe items to carry. Movie theaters are only able to show films that are capable of gathering the critical mass of audience that keeps their bottom line out of the red. One would think that retailers would sell all high quality goods, but surprisingly an abundance of critically acclaimed entertainment exists that is not able to clear the bar set by retailers. Anderson mentions “The Triplet of Belleville”, a film that was nominated for an Oscar, but only opened on six screens in USA. In this respect, traditional hit culture has partly been generated by the economics of supply and demand and the birth and death of blockbuster franchises were highly subject to what titles retailers decided to carry. Online shopping has changed this. According to Anderson (2004) Amazon.com lists 2,3 million books where as where as the typical Barnes & Noble bookstore has an inventory of 130,000 books. The interesting part is that the 130,000 highest selling titles on Amazon.com actually represent a smaller part of the total revenue than the titles below the top 130,000 combined. This means that the market of the books unavailable at physical bookshops is even larger than those available. Anderson calls this phenomenon The Long Tail. (Figure 3) “Suddenly, popularity no longer has a monopoly on profitability”. (Anderson 2004)
Digital goods

The departure from traditional business modeling becomes even more apparent with digital distribution of digital goods. Shapiro and Varian (1999) introduce the term "information goods" that refers to anything that can be digitized to a string of 1’s and 0’s. Anything from music to news articles, databases, movies, Web pages and baseball scores can be called information goods with this definition. Information is costly to produce but very cheap to reproduce, which results in high fixed and minimal variable costs while Brick-and-mortar retailers are bound by the restrictions brought by the variable costs baked in physical distribution. Wal-Mart may appear egalitarian in its offering, but its distribution cost structure requires it to focus on CDs that sell at least 100,000 pieces. As the previous chapter, "Hit culture", pointed out, the massive selection of webshops selling physical products is made possible by the low cost of listing products in an online store as well as efficient searching and browsing features that allow customers on the Web to find what they are looking for. However, an even bigger revolution in the music industry has been to transmit music files over the Web instead of shipping CDs from one part of the world to another. Apple’s iTunes and Spotify have realized this and are now one of the most important players in the music industry. iTunes related net sales for Apple in 2011 were $6.3 billion and Daniel Ek, the
CEO of the recently established online music distribution platform Spotify, says in April 2012 that “It is not unlikely that, already this year, we have a turnover of more than SEK 6 billion ($887 million”). (U.S. SECURITIES AND EXCHANGE COMMISSION 2011; Andrews 2012). As Anderson (2004) points out, with digital distribution “a miss sold is just another sale, with the same margins as a hit”.

2.2.3. Retailing channel strategies

With the exciting new opportunities that digital consumption has introduced, one may wonder if selling everything on the Web is the only way businesses should go. Selling physical and digital goods on the Web has indeed given retailers new convenient ways to serve their customers, but does this alone mean that physical retail has become obsolete or that a retailer cannot use multiple channels? Berman (2010) introduces two core concepts of modern retailing; Single-channel retailing refers to serving customers through one retail format. The format could be based on a physical store, catalog retailing, direct selling or web retailing. Multi-channel retailing refers to retailers selling to consumers through multiple retail formats.

Berman explains the difference of the two concepts: “A new retailer often relies on single-channel retailing, whereby it sells to consumers through one retail format. As the firm grows, it may turn to multi-channel retailing and sell to consumers through multiple retail formats. This allows the firm to reach different customers, share costs among various formats, and diversify its supplier base.” (Berman 2010)

A popular form of multi-channel retailing is bricks-and-clicks (or sometimes clicks-and-mortar), which refers to a retail approach combining of web retailing and brick-and-mortar stores. According to Berman (2010) the bricks-and-clicks approach is a model with currently the most sales growth potential. He argues that “the Internet is much more effective as a marketing vehicle, while the store is – and will remain – the more effective purchasing vehicle” because shoppers search products on the Internet and go to see, touch and ultimately buy the product at a local store.

Contrary to Berman’s statement, not everyone buys products at the store as demonstrated by the competition between Blockbuster and Netflix in the recent years. Blockbuster was running an online business as well as a brick-and-mortar business – a strategy with dissimilar domains of expertise and difficult to execute – while Netflix got
the upper hand in the rivalry by focusing solely on the online side with no physical retail locations. In 2005 Blockbuster was dominating the US home video rental business with Netflix as the clear underdog. Surprisingly, in 2010 the price for the stock of Netflix had gone up from the $11 range of 2005 to the $140 whereas Blockbuster filed for bankruptcy in September 2010. (Stross 2010; Fritz 2011)

2.2.4. Web 2.0

The dot-com bubble in the fall of 2001 brought a lot of attention to the Internet and all things digital. The Web was said to be over-hyped, while in fact bubbles and shakeouts often coincide with technological revolutions. (Pérez 2002) The said shakeouts “typically mark the point at which an ascendant technology is ready to take its place at center stage.” Web 2.0 was a major paradigm shift that was considered to have risen out of the ashes of this bubble. (O’Reilly 2005)

As stated in chapter 2.2.1 discussing Web 1.0, the Internet started out as a hierarchical publishing model where only few had access to the technology and the required skills to distribute information. Web 2.0 democratized the online world by technologically empowering the average surfer who could finally publish and share his or her content such as pictures, videos, texts or files more conveniently. Early representatives of Web 2.0 were sites like Wikipedia (founded 2001), Facebook (launched 2004), Flikr (launched 2004) and YouTube (launched 2005). To underline the importance of the paradigm shift that was brought by Web 2.0, Time magazine selected “YOU” as the person of the year 2006 – an honor usually granted to heads of state and other power figures. (Grossman 2006)

Actually, Web 2.0 didn’t introduce technologically anything new, but more of a matured mindset. The Internet started out as a giant Bulletin Board System (BBS) that allowed users to exchange software, data, messages, and news with each other. The late 1990s saw a surge of popularity in homepages where users could share their own thoughts in the forms of blogs, photo albums or something else and this was also the time when e-commerce companies like Amazon.com started to emerge. Web 2.0 is still hardly old wine in new bottles since the sharing methods it introduced are fundamentally different from the ones of the BBS age of the late 1970s. (Kaplan, & Haenlein 2010)
Lehdonvirta (2012) points out that “the first new digital consumer was arguably the ‘pirate’ that got involved in the distribution of digital goods”. As Lehdonvirta states, much of Web 2.0 and social media literature is oblivious to file sharing that was clearly the first piece technology that dramatically changed the role of consumers. Perhaps the authors of such literature have chosen the said approach due to the controversial nature of the activity. However, some commentators say that piracy is here to stay and “the best way to avoid the piracy is to make it obsolete by providing a better, legal alternative”. (Raivio 2009)

Wikileaks is a whistleblower site where in the spirit of Web 2.0 anyone can submit information to be published – especially information that governments or institutions of similar power are alleged to bewrongfully denying from the public. Pontin (2011) believes that Wikileaks has been a good innovator as it has strengthened freedom of speech and helped to build trust by creating a more transparent society. In 2009 a soldier and IT administrator of the US Army, Bradley Manning, was accused of submitting US diplomatic cables to Wikileaks, which later made some of the cables globally available on its website. Before the cables were made public, video footage surfaced from supposedly the same source as the cables. The footage featured US army soldiers in a helicopter shooting civilians on a street at a warzone, including a Reuters reporter. (Bumiller 2010)

The public was enraged when Wikileaks posted this note hinting their governments had been hiding such information from them. Until that point, diplomacy had been something that happened in closed cabinets with high-level confidentiality. Many diplomats and politicians in USA and other countries immediately voiced their objection for the actions of Manning as well as Wikileaks after the disclosure. Due to the fact that some in the diplomatic circles were blaming Manning and Wikileaks – the mere messengers of the incident instead of the institutions behind the reportedly corrupted actions – some spectators drew the conclusion that diplomats in general resists the Web 2.0 way of thinking, the thinking where everyone is a publisher. However, recently articles in diplomatic journals have surfaced suggesting gradual change as the actions of Wikileaks have been formally recognized and it has even been concurred that Web 2.0 is here to stay irregardless of whether public institutions like it or not. Cull concludes that rather than trying to resist the change brought by technology,
diplomats should adapt and embrace the new opportunities introduced by the Web becoming social. (Cull 2011)

Web 2.0 has also had a profound impact on the roles consumers in consumption. Bulletin boards, price comparison sites, blogs and instant messengers connect the N-Geners (a term coined by Don Tapscott to refer to consumers of the net generation) together to a mass that is not shy to scrutinize offerings and sales pitches. Familiarity builds trust and thus it’s not surprising that people who N-Geners know best influence their buying decision more than anyone else. Since technology has facilitated peer-to-peer communication, mass media and advertising have found themselves in a situation where they will have to work harder to earn the trust of the average person not willing to take their authority for granted anymore. (Tapscott & Williams 2006: 52)

N-Geners refuse to be passive consumers and have a “desire for choice, convenience, customization and control by designing, producing, and distributing products themselves”. As an example of this, file sharing accounted for more than half of the world’s Internet traffic in 2006. In addition to consuming and distributing content, N-Geners are creating new content and art with the help of digital distribution and tools available on the Web. An example of this “remix culture” is e.g. fans using their PCs to synchronize Japanese animé art with music to create a new art form called animé music videos. (Tapscott & Williams 2006: 52-54)

The remix culture is related to the “prosumer” movement where consumers actively take part in the production of the goods or services that they consume. The virtual world Second Life is a great example of users creating a considerable share of the content of a service. In Second Life users interact with each other digitally as avatars – factual or fictional characters the users have created to represent them inside the virtual world. The developer of Second Life, Linden Labs, has audaciously created a world that has little set script and few limitations to what players are able to do. Linden Labs actually produces less than 1% of the content in Second Life itself and the rest is created by an enthusiastic community of players that actively spend more than 23,000 hours a day building new content within Second Life. (Tapscott & Williams 2006: 124-126)

In the DIY (do-it-yourself) phenomenon, prosumers have formed communities around existing products ranging from Apple’s iPod to Toyota Prius to create self-made
modifications and extensions. Technology has made it possible for these hobbyists to unite and easily share notes on their individual projects aiming to customize any commercial or non-commercial objects to fit the needs of their community. Customers make remixes, hacks as well as fan-made designs related to products, which has inspired many companies to extend their hand and make their customers co-innovators. In the past, it took automotive companies a decade to bring out the pick-up truck after farmers had for years been removing the back seats of their cars to store their tools and other cargo. More recently, BMW released a digital design kit for people interested in making their own designs of telematic features to be added in future BMW models. The reaction was positive as thousands responded with their own designs. Encouraged by the feedback BMW is now hosting its own virtual innovation agency. Also, high-end shoe designer John Fluevog on the other hand has a platform where people submit their designs of new shoes for consideration and the best ones get integrated into real products. Fluevog doesn’t offer royalties, but adorns every adopted shoe design with the name of the original designer. (Tapscott & Williams 2006: 127-131)

2.2.5. Social Media

A widely known manifestation of Web 2.0 available for anyone with an Internet connection is social media. Kaplan and Haenlein define social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content.” (Kaplan, & Haenlein 2010) Evans (2008, p. 37) defines social media as “participatory online media where news, photos, videos, and podcasts are made public via social media websites through submission.” Safko (2010, pp. 3-5) defines it by simply stating that social media is a media people use to be social. He continues that social media gives people new tools to interact with each other and marketers a new way to build trust with customers. It is a modern method of communicating with consumers that complementing and sometimes even replacing telephones, billboards, radio, television or printed materials.

Singh (2011) explains social media from a business perspective. He emphasizes that the real-time data collected from social media sites help companies understand consumers’ preferences and engage directly with them, helping the companies develop branding strategies that suit the needs or their clientele better. He uses an example of a new
Subway sandwich in the market that consumers dislike and mention the sandwich on their social networking sites. Social media gives consumers a voice and businesses should be prepared to deal with good and bad feedback. Companies can monitor the feedback in social media to respond quickly to negative feedback and to modify or withdraw the disliked sandwiches to serve their customers better.

Säntti R. and Säntti P. (2011) suggest that social media is a flexible term open for several varying of definitions. It is one of the important phenomena of the decade and it affects society, organizations and people alike. Technology is one of the key foundations of social media, since it has allowed participants to interact and build trust with each other in the roles of consumers as well as producers. In social media all users can generate content. Säntti & Säntti also define Web 2.0 more as a technological foundation that enables the development of concepts like social media. (2011)

Safko (2010) divides social media into 15 categories. Table 1 lists the categories with examples of each social media type.

Table 1: Social Media types (Safko 2010) and their examples (Safko 2010 with additions by Sonninen 2012)

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Social Networks</td>
<td>Facebook, LinkedIn, Mixi, Renren, VK</td>
</tr>
<tr>
<td>2. Publishing</td>
<td>Wikipedia, Blogs, The Internet Forum</td>
</tr>
<tr>
<td>3. Photo Sharing</td>
<td>Pinterest, Instagram, Flickr, Picasa, MyPhotoAlbum</td>
</tr>
<tr>
<td>4. Audio</td>
<td>PodCast.com, Digg, iTunes</td>
</tr>
<tr>
<td>5. Video</td>
<td>YouTube, Hulu, Netflix, Metacafe, Vimeo, Youku</td>
</tr>
<tr>
<td>6. Microblogging</td>
<td>Twitter, Weibo, Jaiku, FriendFeed</td>
</tr>
<tr>
<td>7. Livecasting</td>
<td>Ustream, Justin.tv, BlogTalkRadio, AOL AIM</td>
</tr>
<tr>
<td>8. Virtual Worlds</td>
<td>Habbo Hotel, Second Life, DreamVille</td>
</tr>
<tr>
<td>9. Virtual Gaming</td>
<td>MMORPG: World of Warcraft, Xbox Live</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>10. Productivity Applications</td>
<td>Gmail, BitTorrent, SurveyMonkey</td>
</tr>
<tr>
<td>11. Aggregators</td>
<td>Digg, iGoogle, MyYahoo!, Yelp</td>
</tr>
<tr>
<td>12. RSS (Rich Site Summary)</td>
<td>Mozilla Firefox, Safari, Internet Explorer</td>
</tr>
<tr>
<td>13. Search</td>
<td>Google Search, Yahoo! Search, Technocrati</td>
</tr>
<tr>
<td>14. Mobile</td>
<td>Foursquare, BrightKite, Jaiku</td>
</tr>
<tr>
<td>15. Interpersonal</td>
<td>Skype, Apple iChat, AOL instant messenger</td>
</tr>
</tbody>
</table>

The striking aspect about Safko’s table (2010) is that there is a separate category for mobile (14.) while as of 2012, all of the categories can be accessed using a smartphone as well as a desktop computer. In this sense, a separate “mobile” category is unnecessary. The rapid development of mobile technology and its effect on consumption will be discussed in more detail in chapter 2.2.8.

Social media has affected consumption in a multitude of ways. Trust has been a key factor affecting online shopping behavior. Consumers are “infamously cautious, distrust new online suppliers and use perceptions of reputation as proxies of trustworthiness”. (Goode & Harris 2007) Harris and Dennis (2011) found out that very few customers trust advertising, what companies say about themselves or the companies’ willingness to listen to their customers and that in the mind of an average customer the most trusted source of information is “a person like myself”. Harris and Dennis speculate that the trustworthiness of different people affecting the purchasing behavior of a consumer on Facebook is “(i) ‘real’ friends, experts in the relevant topic; (ii) other ‘real’ friends; (iii) Facebook friends, experts in the relevant topic; (iv) other Facebook friends; (v) expert blogs and independent review sites; (vi) celebrities; and (vii) reviews on the e-retailer site”.

Social media has given easy access to connections close and distant alike, which has led to easier appraisal of online vendors by quickly asking friends as well as recommending online outlets directly to connections. This has lowered the barrier for online shopping
since good experiences – just as well as bad experiences – travel quickly when communicated across social media. This means that online retailers using dubious methods will be weeded out from the ecosystem quickly and the best retailers will be rewarded for their good actions by a loyal and growing customer base.

The advertising agency with the name “JWT” points out that the development of social media has given rise to startups like Clothia that provide consumers with a “virtual fitting room”. (Figure 4) In this virtual fitting room consumers can combine their own digital photographs with clothes for sale on the website to understand what they would look like if they bought the goods offered by the service. The users can then share the amalgamated images on social media to get instant feedback from their friends. (JWT 2011)

![Virtual Fitting Rooms](https://www.jwtintelligence.com/2011/12/100-things-to-watch-in-2012/)

**Figure 4**: Virtual fitting rooms (screenshot from JWT 2011). The number 91 refers to the fact that this is the 91st entry on the publication. http://www.jwtintelligence.com/2011/12/100-things-to-watch-in-2012/

JWT also mentions the beverage company uFlavor that makes consumers co-creators of their products. (Figure 5) Users are free to create their own personalized recipes, bottle designs, with an option to test and sell their creations through social media for a cut. (JWT 2011)
2.2.6. Virtual consumption

Digitalization has introduced new and more convenient ways to consume the physical goods like food, tools or apparel, but it has also had a profound effect on the consumption objects themselves. Ritzer et al. introduce sites, processes, subjects and objects as the most important concepts of consumption (Ritzer et al. 2001: 421) and mention that digitalization has affected all of them. The Internet has diversified the venues and processes of consumption as webshops have opened more options to brick-and-mortar and catalog retailing. Smartphones have made it possible to shop from anywhere. Web 2.0 has empowered consumers to become prosumers that actively communicate with each other and take part in the design, production and distribution of goods and services. With large hard drives and fast Internet connections the consumption objects themselves have also changed as people can now download music on their device from an online shop or streaming service instead of buying it on CD. People can also buy their avatar in a virtual world a new purse instead of getting a physical one themselves.

As a concrete example, people have been enjoying music for centuries and while one can strike a chord in a physical musical instrument, the music itself has always been an intangible experience if we purposely ignore the fact we enjoy the physical vibrations of air that our ears translate to music. In this sense, there isn’t much difference if one is
listening to, let’s say, Vivaldi’s “Four Seasons” on a CD or a music file downloaded from the Internet. However, when comparing virtual purses in a virtual world instead of real purses in the physical world the similarity is not obvious anymore. Physical CDs and streamed music files essentially sound the same when played through loudspeakers, but one cannot bring home the groceries in a virtual purse. Why are people willing to spend money on something virtual and to what extent can physical consumption substitute the virtual? Have consumer become less materialistic?

The sociology of consumption suggests that the answer to the latter question is “no”. Featherstone (1991) identifies three main perspectives on consumer culture in his book Consumer Culture & Postmodernism.

The first one is the “Marxist production of consumption” perspective that views consumptions as something mass media together with capitalist and other forces have constructed to lure people to consume in order to open up new markets for the expansion-hungry production industry. (Miller 1987)

Some other researchers have seen goods as tools that people use for building social bonds and distinctions. In this approach, consumers are seen to communicate symbolic meanings implicit in commodities to express status, class, group membership, difference or self-identity. The satisfaction derived from goods comes mainly from their use as social markers, and only secondarily from their physical function (Douglas & Isherwood 1980).

Thirdly, consumption is also seen as an individual, hedonistic process. (Campbell 2004; Featherstone 1991) Featherstone argues that particularly urban everyday life is aestheticised with rich imagery that can evoke dreamy and pleasurable sensations. For an individual, modern consumer culture also resembles artistic expression in the way it mixes consumption styles creatively. (Lehdonvirta et al. 2009)

Much of the research above was created in the 20th century using physical goods and services when the digitalization of society was only about to ignite. However, the views presented imply that in many cases consumption is not a result of simply physical or mechanical problem solving, but also an attempt to fulfill the need of belonging to a social group, to get positive a reaction from others or to express oneself. The results of
the research per se don’t alone give a reason to believe that virtual consumption objects would be any less valuable than physical ones.

Also, in chapter 2.1.3 utilitarian and hedonic motives were identified as the two main types of consumption drivers. Here in chapter 2.2.6 the article of Douglas & Isherwood (1980) suggests social motives should be added to this list.

2.2.7. Gamification

Marketers have long ago noticed that turning consumption into a game is good for business. Coupons, frequent flier miles and loyalty bonuses have been in use since long ago to incentivize patrons to consume even more. Smartphones have taken this phenomenon to the next level as an increasing number of businesses are using virtual points, levels, challenges and other elements from video games to increase demand and control the behavior of consumers. (Schwartz 2011) Games utilize the hedonic needs (“This game is so fascinating that it is exciting and entertaining for me to master it”, chapter 2.1.3), social needs (“I want to impress my friends with my skills in this game”, chapter 2.2.6) and utilitarian needs (“I want to train myself using this game”, chapter 2.1.3) that humans have.

Foursquare is a prominent smartphone application that allows users to “check in” to venues like restaurants, clubs, bars, supermarkets or basically any locations to unlock points and achievements or “badges” as collectible virtual rewards. The person with the most check-ins at a venue during a specific period will become the “mayor” of the said venue – a title that holds no other direct value than what Schwartz calls “bragging rights”, a privilege corresponding to the consumption theory (Douglas & Isherwood, chapter 2.2.6) that aims to build social bonds and distinctions. (Schwartz 2011) Some badges are location-specific, which makes a Foursquare a modern day digital replacement for the passport where some people have collected stamps of immigration offices in different countries.

A single check-in contains a lot of interesting information from the point of a retailer. A person that has checked in for example a café in a shopping mall is communicating “this would be a great place to meet up” to his/her friends and “I’m here, got anything special for me?” to the café owner. (Schwartz 2011)
A proof of the appeal of Foursquare is that some people are willing to go as far as manipulating their scores with artificial check-ins to gain the virtual respect of others. Some cheating users have been asked to be taken down by the developer on Foursquare message boards. This suggests that the virtual achievements of users are perceived to be valuable by the user community of the application. (Schwartz 2011)

The in short, Foursquare incentivizes going to physical locations in the following ways (Figure 6):

1. Leaderboard among your friends, the more check-ins you have, the more points you have
2. Mayorships: the person with the most check-ins to a venue during the last 60 days will have the honor of being the “mayor” of the venue.
3. Specials: some venues offer perks for check-ins or mayorships, e.g. hamburger chain Hesburger gives a discount for a meal for each customer that has checked in and the pizza franchise Domino’s Pizza gives a 50 % discount to the mayor for one purchase every day.
Figure 6: Four screenshots of the Foursquare application on iPhone. Top-left: the badges that the user has gathered from his check-ins. Bottom-left: the search page. Top-right: the map view showing venues close-by. Bottom-right: list of check-in unlockable special offers around the area.
2.2.8. Mobile consumption

In the recent years, information society has rapidly developed and changed the daily lives of people. Internet penetration went from virtually zero to majority access across Europe within a decade (Webster 2006: 124 & Eurostat 2006). Mobile telephony started growing in the mid-1990s and by 2003 mobile phone subscriptions had passed the number of landline subscriptions for the first time in history (Castells 2007). According to ITU (International Telecommunication Union) landline subscriptions peaked in 2005 when fixed telephone lines per 100 people reached 19.3 globally. Afterwards the figure has been on a steady decline and in 2011 the number had already slumped to 16.6 per 100 people. Meanwhile, mobile subscriptions went up in the same time frame from 33.9 per 100 people in 2005 to 86.7 per 100 people in 2011. (ITU 2012)

Not only is the mobile handset penetration strengthening, a quickly growing number of mobile handset shipments are now smartphones. According to Gartner, worldwide smartphone shipments in 2009 accounted for 172 million units, which formed 14% of all mobile devices delivered, while in 2011 smartphone sales reached 472 million units making up 31% of all mobile devices sold. (Gartner 2010 & 2012)

How are smartphones different from ordinary mobile phones then? There is no standard industry definition, but the website www.phonescoop.com defines a smartphone as “A category of mobile device that provides advanced capabilities beyond a typical mobile phone. Smartphones run complete operating system software that provides a standardized interface and platform for application developers.” (http://www.phonescoop.com/glossary/term.php?gid=131, referenced 20.5.2013)

Traditional mobilephones, often referred to as “feature phones”, have simple applications such as an address book to store contacts, a clock or a calendar, but the main purpose of the device is traditional telecommunication with other people using voice calls and text messages.

Smartphones, on the other hand, allow installing applications by third party developers and this paradigm shift has been one of the most important factors contributing to the global shift towards smartphones. Marketplaces, where third party developers can publish their own applications or “apps”, are called app stores. These app stores have grown rapidly in the recent years and Apple’s App Store now offers more than 500,000
apps available for download (Apple Inc. 2012). Research suggests that people are also spending more and more time with the apps they have on their smartphone. In June 2011, Flurry found out that for the first time ever the average smartphone user daily time spent in apps surpassed desktop and mobile web consumption. The average user now spends 81 minutes per day using apps. This number was 43 minutes just one year before in June 2010. (Newark-French 2012) For comparison the average American watched 311 minutes of television every day in 2011 with not much change from 2010. (Nielsen 2011) Meanwhile, among US teenagers voice calls had declined 16 % to 572 minutes a year corresponding to 48 minutes a month between Q3/2010 and Q3/2011.

Based on these figures it is fair to say that the difference between an ordinary mobile phone and a smartphone is that the former is used mostly for calling and text messaging while the latter has a broader usage leaving actual voice calls to the minority.

While the time spent using computers, mobile phones and the Internet is increasing, brands and advertisers are not keeping up with the change. As shown in Figure 7, (Meeker & Wu 2012) mobile devices represented 10 % of all time spent on media where as the advertising dollars and euros of mobile represented only 1 % of the amount of money that was spent on advertising on various media. Interestingly, time spent on print was down to 7 %, but it was still able to attract 25 % of the advertising money going around. In short, media consumption habits of people are changing faster than most companies even realize, which presents lucrative opportunities for the bold among companies navigating towards the future of consumption. The opportunity is there, but who will be the one to make use of it first and how?
On the other hand, the fact that mobile devices are making the distribution of advertising easier than ever also means that marketers face harder competition when reaching out to the attention of the consumer. (Figure 8) (JWT 2011)

The share of Internet traffic originating from mobile devices is on a steady rise. Figure 9 illustrates mobile traffic as a percentage of total global Internet traffic. The ratio passed 10% for the first time in 2012 and seems to still be in a steady rise. (Meeker & Wu 2012; StatCounter Global Stats)
Digitalization is also changing the brick-and-mortar shopping experience. (Figure 10) Shoppers are able to select the products they would like to buy online before entering the store or alternatively in the store with a mobile device and have the goods collected, packed and waiting to be picked up. According to JWT this means less waiting in line at the cashier and more flexible delivery options. (JWT 2011)

Another application changing the brick-and-mortar experience of shopping is Foodie, which focuses on buying groceries online and enjoying different foods through recipes. The application has a collection of various recipes for cooking at home, a shopping
memo function, a mobile shopping option as well as a store locator service. (Figure 11) Foodie was originally released in 2010 by the startup Digital Foodie. (http://yritys.foodie.fm, referenced on 20.5.2013)
Figure 11: Four screenshots of the Foodie application on iPhone. The 2 images on the left side represent the “Products” view where the user looks at the information of individual products. The top-right image shows the view where users can shop for items and have the delivered to their home. The bottom-right image shows the recipe function.
2.2.9. Pricing of digital goods and services

How should a company price its website or application? As many spectators have concluded especially the format and distribution of information goods are becoming increasingly digital and some researchers believe that objects will get a new meaning in digital era. (JWT 2011) (Anderson 2004) As consumers are having relatively easy access to the data forming the information goods and services as well as a good capacity to distribute it, the vendors of information goods and services will need to think of new ways to create value to their customers.

Chris Anderson (2004) introduced the concept of diminishing cost of shelf space in the online world. In the pre-online world, supply and demand were highly location-specific as clients were only able to conveniently shop in locations close to their area. Online shopping made the cost of listing products for customers to browse virtually zero, which removed a barrier of entry and cleared space for competition.

In his book “Free” (2009) Anderson takes the concept further and talks about the pricing strategies of digital goods and services. In the online world, everything is just a click away and if service A decides to make itself a paid service, service B can conquer the same market by making itself free. As Anderson explains in his book, this doesn’t mean that services shouldn’t expect to have any revenue – it’s just that consumers want to have more of a say in the business model used.

In 2008 the members of the Monty Python team discovered that fans had uploaded tens of thousands of their videos on YouTube. Initially distressed by their discovery, the team later decided to open an official Monty Python YouTube channel with regular updates of the most popular Monty Python clips in high quality videos and they decided to offer all of the content free of charge. In the end of their open letter they pleaded to all of their fans to “soften” their “pain and disgust at being ripped off all these years” by clicking on links and buying their movies and TV shows. Three months later Monty Python’s DVDs had reached 2nd place on Amazon.com’s “Movies and best-sellers” list, with an increase in sales of 23,000%. This example proves that new, creative ways to monetize may often be more profitable than asking to be paid upfront before delivery. (Anderson 2009)
Companies can also put a price tag on their digital services even with the threat of copying if they have something else such as convenience to offer as a justification for the price. Spotify is a service that provides consumers with an easy access to a massive collection of music at a low cost. While downloading pirated music on the Internet is relatively simple, for most of Spotify’s customers, easy access to this massive collection is enough for them to pay the small fee required to access the service. (www.spotify.com, referenced 20.5.2013)

Using physical motivational objects to extend a digital product is another way to justify an above-zero price point. Some bands have experimented with selling physical novelty items like T-shirts or cassette box sets that come with download options. (Figure 12) While anything in the digital world can be copied and distributed in the blink of an eye, objects inhabiting the physical realm represent a more challenging design process and cost structure, which provides information goods’ vendors with an interesting tool against piracy. (Figure 12 & JWT 2011)

Figure 12: Will physical goods become motivational objects in the digital era? (JWT 2011)

2.3. The underlying drivers to human consumption

Consumption has a long history and technological advancements have shaped it in many ways through out the years. Even with all the development in the ICT industry, the underlying drivers of consumption seem to have stood same through time. In
chapter 2.1.3 we identified the importance of utilitarian and hedonic shopping. In chapter 2.2.6 we discussed three other reasons behind consumption: “Marxist production of consumption”, “hedonistic reasons” and “consumption as a social bond builder”. Out of these three, the first one is not a phenomenon that rises out human needs, but rather through external production. However, the author argues that even produced consumption utilizes hedonic, utilitarian or social needs in human behavior. Even if the industry makes a consumer want a product, it is still probably because the consumer feels or is tricked in to feeling the product answers his/her hedonic, social or utilitarian needs. The second one, “hedonistic reasons”, is essentially the same as “hedonic shopping” described in chapter 2.1.3. The third one, “consumption as a social bond builder”, is something that was not discussed earlier, but the author believes it to be an important influencer of purchasing decisions. For the purposes of this thesis and as an answer to the first research question Q1 the following framework of three drivers behind human consumption is presented. (Figure 13).

![Figure 13: The proposed drivers of human consumption](image)

Based on the literature reviewed, this framework now includes “social needs” in addition to the “utilitarian needs” and “hedonic needs” discussed earlier and the framework will be utilized as the starting point when designing the set up of the qualitative research in chapter 3.
3. Research methodology

3.1. Research methods

The overall research approach of this thesis is based on the ‘constructive research’ approach, as conceptualized by Kasanen, Lukka and Siitonen (1993). Constructive research is a research method where a real world problem is examined and addressed with a creative solution, a construction. Constructive research (Figure 14) starts with a problem of practical relevance, observes it through a theoretical framework and produces a construction, a novel prototype attempting to solve the problem chosen. Finally, the practical applicability of the construction is evaluated and the theoretical contribution provided by the prototype is elaborated.

![Figure 14: Constructive research as described by Kasanen et al. (1993)](image)

The composition of this thesis will follow the flow of the following research methodology. The research will be carried out in four phases:

1. Theoretical analysis of future trends in retail and state-of-the-art mobile application development through a cross-disciplinary, academic literature review.
2. Empirical study consisting of a survey and interview with users of cutting-edge mobile applications Foursquare and Foodie that are changing retail.
3. Synthesis of the lessons of phases 1 and 2 to create a broader understanding of research problems 1 and 2.
4. Framework creation and conclusion.

The literature review deals with research that has been already conducted in the fields of retail as well as mobile applications. The goal of this phase is to provide a rigorous understanding of digital and multi-channel retailing.
Due to the fast moving nature of the ICT field, it is assumed for the purposes of this thesis that the academic literature available currently does not give a complete understanding of the current situation of digital retailing. To remedy this, interviews and surveys will be conducted with customers to find out why they have or why they haven’t used different consumer-oriented digital tools such as smartphone applications for shopping currently and why they shop in certain way. Consumers with smartphones will be able to voice their opinions on why they use certain services and what value it brings to them.

After the literature review and the qualitative research have been executed, the results will be compiled to formulate a comprehensive understanding of the factors influencing the different approaches retailers can take to serve consumers better in the age of digitalization and smartphone applications. Different data sets within this thesis may bring conforming or conflicting results, but their combination will bring the best overall understanding of the field. The synthesized lessons of the literature review and qualitative research will be then used to devise a framework that provides retailers with concrete suggestions on their digital strategy.

As stated earlier, this thesis approaches the topic from a constructive research angle. (Kasanen et al. 1993) Empirical research was chosen to support the literature review for this research because of the lack of academic literature addressing the research problem, and because of the approach of the constructive research methodology used. Qualitative material allows developing a deeper understanding of the research problem.

The qualitative methodology of this research was planned and carried out according to the scientific principles presented by Eskola and Suoranta (2008) and Nielsen (2000). Nielsen, a widely cited researcher in the field of usability, posits that while at least 15 test users are required to find all usability problems, having 5 people per test and maintaining an iterative design process provides the highest usability results per invested time ratio as shown in Figure 15. (Nielsen 2000) Nielsen’s approach is widely used in privately funded organizations e.g. companies because it emphasizes the efficiency of the research efforts over absolute accuracy when setting the size of test users. In short, it emphasizes creating data that is “good enough” while still being financially sustainable.
This thesis posits that Nielsen’s approach could be also be applied in the field of consumer research to achieve research projects that achieve reasonably accurate results, while simultaneously keeping the committed time and expenses at a moderate level.

![Usability problems found per test user](image)

Figure 15: Usability problems found per test user

The data collected in the survey and in the interviews will be sorted so that the answer of each respondent can be seen immediately after each question to give a comprehensive view of each question. These consolidated answers will then be compared with topics brought up in the literature review.

### 3.2. Research design and data analysis

The purpose to conduct the survey and interview is to find out whether the hypothetical 3 drivers of consumption presented in chapter 2.3 (Figure 13) apply in the digital world. The wording of the questions aims to expose social, hedonic and utilitarian patterns and their contexts in the usage of the applications. Social aspects are expected to be revealed by e.g. questions that measure interaction with other Foodie or Foursquare users. On the other hand, hedonic aspects are targeted by e.g. the question about Foursquare badges and Foodie recipe functions. Finally, utilitarian factors will be examined with questions targeting e.g. convenience in both applications. The gathered data will also examined through the same 3 lenses.
There are many cutting-edge applications changing retail, but the Foursquare and Foodie were selected to this study due to their ties with retailing and the author’s familiarity with them. Other applications are available as well and they are the subject of another thesis.

3.3. Survey

As described in chapter 2.2.7, Foursquare is a mobile application that turns moving around the city with your friends a game by awarding points and badges for checking in to venues. Foursquare incentivizes the visiting physical locations in three ways: leaderboards, mayorships and specials.

To estimate the impact of Foursquare usage to the traffic of physical stores, Survey 1 will be conducted. The survey is constructed so that it 1) gathers basic demographic data and 2) explores how the users utilize Foursquare including the digital, physical, social, hedonic and utilitarian aspects of the usage. The detailed questions of the survey can be found in Appendix 1: Structure of Foursquare Survey (Survey 1)

The survey respondents are selected by using the author’s personal Facebook page to invite the author’s Facebook friends using Foursquare to complete the survey. The invitations were especially targeted towards people who seemed likely to be users of the Foursquare service. The 9 respondents to Survey 1 are all between the ages 18 and 34 and came from 4 different countries. 3 of the respondents are female and 6 male.

Table 2: Backgrounds of the surveyees

<table>
<thead>
<tr>
<th>User</th>
<th>Nationality</th>
<th>Age</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>LY</td>
<td>China</td>
<td>25-34</td>
<td>Female</td>
</tr>
<tr>
<td>HS</td>
<td>Finland</td>
<td>18-24</td>
<td>Female</td>
</tr>
<tr>
<td>EP</td>
<td>Finland</td>
<td>25-34</td>
<td>Male</td>
</tr>
<tr>
<td>ML</td>
<td>Finland</td>
<td>25-34</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>Country</td>
<td>Age</td>
<td>Gender</td>
</tr>
<tr>
<td>---</td>
<td>-----------</td>
<td>-----</td>
<td>--------</td>
</tr>
<tr>
<td>SS</td>
<td>Japan</td>
<td>25-34</td>
<td>Male</td>
</tr>
<tr>
<td>TS</td>
<td>USA</td>
<td>25-34</td>
<td>Male</td>
</tr>
<tr>
<td>KK</td>
<td>Finland</td>
<td>25-34</td>
<td>Female</td>
</tr>
<tr>
<td>HT</td>
<td>Finland</td>
<td>25-34</td>
<td>Male</td>
</tr>
<tr>
<td>HH</td>
<td>Japan</td>
<td>25-34</td>
<td>Male</td>
</tr>
</tbody>
</table>

### 3.4. Interview

To better understand the implications of mobile shopping applications to retail, an interview on the usage of the application of the app "Foodie” will be conducted. The interview is constructed so that it 1) gathers basic demographic data and 2) explores how the users utilize Foodie including the digital, physical, social, hedonic and utilitarian aspects of the usage. The detailed questions can be found in Appendix: Structure of Foodie Interview (Interview 1).

The interviewees are selected using the author’s personal facebook page to contact friends who were expected to use the app based on whether or not they have connected their Facebook account with the the Foodie application. Out of the authors some 600 hundred Facebook friends, a few dozen have registered the Foodie application in their Facebook profile. All of these registered people will be sent an invitation to an interview regarding Foodie and 6 of them volunteered. The interviewees of Interview 1 are all male between the ages 26 and 32. The homogenity of the respondents is not surprising when the selection method described above is taken into account. The homogeneity in the nationalities of the interviewees is explained mostly due to the application Foodie being only available in Finland and UK at the moment.

As it was hard to predict how the interviewees would react to the questions asked, the semi-structured interview is selected. The semi-structured approach allows some planning and better consistency than a completely free approach, but leaves room to pursue interesting answers that come up during the interview. (Wengraf 2001)
<table>
<thead>
<tr>
<th>Initials</th>
<th>Age</th>
<th>Gender</th>
<th>Occupation</th>
<th>Nationality</th>
<th>Platform</th>
<th>Foodie Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR</td>
<td>26</td>
<td>M</td>
<td>Undergr. Student</td>
<td>Finland</td>
<td>Android</td>
<td>1st time user</td>
</tr>
<tr>
<td>HT</td>
<td>32</td>
<td>M</td>
<td>Grad Student</td>
<td>Finland</td>
<td>Android</td>
<td>1st time user</td>
</tr>
<tr>
<td>LL</td>
<td>29</td>
<td>M</td>
<td>Product Manager</td>
<td>Finland</td>
<td>Desktop</td>
<td>1st time user</td>
</tr>
<tr>
<td>NK</td>
<td>28</td>
<td>M</td>
<td>Tour guide</td>
<td>Japan</td>
<td>Desktop</td>
<td>1st time user</td>
</tr>
<tr>
<td>TL</td>
<td>29</td>
<td>M</td>
<td>Grad Student</td>
<td>Finland</td>
<td>iPhone</td>
<td>Advanced user</td>
</tr>
<tr>
<td>TS</td>
<td>31</td>
<td>M</td>
<td>Grad Student</td>
<td>USA/Finland</td>
<td>iPad</td>
<td>1st time user</td>
</tr>
</tbody>
</table>
4. Results

4.1. Results of the survey

The number of check-ins the survey respondents had collected varied between 50 and 2148 and the number of friends they had in the service varied between 6 and 105. This indicates that none of them was really a beginner with Foursquare. Around half of them had tried specials and the ones that hadn’t mostly reported the lack of good specials in their country as the primary reason not testing that specific function. Almost all users had experienced becoming a mayor of a venue. (Table 4)

Table 4: Foursquare usage statistics of the surveyees

<table>
<thead>
<tr>
<th>User</th>
<th>4sq usage</th>
<th>4sq friends</th>
<th>Check-ins</th>
<th>Mayor experience.</th>
<th>Specials experience.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LY</td>
<td>Monthly</td>
<td>28</td>
<td>129</td>
<td>0</td>
<td>1-3</td>
</tr>
<tr>
<td>HS</td>
<td>Hourly</td>
<td>11</td>
<td>297</td>
<td>3-10</td>
<td>1-3</td>
</tr>
<tr>
<td>EP</td>
<td>Weekly</td>
<td>34</td>
<td>50</td>
<td>1-3</td>
<td>0</td>
</tr>
<tr>
<td>ML</td>
<td>Daily</td>
<td>44</td>
<td>2148</td>
<td>10+</td>
<td>1-3</td>
</tr>
<tr>
<td>SS</td>
<td>Weekly</td>
<td>55</td>
<td>616</td>
<td>3-10</td>
<td>0</td>
</tr>
<tr>
<td>TS</td>
<td>Rarely</td>
<td>9</td>
<td>284</td>
<td>3-10</td>
<td>0</td>
</tr>
<tr>
<td>KK</td>
<td>Weekly</td>
<td>82</td>
<td>154</td>
<td>3-10</td>
<td>0</td>
</tr>
<tr>
<td>HT</td>
<td>Weekly</td>
<td>105</td>
<td>220</td>
<td>1-3</td>
<td>1-3</td>
</tr>
<tr>
<td>HH</td>
<td>Monthly</td>
<td>6</td>
<td>491</td>
<td>1-3</td>
<td>1-3</td>
</tr>
</tbody>
</table>

The survey revealed interesting attitudes among the respondents towards Foursquare. Most of them reported that specials (discounts and deals) had some influence on how
they planned and carried out their daily schedule where as opportunities to gain mayorships at venues didn’t have such a strong impact. Most respondents did not openly assign significant value to a high ranking on the leaderboard, although many of them mentioned that they either secretly or ”as a joke” tried to stay on top of the list. Interestingly almost all surveyees seemed to either like or even love the badges representing achievements within the Foursquare application. The common explanation was the fun of collecting the badges, a behavior that is reminiscent of collectors of postage stamps or stamps on a passport. (Table 5)

Table 5: Attitudes towards Foursquare among the surveyees

<table>
<thead>
<tr>
<th>User</th>
<th>Specials influence</th>
<th>Mayorship influence</th>
<th>Leaderboard influence</th>
<th>Badges</th>
<th>Brand pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>LY</td>
<td>No exp.</td>
<td>No</td>
<td>No</td>
<td>Like</td>
<td>Unfamiliar</td>
</tr>
<tr>
<td>HS</td>
<td>Some</td>
<td>Some</td>
<td>Some</td>
<td>Like</td>
<td>Unfamiliar</td>
</tr>
<tr>
<td>EP</td>
<td>Some</td>
<td>No</td>
<td>No</td>
<td>Like</td>
<td>Unfamiliar</td>
</tr>
<tr>
<td>ML</td>
<td>Some</td>
<td>No</td>
<td>Some</td>
<td>Love</td>
<td>Unfamiliar</td>
</tr>
<tr>
<td>SS</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>TS</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Like</td>
<td>Unfamiliar</td>
</tr>
<tr>
<td>KK</td>
<td>Some</td>
<td>Some</td>
<td>Some</td>
<td>Like</td>
<td>Unfamiliar</td>
</tr>
<tr>
<td>HT</td>
<td>Some</td>
<td>No</td>
<td>No</td>
<td>Like</td>
<td>Unfamiliar</td>
</tr>
<tr>
<td>HH</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
<td>Like</td>
<td>Unfamiliar</td>
</tr>
</tbody>
</table>
4.2. Results of the interview

This chapter examines the answers of the interviewees by question. The detailed collection of answers is in the Appendix: Summary of interview questions arranged by question.

1. Usage of Foodie.fm

The drivers of usage among the 6 respondents were as follows: Five users mentioned ordering food online, three mentioned viewing recipes and one mentioned making shopping lists as well as checking locations of grocery stores as the reasons behind Foodie.fm usage. The main use case among the respondents is thus ordering food online, which serves utilitarian needs of consumers. This question does not fully open the reason and context for the usage of the software, which leads to the next question.

2. Situations and frequency of Foodie.fm usage

Four out of six users mentioned identified using Foodie in the evening after work. The 1st time users spent between 10-30 minutes exploring the application and the check out process was faster than this for all users except AR and TS who needed tens of minutes to check out their purchased items due to usability issues (hidden button and counterintuitive availability of products).

3. Difference between ordinary shopping and shopping with Foodie.fm

All 5 respondents that indicated they were using Foodie to shop for items online mentioned that the fixed delivery pricing encourages them to focus on large order sizes of products. Two out of five of these online shoppers mentioned that they tend to focus on products that are heavy to carry and avoid frozen or quickly aging fresh products when using Foodie, which hints at utilitarian usage. However, the users of the recipe service also mentioned that Foodie brings diversity to their cuisine and that the absence of the app results in them buying their usual shopping cart of products, which is a hedonistic behavior.

4. Utilization of information and searches inside Foodie.fm

The product information played an important role to some users; one examined each purchase closely due to his allergy, another one decided not to buy Heinz Ketchup
because it didn’t have photograph of the product. All six users had tried using the recipe section of Foodie. Three out of six users had experience on shopping based on recipes. One user was not that interested in the recipes since he was focusing mostly on non-foodstuff items. One user thought the recipes were too exotic for him to cook. One user believed he was going to try the recipes some other time. It sounds like it was difficult for the respondents to get socially or hedonistically engaged if some of the basic utilitarian information is missing.

5. Effect of recommendations in Foodie.fm to buying behavior and recipe perception

The respondents didn’t believe the recommendations affected their behavior very much: little effect (2 respondents), no effect (1 respondent), structure of recommendation system unclear (2 respondents). It is unclear why the recommendations didn’t spark more interest than this.

6. Usage and usefulness of the social aspects inside Foodie.fm

The 5 people using Foodie for the first time hadn’t used the social functions of the app. The experienced user (around 20 total sessions) said he had used the social functions 2 times. The more people use social applications, the more useful it becomes for users to communicate with each other so if there is no critical mass using the application it may make little sense to use the social functions. Question 8 asks if the users know other Foodie users.

7. Influence of other users on perceived image of products and recipes

Three out of five respondents answers can be interpreted that “in the long run the opinions of other Foodie users may have minor effect on my usage”. The other 2 didn’t believe there was an effect. It is hard to guess why most users only saw recommendations having a small impact to their choices inside Foodie, but as discussed in question 6, a widespread usage of the app may be required before users get interested in social functions.

8. Situations of Foodie.fm usage with friends and family members
Two out of 6 respondents knew another person who is using Foodie, which hints that most respondents don’t have the ability to enjoy the social aspect of Foodie with real life acquaintances.

9. **Opportunities to improve social usage of the service**

Three out of six mentioned submitting own recipies, two brough up recipe competitions and one challenging others to suggest a recipe for a special event to encourage social usage.

10. **Concerns regarding privacy and their effect to the usage**

None of the 6 respondents were worried about giving personal information to Foodie. One user was concerned if the Foodie app had been updating his Facebook page with some updates. It seems that the respondents have learned how one should and should not behave on the internet or believe the internet is safe enough.

11. **General attitude toward online shopping**

The biggest drivers to shop online were lower price, wider selection and bulk products that have no best before date restrictions. Low price and focusing on bulk products is utilitarian behavior while a wider selection may be this as well or then possible hedonic behavior.

12. **Impact of the interview to future usage of service like Foodie.fm**

None of the respondents reported major changes in their life due to this experiment. However, three out of six said that they are now slightly more open to using Foodie like services for convenience e.g. when they are ill.

13. **Usage of Foodie.fm in the future**

Five out of six would use Foodie to save time, money or to remove the need to be at a physical location. These are all utilitarian needs. Why didn’t the respondents mention any hedonic or social aspects? Hard to say, but could it because of the platform not being mature enough yet.

14. **Other comments**
Prices for complete recipes and personally tailored suggested recipes were brought up.

4.2.1. Sketching an answer to the 2nd research question Q2

It seems the same drivers give rise to online shopping as traditional shopping. **First** online shopping solved problems. (Underhill, 2000) **Second** it became hedonic as demonstrated in the study related to Ebay by Denegri-Knott and Molesworth (2010). **Third** it has become social as suggested by the rise of of applications such as Foursquare and Foodie.

The research conducted in relation to Foodie and Foursquare showed that people initially had problem-solving-oriented and hedonic approaches to using the applications and after the application was established to be fun or useful, social usages started to appear.

If we look at the different sections of the Foursquare survey, the **badges** were very popular among the respondents. The answers reflected hedonic desire to collect as well as social comparison and competition with peers. **Mayorships** were almost as popular as badges, and they also brought about hedonic and competitive (social) behavior. The **leaderboard** function was the least popular aspect inside Foursquare and it catered mostly to social needs.

Meanwhile, the Foodie application seemed to be split between two major use cases – making ones life more convenient ordering especially heavy food items online and hedonic daydreaming around new recipies. Interestingly, many Foodie users said they would like to submit their own recipies and see submissions of friends when asked, how they would further develop the software. In this respect, the users were interested in having more social features that the application was lacking.

The literature review and results of this research suggest that the answer to the second research question Q2 (“2. How do digital and physical aspects of consumption affect the behavior of consumers?”) is that the digital space is an extension of our physical existence and the same principals needs are present. Thus, from the point of view of a retailer, the digital spaces has become a permanent extension of the physical one and a retailer hoping to thrive in comparison to his or her competition must address both physical and digital aspects of retail.
5. Devising a framework based on the results

Based on the results in Chapter 4 “Results” it is evident that retail no longer is only about physical shops and bargain sales. As the attention of consumers is shifting to smartphones and tablets (Newark-French 2012), it is becoming increasingly difficult to stay competitive in retail without any digital presence. The purpose of this chapter is to synthesize the results in the literature review and empirical research together to sketch a framework that a traditional brick-and-mortar retailer can use to craft its digital strategy.

5.1. Q3: What kind of digital strategy should a traditional brick-and-mortar retailer have?

5.1.1. Information goods and material goods

The 3rd research question asks “What kind of digital strategy should a traditional brick-and-mortar retailer have?”. Let’s start out by once more making sure that the definitions of “digital strategy”, “retail” and the actor engaged in “retail”, the “retailer”, are clear enough. It is also worth revisiting the two forms of goods once more: information goods and material goods. (Figure 16) (Shapiro and Varian 1999)

*Figure 16: Two types of goods*

Chapter 2.2.2 defined information goods as “anything that can be digitized to a string of 1’s and 0’s” and gave examples such as “music to news articles, databases, movies, Web pages and baseball scores. Information goods can be stored on a physical medium, but they can also be transmitted digitally. (Shapiro and Varian 1999)

Material goods means everything left outside the umbrella of information goods. Material goods refer to more traditional products than are physically bound and cannot be transformed into digital format. For example, a video cassette is a material good, but the movie stored inside it is an information good since the experience of watching a film is agnostic of whether it was played back from a video cassette or a digital file. Movies
can be sold inside physical media but also as a non-physical file downloadable from the Internet. Apples and chairs on the other hand are good examples of material goods as the utility they pose to us humans are bound to their physical existence. You can download a movie on the Internet and watch it, but you can’t download an apple and then eat it nor can you physically sit on a digital chair.

Chapter 1 briefly touched upon the definition of retailing in the following way:

“Retailing comprises the business activities involved in selling goods and services to consumers for personal, family, or household use. It is the last stage in the distribution process”.

For the purpose of this research, the author will slightly finetune this definition by adding that retailing excludes information goods and concern only material goods. The author expects retailers sell material goods and media companies sell information goods and related experiences.

Thus, the answer to the 3rd research question (“3. What kind of digital strategy should a traditional brick-and-mortar retailer have?”) will be focused solely on retailers of material goods. The reason why information goods is left out from this definition of retailing is that it seems that most, if not all, information goods will in the future be distributed digital without a physical medium such as a USB stick, DVD or cassette. Why? If all distribution is digital, this leaves little purpose for physical shops and thus traditional physical retailing. Examples of this phenomenon are the success story digital music distribution platform iTunes and video streaming service Netflix outrivaling physical retail giant Blockbuster, which filed for bankruptcy later (Stross 2010; Fritz 2011). Information goods will continue to exist in a digital form, and while how a producer of information goods handles tasks like product development and marketing is certainly not trivial, the theme would be the topic of another thesis and will be thus omitted here.

To reiterate, this thesis focuses on the sales of material goods and how new digital tools can extend this business of inherently physical products.

Let us go back to Figure 13 in Chapter 2 (presented once again here in Figure 17). The drivers of human consumption are social, hedonic and utilitarian. As the results in Chapter 4 also suggest, these drivers also seem to hold in the digital domain.
If the drivers of our behavior in both physical and digital context are driven by similar needs, what is the best way to create a comprehensive model combining the best of both worlds? Since retail has traditionally been a completely physical industry, the author expects that analyzing the separate contributions of physical and digital aspects of shopping and combining them in a meaningful way is crucial for any retailer that hopes to stay competitive in the fast pace of change. One good example of this was the rivalry of Blockbuster and Netflix that ultimately led to the demise of Blockbuster since it was unable to react to the changes brought by the digital age as quickly as Netflix. (Stross 2010; Fritz 2011)

5.1.2. Utilitarian drivers

If we look at Maslow’s Hierarchy of needs (Figure 2), physiology and safety related needs are at the bottom and thus the most important for human survival. These survivalist needs are clearly utilitarian and therefore one could argue that the most fundamental driver for shopping is also the utilitarian one. Examples of utilitarian contributions that a physical shopping experience brings are:

- Easy access and ubiquity of grocery stores favor physical shopping. The Foodie experiment showed that some test users didn’t bother shopping for food with the Foodie software because their local supermarket was just around the corner.
- Product catalogue visualization: Many Foodie test users reported that they haven’t come across a digital shopping experience that would make browsing and sampling for different products in a digital application easier than an old-fashioned brick-and-mortar store.

In the digital context this brings up the question ”does the piece of software you are planning to extend your retail presence with somehow make your user’s life easier”? The following examples of software serving the utilitarian needs of shoppers were created by the author based on the results of this research:
• Providing product, location, payment method or other information more conveniently. Foodie test users were searching for accurate product information digitally.
• Providing a method to make shopping physically more effortless. Foodie users preferred to shop for heavy items.
• Saving users time by eliminating need to go to shop. This was also something that came up with the users of Foodie.
• Giving discounted prices compared to the physical outlet. This was demonstrated in the "Specials" function of Foursquare and some Foodie users also asked for a discount feature.
• Wider offering in digital store compared to physical. AR indicated in the Foodie survey that he enjoyed this feature in online shopping.

5.1.3. Hedonic needs

Is shopping fun and enjoyable? If yes, then it tickles the small hedonist inside the human mind. Examples of physical hedonic shopping are:

• The ability to touch and experience to the fullest. The author assumes that digital interfaces are able to recreate audiovisual messages easily and other sensory stimuli only to a limited extent.

How can software cater to hedonic needs of human beings? Here are some examples provided by the author to demonstrate the point:

• Stylish visualizations of products that may be hard to realize the real world. This could be e.g. a detailed 3D model of a car that can be rotated on the screen in a way not feasible in the real world. Foodie users indicated that they were not impressed with the looks of the recipe service, but indicated it was handy so there is a lot of potential for further development here. Ideally, a service could provide more tools for daydreaming and thus facilitate hedonic consumption.

• A digital application has the potential to connect the retailer and the customer in new ways as represented by e.g. social media. This provides the retailer with a channel to surprise and delight the customer on a regular basis. The Foodie interview suggested that the users were interested in more social interaction with the service owner as well as other users, but felt that the platform wasn’t useful enough in this respect yet for them to use it.
• Elements of gaming and collecting can be added to make the digitally experienced shopping more fun as demonstrated by the Foursquare Survey. This could add loyalty and engagement with to the physical retail stores.

5.1.4. Social needs

Humans are social beings, and this explains our taste for sharing things with one another. Physical experiences can facilitate social interaction e.g. by:

• Enabling engaging multisensory experiences
• Interacting with other people in the physical world may just be the ultimate social experience

A digital service adds social value by:

• Since users value the opinion of other users more than the platform owner it is possible to improve the perceived credibility of a service allowing users to exchange information among themselves about the service and its contents as demonstrated by the Foodie interview.
• Registering shopping activities and communication status as demonstrated by Leaderboards and Badges in Foursquare.

5.1.5. The synthesis of physical and digital findings

The above suggestions on how the utilitarian (U), hedonic (S) and social (S) needs to consume can be addressed with digital tools have been compiled to a list of inspirational imperatives to the retailer in the boxes below (Figure 18):
Retailers can use these suggestions in their development workshops to identify potential that they could possibly unlock by extending their physical retail experience digitally. As an example a grocery store could address “U: Provide a wider offering” by offering the users a more extensive product offering through its app or website.
6. Discussion

6.1. Evaluating the research

This research provides the reader with a basic understanding on how a purchase is born in the mind of the consumer. It also goes on to analyze how the transformation to the digital age has affected this and provides concrete tips to retailers that would like to improve their value proposition to their customers using digital tools. The scope and findings of the research are typical to those of master’s theses, but closer examination finds strengths and weaknesses.

The literature review and theory section is rich and broad, maybe even to the extent of being too thorough. This may be a result of the fact that the thesis was written in several sprints over a long period time, which may have led to a slightly different focal point during each sprint. A more temporally focused writing approach might have brought improved focus and consistence.

Moreover, some of the sources quoted in the literature review e.g. newspapers are non-scientific. The usage of e.g. the Forbes article written by Jackson already in the introductory chapter of this thesis is a research style that may be frowned upon by some scholars as something too shallow. However, such usage was justified as mentioned in the beginning of the thesis and the reasoning for this approach was that some parts of mobile consumer internet move faster than traditional research creates results.

The constructive research method is selected as the methodology, but typically the last phase of constructive research tests the construct created empirically, while this thesis leaves testing on a speculative level. For example assumptions made when interpreting the data are not not verified, which raises the question if the assumptions are valid in the first place. This leaves room for further research.

The collected data brings many interesting insights. The two selected applications do provide good examples to how digital services are impacting consumer culture, and the thesis could also go deeper into why the said applications were selected for the research and what other alternatives there are. The author sees potential for further research here.
In addition, while the results of the thesis have been distilled from the literature review as well as the interview and survey, the link between data gathered and the conclusions drawn could be even stronger.

6.2. Contribution for theory

The research questions of this thesis were the following:

1. What are the underlying drivers behind human consumption?

2. How do digital and physical aspects of consumption affect the behavior of consumers?

3. What kind of digital strategy should a traditional brick-and-mortar retailer have?

Regarding the 1\(^{st}\) research question, the literature review came to the conclusion that the drivers of consumption are utilitarian, hedonic and social aspects. Traditional consumer research focuses on utilitarian and hedonic shopping and this research suggests that the social aspect is also important.

While the first research question focused on the physical side, the 2\(^{nd}\) research question focused especially how digital aspects extend traditional consumption. The conducted interview and survey suggested that these drivers are very similar in the digital world too. The author is unaware of similar research so it is possible that this may be an original finding of this thesis.

The 3\(^{rd}\) research question aimed to compile the findings in questions 1 and 2 into a list of concrete suggestions that would benefit a traditional retailer in the physical domain to stay competitive and innovative in the digital era. The contributions of the framework created for retailers is somewhat anecdotal and requires further testing before it can be counted as something contributing to theory.

This research also produced a new definition for retail that excludes information goods. The author suggests that retailers are the sellers of material goods while media companies sell information goods and related experiences.
6.3. Implications for practice

The results of this research give retailers, marketers and commercial application developers a valuable list of things to keep in mind when planning how to offer their customers more in the digital plane. The contributions to practice brought by this thesis are weaker than its contributions to theory, as the suggestions created in this research have not been verified.

Concrete implications for practice and retailers introduced by this research:

- Digital tools serve the same drivers for shopping as physical ones: utilitarian, hedonic and social. The author has not identified any limitations on how much this conclusion can be generalized, but
- The simplest digital applications bring utilitarian benefits. For example they may allow one to order heavy items conveniently with a smartphone and have the goods delivered to a given address eliminating the need to physically visit a shop.
- Another application can facilitate hedonic day dreaming by arranging recipes inside an application more conveniently than is possible in a physical space.
- Social aspects are the hardest ones to serve with a digital application since they tend to be dependent on whether the application has the required critical mass or not i.e. if there are enough friends of the users registered and actively using the application or not.
- Retailers can use these 3 digital tools to augment or complement their physical offering. In some fields such as retailing of information goods the dominant service model has become almost completely digital.

6.4. Implications for further research

This research is an introductory study to the psychology of shopping in the digital age. It answers some questions while raising new ones for further research.

The most interesting question is how useful the framework created in this thesis is to retailers. Further study should be allocated to evaluating the effectivity of the framework and other suggestions this thesis provides. The number of people sampled in interviews or surveys was selected to be small, and it would be interesting to see if the results stay consistent when the number is increased. The research focused on two
applications, Foursquare and Foodie, and it would be interesting to see how the inclusion of some other applications would affect the results. What kind of data would Pinterest, Twitter or some other application produce? Both tested applications are also a few years old so there may also be other interesting new applications out in the market.
References


TECHCRUNCH and CUTLER, K., Charts: Facebook’s IPO In Historical Context And Its Share Price Over Time | TechCrunch. Available:


Appendix 1: Structure of Foursquare Survey (Survey 1)

Foursquare: Survey/Kysely/アンケート

This survey is a part of my master's thesis and it has questions about your Foursquare usage.

1. Gender:
   a) male  B) female
2. Age group:
   a) 18-24  b) 25-34  c) 35-44  d) 45+
3. Nationality
4. How often do you use Foursquare?
   a) less than once a month  b) monthly  c) weekly  d) daily  e) several times every day
5. How many check-ins have you collected so far?
6. How many friends have you connected with on Foursquare?
7. How many times have you become a "mayor" on Foursquare?
   a) I haven't  b) 1-3 times  c) 3-10 times  d) More than 10 times
8. Do opportunities to gain "mayorships" affect how you plan or carry out your daily schedule? Why/Why not?
9. Have you tried any Foursquare "specials"? (e.g. you receive a discount at a cafe as a reward for your check-in)
   a) No b) Yes, 1-3 times c) Yes, 3-10 times d) Yes, more than 10 times
10. Do Foursquare "specials" affect how you plan or carry out your daily schedule? Why/Why not?
11. Do you value a high placement on the Foursquare "leaderboard"?  Why/Why not?
12. What do you think about "badges" in Foursquare?
13. Are you following any "pages"? Why/Why not?

Why do you use Foursquare?
Appendix 2: Answers to Survey 1

1. Survey answers LY

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Age</th>
<th>Gender</th>
<th>Foursquare usage</th>
<th>Foursquare friends</th>
<th>Check-ins</th>
<th>Mayor experience</th>
<th>Specials experience</th>
</tr>
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<tr>
<td>China</td>
<td>25-34</td>
<td>Female</td>
<td>Monthly</td>
<td>28</td>
<td>129</td>
<td>0</td>
<td>1-3</td>
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</tbody>
</table>

Do Foursquare "specials" affect how you plan or carry out your daily schedule? Why/Why not?

So far not affecting, I have not experienced specials much

Do opportunities to gain "mayorships" affect how you plan or carry out your daily schedule? Why/Why not?

not much, not too much interested in majorships

Do you value a high placement on the Foursquare "leaderboard"? Why/Why not?

No, not interested in this kind of competition

What do you think about "badges" in Foursquare?

could be surprise, not that engaging though

Are you following any "pages"? Why/Why not?

have not used this function before...

Why do you use Foursquare?

test the software, remember where I have been to, randomly check where my friends are, and have a belief of serendipity;)


2. Survey answers HS

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Age</th>
<th>Gender</th>
<th>Foursquare usage</th>
<th>Foursquare friends</th>
<th>Check-ins</th>
<th>Mayor experience</th>
<th>Specials experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
<td>18-24</td>
<td>Female</td>
<td>Several times every day</td>
<td>11</td>
<td>297</td>
<td>3-10</td>
<td>1-3</td>
</tr>
</tbody>
</table>

Do Foursquare "specials" affect how you plan or carry out your daily schedule? Why/Why not?

Ei oikeastaan, kerran se on ratkaisut kun emme osanneet päättää kahden ravintolan välillä mutta silloinkaan sen ravintolan "specials"illa ei ollut suurta merkitystä, lähinnä se oli meidän mielestämä hauska juttu jonka takia kokeilimme sitä!

Do opportunities to gain "mayorships" affect how you plan or carry out your daily schedule? Why/Why not?

riippuu minkä paikan mayorship on kyseessä. Se on ihan siistää olla jonkun makeen paikan mayor, mutta tyylisen paikkojen mayorshipit eivät kiinosta.

Do you value a high placement on the Foursquare "leaderboard"? Why/Why not?

Joskus on hauska kisailla kavereiden kanssa. lähinnä jos tietää että on mahdollisuus sada huikeat pisteet, silloin innostuu checkailemaan ahkerammin!

What do you think about "badges" in Foursquare?

se on ihan hauskaa, alussa niitä sai enemmän. Välillä tulee vertailtua kavereiden kanssa

Are you following any "pages"? Why/Why not?

en, en edes tiennyt että foursquaressa voi seurata "pages":eja

Why do you use Foursquare?

3. Survey answers EP

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Age</th>
<th>Gender</th>
<th>Foursquare usage</th>
<th>Foursquare friends</th>
<th>Check-ins</th>
<th>Mayor experience</th>
<th>Specials experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
<td>25-34</td>
<td>Male</td>
<td>Weekly</td>
<td>34</td>
<td>50</td>
<td>1-3</td>
<td>0</td>
</tr>
</tbody>
</table>

Do Foursquare "specials" affect how you plan or carry out your daily schedule? Why/Why not?

they could if the reward was nice enough

Do opportunities to gain "mayorships" affect how you plan or carry out your daily schedule? Why/Why not?

no

Do you value a high placement on the Foursquare "leaderboard"? Why/Why not?

not really. at the beginning they used to a little bit, as a kind of joke

What do you think about "badges" in Foursquare?

they are cool

Are you following any "pages"? Why/Why not?

no. didn't know such things exist

Why do you use Foursquare?

Using it I can find cool places somewhere around the city and checking in to venues itself is fun too

68
4. Survey answers ML

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Age</th>
<th>Gender</th>
<th>Foursquare usage</th>
<th>Foursquare friends</th>
<th>Check-ins</th>
<th>Mayor experience</th>
<th>Specials experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
<td>25-34</td>
<td>Male</td>
<td>Daily</td>
<td>44</td>
<td>2148</td>
<td>10+</td>
<td>1-3</td>
</tr>
</tbody>
</table>

Do Foursquare "specials" affect how you plan or carry out your daily schedule? Why/Why not?

No. Well. Maybe sometimes, but only if the offer is really cool. You know, not one of those "buy a pair of last season jeans with a 5€ discount"

Do opportunities to gain "mayorships" affect how you plan or carry out your daily schedule? Why/Why not?

No. Not really into that stuff.

Do you value a high placement on the Foursquare "leaderboard"? Why/Why not?

No, but secretly maybe yes. Having many points doesn't really tell much about the person.

What do you think about "badges" in Foursquare?

Super cool. I like to collect them. I also feel a bit jealous if one of my friends gets a badge I've had difficulties in getting.

Are you following any "pages"? Why/Why not?

Don't know?! Yes? KLM, I think.

Why do you use Foursquare?

Käytän foursquarea, koska haluan "'pitää päiväkirjaa'" menemisistäni sekä pysyä kartalla siitä, missä mun ystävät pyörivät. Oon joskus tsekannut tarjouksia sieltä, mutta
ne ovat yleensä aika turhia mun näkökulmasta, joten firmojen kanssa en ole niinkään paljon tekemisissä siellä.

En käytä foursquarea niinkään uusien paikkojen löytämiseen, ellen sitten näe jonkun kaverin chekkaavan sisään johonkin kiinnostavaan paikkaan. Yksi mun köpiskavereista bongasi yhden kirpputorin, kun huomasi mun chekanneen sinne, mutta muuten tuollaisia kokemuksia mulla on aika vähän. Ehkä kiteyttäen voisi sanoa, että mulle foursquare on eräänlainen pelimuotoinen päiväkirja, josta näen missä olen käynyt. Toisinaan muuten chekkaan sisään joihinkin paikkoihin, jos haluan kerätä niitä merkejä. (käyn siis fyysisesti siellä paikan päällä, en huija )

5. Survey answers SS

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Age</th>
<th>Gender</th>
<th>Foursquare usage</th>
<th>Foursquare friends</th>
<th>Check-ins</th>
<th>Mayor experience</th>
<th>Specials experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>25-34</td>
<td>Male</td>
<td>Weekly</td>
<td>55</td>
<td>616</td>
<td>3-10</td>
<td>0</td>
</tr>
</tbody>
</table>

Do Foursquare "specials" affect how you plan or carry out your daily schedule? Why/Why not?

No.

Do opportunities to gain "mayorships" affect how you plan or carry out your daily schedule? Why/Why not?

no. Motivations of gaining mayorships is not enough to change my daily schedule.

Do you value a high placement on the Foursquare "leaderboard"? Why/Why not?

basically not. cant find any motivation there.

What do you think about "badges" in Foursquare?

I dont care.

Are you following any "pages"? Why/Why not?
Why do you use Foursquare?

To share where I am in real time. It often gather my friends around the place. It also play a role of life logging. helps to remember the name of restaurants and nice cafes.

6. Survey answers TS

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Age</th>
<th>Gender</th>
<th>Foursquare usage</th>
<th>Foursquare friends</th>
<th>Check-ins</th>
<th>Mayor experience</th>
<th>Specials experience</th>
</tr>
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<tr>
<td>Finland</td>
<td>25-34</td>
<td>Male</td>
<td>Less than once a month</td>
<td>9</td>
<td>284</td>
<td>3-10</td>
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</table>

Do Foursquare "specials" affect how you plan or carry out your daily schedule? Why/Why not?

I have never used any specials, mostly because I always doubt that the store/cafe will know what I'm talking about (I feel that 4sq has such limited reach in Finland that clerks won't know what I'm talking about and I want to avoid that conversation). I've never looked at the 'explore' tab until now but see that some specials are located there nicely, but again unless there's wifi there then I can't check in and take advantage. That happened to me during the EU world cup at Sports Academy because I couldn't checkin to get the discount.

Do opportunities to gain "mayorships" affect how you plan or carry out your daily schedule? Why/Why not?

No. I don't have a smartphone so my Foursquare activity (checkins) are unfortunately limited to wifi connection. So, the places that I check in most have been right around my house or school (where I always have wifi). But I have never received any tangible benefits from being a mayor, and the other places I go regularly have such established mayors that I have no hope of ever ousting them (like school buildings, DF, VG in Otaniemi)
Do you value a high placement on the Foursquare "leaderboard"? Why/Why not?

I only get high on the leader board when I travel and thus check in at new places where none of my friends have been, and I get points fast. Then I get to the top of the leaderboard fast, but then there's no real benefit that I perceive (other than something emotional bonus but it's fleeting). Otherwise I don't checkin enough at home to ever do well on the leaderboard.

What do you think about "badges" in Foursquare?

They are a good draw to get me to use them, but I'd like some feature that says "check in at 2 more airports to get the ___ badge" or something so that I know what to shoot for. I'm sure there's a list somewhere, but there could be a note when I check in at an airport or something that says: "did you know...if you check in at 2 more airports then you'll get the ___ badge" or something. Does 4sq have badge achievements? Like they do in Hay Day, that helps to have goals to shoot for in the game.

Are you following any "pages"? Why/Why not?

No. I've never heard of them or been introduced to them. But if they are like lists I like those features in 4sq, especially if they are quirky and cultural. Like in Helsinki if they had the Font Walk on 4sq, I'd do that to act as a sort of mobile walking tour guide as well.

Why do you use Foursquare?

So, honestly I don't use foursquare that much. Like I said in the survey, I really only use it when I'm traveling and can shoot towards the top of the leaderboard with exotic checkins.

My use is restricted by free wifi, so I only check in when that is available. I've never browsed any spots because I have doubts that since 4sq is so lowly penetrated in Finland, those spots with presence in 4sq are not because they're good spots to visit, they're just savvy with social media.

And most of the friends I have on 4sq are ones I don't see much (especially the ones in the US) so that doesn't help me to seek out places where my friends are. Besides, the
more friends I have the less chances I get for being the 'first of friends to be here' points. It's also frustrating when the 'official' check in spot isn't clearly listed, or it isn't clear which one it is, if there are several. Like if someone hasn't found that place on the list and creates the spot, but then it makes duplicates...if that makes sense.

I guess to sum up, I don't get any interaction out of 4sq, I just put my input in but don't get any responses or actions because of it. It's one-sided. As I don't get anything occasionally from my usage, it's easy to forget all about it, which happens all the time.

7. Survey answers KK

<table>
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<tr>
<th>Nationality</th>
<th>Age</th>
<th>Gender</th>
<th>Foursquare usage</th>
<th>Foursquare friends</th>
<th>Check-ins</th>
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<td>Weekly</td>
<td>82</td>
<td>154</td>
<td>3-10</td>
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Do Foursquare "specials" affect how you plan or carry out your daily schedule? Why/Why not?

I would be happy to consider them. Not many places in Finland take advantage of them and I don't have roaming Internet abroad, so doing checkins is more difficult.

Do opportunities to gain "mayorships" affect how you plan or carry out your daily schedule? Why/Why not?

Somehow they encourage me to be more active/competitive in my checkins.

Do you value a high placement on the Foursquare "leaderboard"? Why/Why not?

Depends on the week. Sometimes when travelling or particularly active it's pretty high. Had a long break in Foursquare use when I lost my previous smart phone.

What do you think about "badges" in Foursquare?

They are cool. I want more. I like that I don't know what most of them are, so they often come as a surprise.
Are you following any "pages"? Why/Why not?

No. What is a "page"?

Why do you use Foursquare?

I like the game element, having a record of where I've been, seeing where friends are, using it as a discovery tool and, yes, the occasional bragging rights :D

8. Survey answers HT

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Age</th>
<th>Gender</th>
<th>Foursquare usage</th>
<th>Foursquare friends</th>
<th>Check-ins</th>
<th>Mayor experience</th>
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<td>105</td>
<td>220</td>
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</table>

Do Foursquare "specials" affect how you plan or carry out your daily schedule? Why/Why not?

No, haven't seen a special good enough yet to affect schedule. Would do so if I came across one.

Do opportunities to gain "mayorships" affect how you plan or carry out your daily schedule? Why/Why not?

No, its just a nice bonus if you do (become a mayor).

Do you value a high placement on the Foursquare "leaderboard"? Why/Why not?

No. I'm not that active in foursquare that I would follow it.

What do you think about "badges" in Foursquare?

It's nice to earn badges every now and then, sort of motivates you to check into different kinds of places.

Are you following any "pages"? Why/Why not?
No, in Foursquare? What are they?

**Why do you use Foursquare?**

Just for fun. When going out, might check on where other friends are and hook up with them later :)

9. **Survey answers HH**

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Age</th>
<th>Gender</th>
<th>Foursquare usage</th>
<th>Foursquare friends</th>
<th>Check-ins</th>
<th>Mayor experience</th>
<th>Specials experience</th>
</tr>
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<tbody>
<tr>
<td>Japan</td>
<td>25-34</td>
<td>Male</td>
<td>Monthly</td>
<td>6</td>
<td>491</td>
<td>1-3</td>
<td>1-3</td>
</tr>
</tbody>
</table>

**Do Foursquare "specials" affect how you plan or carry out your daily schedule? Why/Why not?**

日本ではそんなにspecialsがないのでよく分かりません (Specials are rare in Japan so I it’s hard for me to comment)

**Do opportunities to gain "mayorships" affect how you plan or carry out your daily schedule? Why/Why not?**

行った場所を覚えておくため、或いは友達に伝えるためにチェックインをするので、Mayorになることにこだまっていない (I check in to places to remember places or to communicate something to my friends so I am not too stuck on mayorships)

**Do you value a high placement on the Foursquare "leaderboard"? Why/Why not?**

あまりleaderboardを気にしたことがないです。(I haven’t really paid that much attention to the leaderboard)

**What do you think about "badges" in Foursquare?**

面白いと思います。何となく達成感もあるので。(I think they are cool. I also like the sense of achievement they give me)
Are you following any "pages"? Why/Why not?

pagesがあることを知りませんでした・・・(I did not know there’s a thing called "pages")

Why do you use Foursquare?

「場所」或いは「位置」に関する情報が蓄積してあるので。ただFoursquare上で楽しむというより、Foursquareでチェックインした情報をFacebook上にFeedして、Facebook上で友達と楽しむ感じです。(I use it to store place and location information. However, rather than enjoying only Foursquare itself, I share my Foursquare check-in information on my Facebook feed and interact with my friends over there.)

Appendix 3: Structure of Foodie Interview (Interview 1)


Kysymykset

1. Mihin käytät Foodie.fm palvelua? (esim. ruokalistan suunnittelu, ostosten suunnittelu, jaettu ostoslista, ruuan tilaaminen verkosta jne.)
3. Eroasiko ostoskäyttäytymisesi tavanomaisesta käyttäessäsi Foodie.fm palvelua?
5. Vaikuttavatko palvelun antamat suositukset ostospäätöksisi / mielikuviiisi tuotteista tai resepteistä?
6. Käytätkö palvelun sosiaalisia ominaisuuksia (mm. ostoslistan jako, kavereiden seuraaminen, tykkääminen, komментointi)? Jos et, miksi?
7. Vaikuttivatko muiden käyttäjien mielipiteet (tykkäykset, kommentit tai jakamiset) ostospäätöksi / mielikuviiisi tuotteista tai resepteistä?
9. Mikä saisi sinut käyttämään sosiaalisia toiminnallisuksia nykyistä enemmän?
11. Miksi ja mitä ostat netistä ylipäätään/Miksi et?
12. Miten tämä kokemus vaikutti käyttäytyseesi?
13. Millon käyttäisit Foodieta? Milloin et?
14. Muita kommentteja?

Appendix 4: Transcripts of Interview 1

1. Interview transcript: AR

Author: Kertoisitko ensin vapaasti miten Foodien käyttö sujui?


**Author:** Kestikö itse tilauksen teko kauan?

**AR:** Seuraavan päivänä, kun olin jo tottunut käyttöliittymään niin homma hoitui käden käänteessä. Ihan muttama minuutti. Sovellus pääosin toimii tosi hyvin.

**Author:** Jos mietitä ostokskäyttäytymistäsi fyysisessä kaupassa ja tämän sovelluksen yhteydessä, löydätkö jotain eroja? Kokemuksesi sovelluksesta on vielä vähäistä, mutta osaatko kuvitella jotain eroa käytössä pitkällä tähtäimellä?

**AR:** Omalla kohdallani en näe suurta eroa, mutta kun kerroin Foodie-tilauksestani avovaimolleni niin hän sanoi ensimmäiseksi, että ”tilaa paljon maitoa ja muuta painavaa”. Moni varmaan tilaisi paljon painavaa. Mulle sillä ei ole niin paljon väliä, mutta näin olettaisin suurimman osan ihmisistä toimivan. En tilannut pakasteita, vaikka
olisin niitä halunnut kokeeksi tilata, koska olisi ollut mielenkiintoista nähdä, tulevatko pakasteet oikeasti jäässä vai sulaneena. Vähän arveluttaa.

**Author:** Ihmiset suunnittelevat ostoksensa hyvin eri tasoilla. Osa tekee huolellisesti ostoslistan, osa improviso kaupassa. Sitten osa taas menee hakemaan kaupasta inspiraatiota katsomalla valikoimaa. Näetkö jotain rajoituksia tai mahdollisuksia Foodiessa tällä suhteen?


**Author:** Käytitkö tuotteita etsiessä hakukenttää?

**AR:** En?

**Author:** Katsoitko Foodiessa olevia reseptejä?

**AR:** Ihan paria, joo.

**Author:** Pystyisitkö kuvittelevasti käyttävän reseptitoimintoa säännöllisesti?

**AR:** Joo, mikä ettei. Välillä menee suoraan kauppaan töistä ilman käsitystä, mitä kokata niin siinä tilanteessa tällainen olisi hyvä.

**Author:** Käytätkö tällä hetkellä jotain reseptipalvelua vai millä tavalla ostat ruokasi?

**AR:** Yrityksen ja erehdyksen kautta, aina testaan jotain itse kehittämäni.

**Author:** Huomasitko sosiaaliset toiminnot Foodiessa?

**AR:** Joo, huomasin, että voisi kutsua kavereita ja muuta tällaista. Sitä profiiliakin olisi voinut laittaa kuntoon.
Author: Olitko Foodieta käyttäessäsi huolissasi yksityisyystä?


Author: Millä tavalla tällä hetkellä suunnittelet kaupankäyntisi?


Author: Onko työkaluina kynä ja paperi, digilaite vai oma pää?

AR: Kyllä melkein aina muistan ja luotan muistiin. Silloin kun on isot ostokset kyseessä käytän kynää ja paperia.

Author: Minkälainen tunne tästä Foodi-kokemuksesta jää?


Author: Mitä muuten ylipääätään ostat netistä ja mitä fyysisesti?


Author: Mitkä tekijät saa tilaamaan netistä ja mitkä fyysisesti.
AR: Kyseessä on pelkästään käytännöllisyys. Suomessa missä tahansa kaupassa vaatteet on liian lyhyitä mulle. Olen saanut selvitettyä muutaman valmistajan ja kaupan, joilla on mun kokoisia ja niiltä ostaminen on vaan niin paljon helpompaa.

Author: Ruokaostoksia tunnust tekevät edelleen fyysisesti, mutta onko mitään selkeitä tekijöitä, jotka vie suti nettiin tai kauppaan?


Author: Ootko kännykällä ostanut mitään viime aikoina?


Author: Miten näet omalla kohdalla tulevaisuuden ja Foodien kaltaiset sovellukset: millaisessa tilanteessa käyttäisit tai et käyttäisi vastaavaa?


Author: Entä isot bileet ja oluen ostaminen illanistujaisiin?
AR: Ei siellä ole alkoholia, koska suomen laki kieltää. Sehän olisi juuri se mitä opiskelijat ostaisivat varsinkin, jos kuljetus olisi halvempi. Mutta he, tuli vielä mieleen, että yks porukka, jolle tästä Foodiesta voisi olla hyötyä, on kotiäidit, jotka voisi kliksatella akutimmat tarpeet hoidettua. Kahdestaan avovaimon kanssa elellessä ei ehkä tule mieleen tällaiset ongelmat.

1. Interview transcript: HT

Author: Olet käyttänyt Foodie-sovellusta. Voisitko alkuun käydä läpi, mitä olet tehnyt Foodiessa ja miten?


Author: Sanoit katsoneesi niitä reseptejä. Tilasitko reseptin perusteella vai irtotuotteita?


Author: Minkälaisessa tilanteessa käytit Foodieta? Kotona, bussissa, töiden jälkeen, myöhään yöllä, lounastauolla? Kerro kontekstista lisää?


Author: Kuinka suuri osa ajasta oli tutkimusmatkailua ja kuinka suuri osa oli itse ostosuoritusta?


**Author:** Miten ostoskäyttäyymisesi eroaa Foodien kaltaisessa sovelluksessa fyysisestä kaupassa asioinnista?


**Author:** Aivan. Perehdyit niihin resepteihin ja haitko muita tietoja palvelusta reseptien lisäksi?
HT: Ihana lopuksi katsoi kaupan tarjoustuotteet. Tämä oli mielenkiintoista, mutta sitten tosiaan tämä kauppa vaihtui kokonaan ja tarjoustuotteiden katselu muuttui osittain turhaksi.

Author: Käytitkö tuotteiden hakuun vain visuaalista hakua vai käyttöko myös hakukenttää?


Author: Katsoitko palvelusta suosituksia ja vaikuttiko ne ostopäätöksiisi tai vaikutelmiin tuotteista?


Author: Vaikuttiko muiden käyttäjien kommentit tai tykkäykset omiin ostopäätöksiisi?

HT: Lähinnä naurattti, että se sama kaveri tykkää joka päivä siitä samasta pasta carbonarasta, ei vaikuttanut.

Author: Tunnetko ketään muuta, joka käyttää Foodieta aktiivisesti?

HT: Joo, eräs kaveri katsoo reseptejä sieltä, mutta ei ole koskaan tilannut. Taitaa käyttää silloin tallön sovellusta muistilistana fyysisessä kaupassa.

Author: Miten Foodien sosiaalisia toimintoja saisi tehtyä hyödyllisemmäksi tai houkuttelevammaksi?

siitä mielipiteitä niin sen voi jakaa, mutta ei mitään tällaisia lokkirjoitustyyppeisiä juttuja. Jos on jotain suositella muille niin se on mielenkiintoista. Kauppaaminen ja mainostaminen käy nopeasti ärssyttäväksi.

**Author:** Mitä ylipääätään ostat webista, mitä kännykkällä ja mitä ostat fyysisestä?


**Author:** Onko sitten mitään sellaista, mitä et halua ostaa netistä?

**HT:** Vaatteiden kohdalla täytyy ainakin käydä siellä kaupassa sovittamassa. Esimerkiksi ostan paljon kenkiä tietyltä valmistajalta netistä sen jälkeen, kun olen ostanut yhdet kengät heiltä ja tiedän heidän kokonsa. Vaatteet on aika riskialttiita, koska niiden istuvuudesta ei ikinä tiedä. Tää Foodie oli ensimmäinen kerta, kun olin tuoretuotteita netistä ja kokemus oli pääosin positiivinen lukuun ottamatta maksua. Toimitus ja tilaus olivat ristiriidassa siten, että multa oli veloitettu kahdesta herkkusienirasiasta vaikka muovikassissa oli vain yksi.

**Author:** Miten koet oman ostamisesi muuttuvan tulevaisuudessa ja miten tämä Foodie kokemus muutti sitä?

**HT:** Oli tosi hyvä kokemus ja voisin kuvitella ajan säästämiseksi ehkä tätä käyttävän.

**Author:** Milleissessä tilanteessa?

**HT:** Aina on perusteltua mennä fyysiseen kauppaan silloin, kun huomaa jonkin puuttuvan tai tarvitsee jotain nopeasti, koska Foodien toimitusaika on niin hidas. Toinen hyvä tilanne fyysiseen kauppaan menemiseen on vaikka kun kutsuu kavereita ja pitää tehdä jotain mielenkiintoista tuoreista tuotteista. Voisin kuvitella, että perus arkikokkailun, johon ostaa usein samoja tuotteita tai tietyjä vakio-ostoksia, jotka pystyy helposti ennakoimaan, tällainen Foodie sopii. Sitten myös toisaalta sellaiset ostokset sopii, joiden tekemiseksi täytyy nähä paljon vaivaa tai esim. matkustaa kauas.
2. Interview transcript: LL

Author: Käytit Foodie-palvelua. Voisitko kertoa, miten olet käyttänyt sitä?

LL: Ensin latasin sen aplikaation. Sitten mä olin laiska ja menin nettisivun kautta tilaamaan ne kamat. Mä olin siellä nettisivulla ja siellä oli jotain reseptejä automaattisesti. Otin sitten sieltä sen lohirullareseptin ja klikkasin sieltä ne tuotteet ostoskorin. Kävin korin läpi ja poistin ne, joita mulla oli jo kotona ja poistin myös sen sitruunamehu, jota siellä kaupassa ei ollut.

Author: Eli sitruunamehua ei voinut ostaa?

LL: Joo, juuri näin. Muut poistin sen takia taas, että mulla on niitä himassa jo esim. Wasabia.

Author: Eli käytit Foodieta pääasiassa ostosten tekemiseen. Näyttääkö jotain muita toimintoja, kuten esim. reseptejä ja muita?

LL: Siinä oli semmoinen näkymä, jossa oli monta reseptiä. Mä katselin sitä ja ne lohirullat näytti mielenkiintoiselta ja otin ne. Oon joskus käyttänyt niitä reseptejä mielestäni.

Author: Voitko kertoa lisää omasta käyttökontekstistasi?

LL: Taisin olla kotona töiden jälkeen. Ei ollut erityisen nälkä, mutta kytkin oli se, että Antti halusi korvattua. En muista, että olisi ollut kauhea nälkää tai mitään. Sushiin päädyin siksi, että tyttöystävän vanhemmat olisivat käymässä aikaisemmin ja me oltiin syöty sitä porukalla ja tarvikkeista oli osa valmiina.

Author: Miten Foodien tyyppinen ostaminen omalta osalta piirreistä fyysisistä kaupoista ostamisesta?


Author: Muuttuisiko asia, jos kauppaan olisi vaikka 900 metriä matkaa?

Author: Yhdessä haastattelussa tuli esiin se, että lähikauppoja on Helsingissä monessa nurkassa, mutta esim. Stockmannin Herkun palvelut olisi kiva saada toimitettuna kotiin. Tuleeko sinulle mieleen jotain palvelua, joka toimisi tällaisessa digitaalisessa yhteydessä hyvin?

LL: No olen itse esim. tehnyt remonttia, joten esim. rakennustarvikkeiden, vaikka 3 ämpäriä maalia voisi olla semmoinen, joka mulle on hyvä. Rautakauppoja ei ole hirveän monessa paikassa. Vaatteita en tykkiä ostaa, koska ei ikinä tiedä sopiiko ne päälle. Stockan herkku voisi myös ehkä toimia.

Author: Kerroit, että olit katsellut reseptejä. Pystytkö kertoa lisää, mitä muuta tietoa palvelusta käytön aikana?


Author: Vaikuttiko palvelussa olevat suositukset ostopäätökseen ja käsityksiisi tuotteista?

LL: Kyllä mä niitä pikaisesti katsoin ehkä, mutta en usko, että ne olisi vaikutaneet. En muista kuinka paljon niitä kommentteja oli. Ei oikeastaan vaikutusta.

Author: Tunnetko muita henkilöitä, jotka käyttää Foodieta?

LL: En kyllä tiedä. Kysyin itse asiassa siltä kuskilta, onko keikkaa paljon ja ilmeisesti ne ajaa kuitenkin suht usein tilauksia.
Author: Mitä olet mieltä tällaisen palvelun sosiaalisista toiminnallisuksista? Onko siitä hyötyä, että voi tykkäillä, kommentoida ja jakaa?

LL: Joo, kyllä mun mielestä. Jos tekee esim. itse ruokaa tai kaveri tekee ja tykkää, voi jakaa sen hyvän reseptin helposti ja siihen kuuluvat tuotteet.

Author: Monet miettii sitä, että mitä pitäisi jakaa sosiaalisessa mediassa ja mitä ei. Joidenkin mielestä sosiaalisessa mediassa jaetaan liian paljon arkisia asioita. Näetkö, että Foodien feedissä olisi riskiä siitä, että se tieto ei olisi relevanttia aina?


Author: Miten sosiaalisuudesta voisi saada Foodiessa enemmän irti?


Author: Olitko huolissasi yksityisyystä Foodieta käytäessäsi?

LL: En. Jos on huolissaan yksityisyystä niin sitä ei pidä laittaa Facebookiin tai Internetiin muutenkaan. Toisaalta on pakko antaa osoite ja puhelinnumero, jos haluaa, että ne tuo ne tuotteet kotiin.

Author: Annatko usein puhelinnumerosi tai osoitteesi netissä?

LL: Aina kun pitää ostaa jotain niin pitää yleensä antaa. Ei mulla taida noissa sosiaalisissa medioissa mitään olla.
Author: Jos puhutaan yleisesti ostamisesta netistä, mobiilista ja fyysisistä kaupoista, mainitsit aikaisemmin ne vaatteet ja että haluat niitä sovitaa: onko jotain muita kategorioita, jotka haluat ehdottomasti ostaa fyysisesti tai digitaalisesti?


Author: Miten tämä Foodie-kokemus vaikutti sun käsitykseen sun omasta ostamisesta tulevaisuudesta erityisesti tällaisten päivittäistavaroiden suhteen? Näetkö jotain muutoksia?


Author: Jos vedetään yhteen, missä tilanteessa siis käyttäisi Foodien tyyppistä sovellusta?

3. Interview transcript: NK

Author: Voitko kertoa, miten Foodien käyttö sujui?

NK: Se sujui tosi hyvin. En lukenut mitään ohjeitakaan. Ainoa asia, joka mietitytti oli se, että miten maksetaan ja siksi mä kysyn sitä sultakin, että käykö kortti. Se oli ainoa. Varmaa jossain lukee, miten ostetaan, mutta en löytänyt.

Author: Mihin kaikkeen käytit Foodieta?

NK: Ostin jotain nestetuotteita ja vessapapereita. Ne on painavia ja siksi ne on kätevä saada kannettuna kotiin. En ostanut mitään vihanneksia tai hedelmiä, koska mä haluan valita itse ne. Kukaan ei tiedä, mitä ne näyttää.

Author: Mitä kaikkea sä teit sillä Foodiella: käytitkö pelkästään ostamiseen vai katsoitko esimerkiksi niitä reseptejä?


Author: Minkälaisessa tilanteessa teit ne ostokset? Voitko kertoa kontekstista jotain?


Author: Ilmeisesti Foodie on kytetty S-Bonukseen. Kysyttiinkö sulta ovela toimitusta tuotaessa S-etukorttia?

NK: Ei.

Author: Hyvä pointti. Kuinka kauan se ostoprosessi kesti?

NK: Varmasta 30 minuuttia.
Author: Kuinka paljon siitä 30 minuutista meni itse ostamiseen ja kuinka paljon meni tutkimusmatkailuun sovelluksen sisällä?

NK: Itse ostaminen kesti varmaan vain pari minuuttia. Se oli pelottavan sujuva prosessi. Tuli semmonen tunne, että ”OHO! Joko mä ne ostin?” Amazonissa kysytään koko ajan, että ”oletko varma” ja ”oletko varma”.

Author: Eli ainoa ravintoaine, jota ostit oli juoma?

NK: Ostin myös riisiä.

Author: Kokkaatko paljon itse kotona?

NK: Joo.

Author: Käytätkö paljon jotain netin reseptipalveluja?

NK: Joo, kyllä mä.

Author: Luuletko, että tosta Foodien reseptipalvelusta olisi sulle hyötyä ja miten sä käyttäisit sellaista pitkällä tähtäimellä?

NK: Mulle olisi hyötyä enemmän, jos reseptistä näkyisi, että ”tätä voit tehdä tällä hinnalla”. Olisi budjetti ja että ”noi maksaa noin paljon”. Tämä olisi mulle hyvä. Se hinta per annos olis aika jees ja kalorilaskurit ja muut.

Author: Vaikuttiko Foodien sisäiset suositukset sun ostopäätöksiisi tai käsityksiin tuotteista?


Author: Siellä oli niitä sosiaalisia ominaisuuksia. Käytitkö niitä?

NK: En käyttänyt, mutta luin ihmisten kirjoituksesta siellä.

Author: Vaikuttiko muiden ihmisten mielipiteet sun käyttäytymiseen?

NK: Kyllä myöhemmin varmasti vaikuttaisi.
Author: Tunnetko ketään, joka käyttää tota Foodie-sovellusta?

NK: En varmaan.

Author: Mitkä syyt saisut aktiivisemmassa sosiaalisten funktioiden suhteen? Mikä olisi tarpeeksi iso motivaattori?

NK: Jos olisi esimerkiksi joku reseptikilpailu. Se riippuisi niistä kommenteista.

Author: Olitko huolissasi yksityisyydestä kun käytit sitä palvelua?

NK: En. Nykyään kaikki on netissä, joten ei tarvitse olla turhista huolissaan.

Author: Mitenkä sitten kaikki ostaminen ylipääätään, mitä kaikkea ostat netistä?

NK: Ostan sellaisia tuotteita, mitä ei saa fyysisestä kaupasta, esimerkiksi kirjoja, joita ei ole Suomessa. En ole tullut aikasemmin ajatelleeksi, että ruokaa voi ostaa netistä. En ehkä osta niinkään paljon tuotteita, mutta palveluita varaan paljon netissä esim. hotellit ja lennot.

Author: Onko mitään ostoksia, jotka sä teet vain netissä?

NK: Silloin kun olen Japanissa, käytän paljon Yahoo Auctionsia. Se on vähän kuin huuto.net, mutta se ei ole niin hyvä kuin Yahoo Auctions. Mä ostan sieltä kaikkea.

Author: Oletko ostanut kännykällä aikaisemmin jotain?

NK: No en tiedä, esimerkiksi vaikka lentolippuja joskus.

Author: Minkälainen yleisvaikutelma jäi tästä Foodiesta? Muuttiko tämä kokemus jotenkin ajattelutapaasi?


Author: Ostitko sä jotenkin eri tavalla tästä Foodiesta kuin miten sä ostaisit normaalista kaupasta?
NK: Ostin varmaan aika isoja määriä, kun ei tarvitse miettiä, paljonko toimitus painaa ja toimituskulu on kiinteä.

Author: Oliko jotain sellaista, mitä yritit ostaa, mutta et löytänyt?


Author: Minkälaisia etuja kaipaisit enemmän? Halvempaa hintaa vai enemmän toiminnallisuuksia?


Author: Hyviä kommentteja. Onko jotain muuta vielä mielessä?


Author: Olisiko jotain muita palveluita tai tuotteita kuin ruokaa, jota haluaisit tällä tavalla toimitettuna? Tulee esimerkkinä mieleen apteekki vaikka?


Author: Onko vielä muita kommentteja?

NK: Se ajanvaraussysteemi on vähän hänäkää, kun siinä on niin iso aikaikkuna. Yli 2 tuntia. Tätä kuitenkin varmaan käyttää monet kiireiset ihmiset, joten toi on tosi pitkä aika. Olis parempi, jos se lähetetti voisi ilmoittaa vaikka puhelimella pikkaisen etukäteen, että ”tulen 15 minuutin kuluttua”.

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4. Interview transcript: TL

Author: Oletko käyttänyt paljon Foodieta?

TL: Kännykällä olen lähinnä käyttänyt ja jos kaikki kerrat lasketaan yhteen niin varmaan yhteensä 20-40 kertaa. Useasti siis.

Author: Miten aloitit käytön?

TL: Varmaan noin vuosi sitten (kesällä 2011) sain normaaleja uutiskirjeitä sähköpostiin ja siinä mainittiin Foodie-reseptipalvelu ja ajattelin, että mikäs siinä.

Author: Mihin kaikkeen käytät Foodieta?


Author: Eli olet siis käyttänyt Foodieta muistilistana ostoksillesi fyysisessä kaupassa?

TL: Joo, oman ostoslistan lisäksi. Ei voi aina muistaa, mitä vaikkapa kreikkalaiseen lohisoppaan tulee lohon lisäksi. Sitten mä poistan siitä listasta esim. voit ja muut, joita on jo kotona.

Author: Kuinka käyän yksi Foodie sessiosi kestää vaikka minuuteissa?

TL: Jos mä pelkästään selaan reseptejä niin ehkä siinä kestää noin 5-10 minuuttia. Jos käy kaupassa ja ostoslista on Foodiessa niin sitten paljon nopeammin.

Author: Oletko koskaan tilannut sovelluksesta suoraan kotiin ruokaa?

TL: En ole kyllä tilannut.

Author: Käyttävätkö kaverisi Foodieta?

TL: No ainakin yksi.

Author: Miten vertaisit ostokäyttäytymistäsi Foodien kanssa ja ilman?
TL: Lähinnä siinä on 2 vaihtoehtoa. Joko mulla on entuudestaan tuttu lista tuotteista ja mä meen sitten suoraan niihin käsiksi, ehkä ostan päälle vielä lisäksi herätteostoksia. Sitten taas, jos ei tuu mitään mieleen kokkaisideoita eikä ole Foodieta niin silloin on vähän eksyksissä oleva filis. Sitten siinä menee katsomaan vaikka niitä S-marketin sanomia tai muita reseptien perässä. Sitten, jos Foodie on mä selailen sitä ja katson sieltä jonkun hyvän näköisen reseptin.

Author: Valmisteletko sä ennen kauppaa jo sen Foodi-ostoslistan vai alatko sä improvisoimaan siellä kaupassa?

TL: Lähdes aina improvisorin siellä kaupassa.

Author: Eli sä otat Foodien esiin vasta siellä kaupassa?


Author: Mikä on sulle semmoinen tyypillinen tiedonhakutilanne Foodiessa? Voitko kertoa kontekstista lisää?


Author: Olet kokenut kokki ja sinulla on jo oma repertuaari. Painottuuko Foodien reseptikäyttö nimenomaan niihin ruokiin, joista sulla ei ole kokemusta.
TL: Kyllä varmaankin tulee enemmän haettua niitä reseptejä, joista itsellä ei ole kokemusta, mutta vaikka oma lasagneresepti saa paljon lisää tuoreutta, kun saa jonkun muun näkemyksen samasta asiasta.

Author: Käytätkö paljon Foodien sosiaalisia ominaisuuksia?

TL: Olen ehkä 2 kertaa käyttänyt näitä. Taisin tykätä jostain hyvästä reseptistä ja kommentoinut kaverin luomusta.

Author: Miksi olet käyttänyt näin paljon tai vähän Foodien sosiaalisia ominaisuuksia?


Author: Vaikuttaako ne ihmisten kommentit tai tykkäykset siihen, mihin reseptiin sä sitten päädyt tai mitä ostoksia teet?

TL: Uskon, että jonkin verran. En ole kyllä tietoisesti etsinyt, mutta vähän alitajuisesti tykkäysten määrät ja kommentit saattaa ohjata kiinnostusta.

Author: Oletko joskus käyttänyt Foodieta jonkun tuntemasi henkilön kanssa?

TL: Joo, se henkilö, jonka mainitsin taisi kommentoida jotain mun juttua tai sitten mä vastasin sille.

Author: Mikä saisi sinut käyttämään sosiaalisia toiminnallisuksia enemmän?

TL: Esimerkiksi tavallisten tallaajien tehoreseptkilpailu, johon ihmiset saa lähettää omiaan ja kommentoida vaikka Foodien raadin valitsemaa 10 parasta reseptiä olisi aika
mielenkiintoinen. Ne reseptit on tällä hetkellä sen verran sopivia suomalaiseen makuun, että en näe tarpeelliseksi kommentoida hittevästi niitä reseptejä.

Author: Entä jos useampi kaverisi käyttäisi Foodieta?


Author: Onko yksityisyys huolettanut Foodien käytössä?

TL: Joo, olen pistänyt ajan tasalle ne omat tiedot siellä. En ole hirveen huolissani noista. Jos palvelussa on miesopiskelija, jolla on minimaaliset tulot, ja joka on kaikkiruokainen jätemylly niin ei muu oikeastaan haittaa vaikka joku siellä käy kurkkimassa.

Author: Et ole koskaan kokeillut ruoan tilaamista netistä ton Foodie-palvelun kautta, osaatko sanoa miksi?


Author: Tuleeko omia kommentteja mieleen?

TL: En tarjouksia hittevästi katsele Foodiessa, mutta voisi olla kätevää, että reseptiä katsoessa voisi suoraan klikkaamalla laittaa kaikki listassa olevat tuotteet ostokoriin eikä yksitellen. Sitten suosittelupalvelu olisi kova. ”Tykkääit selkeästi salamista, nyt Wotkinsin makkarat tarjouksessa”. Tämä olisi hyvä.

5. Interview transcript: TS

Author: I’ll start out by asking how you have so far used Foodie.
TS: I’ve so far used it only once. I had it downloaded on my device already for some reason, but when I was prompted to give it a shot, I used it this one time to see how it works. I used the app for the at-home-delivery shopping so I basically used it as an online version of a grocery store experience. I duplicated the searching process of individual products through the app.

Author: Did you use the mobile version or the PC version?

TS: I used the iPad version so mobile.

Author: What can you tell me about the context of the usage situation?

TS: So I was at home on my couch using the iPad because I don’t have a smartphone with wireless access everywhere. I liked that I could calmly browse through the products and look around the house to see what I was missing.

Author: How long was your session? Maybe in the beginning there was an exploration phase and then afterwards perhaps a shopping phase?

TS: It was surprisingly long. The exploration phase took 10-15 minutes and I realized there was a product list and a recipe list – so individual products and sets of products. I don’t really shop using recipes like that. Figuring out which store to shop from was another part of the exploration phase. It first gave a default store that was a Prisma in Lahti for some reason so I changed it to a local Prisma. That was a nice thing because I thought that Foodie only does Alepa. It got me a bit excited because I realized the chance to shop at Prisma where I usually never go since it’s so far away. After that it honestly took an hour for me from the product picking phase to the shopping cart phase. An hour felt very very long to me and I got tired clicking around making sure I was purchasing the right products and buying products that have pictures on them. The shopping experience was slower than a real life shopping and I got frustrated with the whole thing.

Author: Where did the hour go? What was the breakdown?

TS: A lot of it was determining what products I need. I went to the dairy section to buy milk and it took some time before I found the one that I want, more than it would usually take me in a physical store. The scrolling took time. First I took the usual stuff I
buy at shops and then I started exploring with the more exotic products that were available on the online, but I didn’t find them very well. First I was looking for Heinz Ketchup and it was there, but it didn’t have photo on it. I usually like to buy Heinz in a certain type of bottle and certain size so I didn’t want to buy one without a picture. Then I got so deep into the product searching phase that I could have found many foreign foods, but I didn’t have the patience to scroll around in the app. In a bigger store I would have had the patience to walk around and browse hard to get products though.

Author: I see. Did you browse through the products by scrolling through lists or did you use the search function?

TS: It was a little bit of both. First I used the scrolling function. It was a little disorienting because it floats on the screen freely without any sense of where I am or what I’ve already looked for. So I found the easy products like milk with that, but special products like ketchup or glass cleaner I accessed through the search bar since they were harder to find through the regular menus.

Author: So were those easy to find?

TS: Yeah, but again the glass cleaner didn’t have a photo.

Author: Were there any products that you weren’t able to find at all?

TS: In the beginning it directed me to that Prisma so I was doing this hour long shopping of all these cool items and I was looking at these new branded energy drinks. They had this chocolate milk energy drink and this coffee energy drink and I was all excited to get these exotic drinks that they don’t have at Alepa. So I was super excited about that. But when I was at the check out it said that ”your reference shop does not deliver groceries with your online store inventory” at which point none of the exciting products not found at Prisma were available. At the end of the day the whole point of me being able to shop at this far away Prisma through slightly more expensive app was completely negated. Using the app to shop at Alepa doesn’t have enough value for me since I have 2 Alepas within a 5-minute walking distance to me, which is a much quicker and more straight forward shopping experience than with the app.

Author: So the first store didn’t allow you to shop online?
TS: Well it did allow me to pick the products I wanted, but it didn’t allow me to check out. In the end it only tells me “Oh, by the way, the store you have been looking at for the last hour doesn’t even have delivery service so forget about it!” I was like what the hell, tell me this beforehand! It completely killed the experience for me so I just though whatever. All of my energy drinks were now void.

Author: Did the second shop work alright?

TS: Yeah, but then I had even regular items like facial tissues, bananas or tomatoes. It takes the Prisma selection and then offers alternatives that the online store has, but those alternatives are like Reilunkaupan banaani versus Chiquita banaani. Prisma had Chiquita, but the online inventory had only Reilukauppa and I had to buy that. So even simple products I had to include the extra step to double check that is this replacement banana suitable for me. It involved a lot of extra steps for me.

Author: If things had gone a bit more smoothly and it had given you only the inventory that you can actually buy through the app, how do you think your shopping experience differs from a physical store using this app? I mean things like timing, quantity, intervals etc.

TS: Yeah, I think I would use the app for large orders, bigger items, specialty products, products that don’t require freshness. I would always buy fruits and bread at a usual store because I want to see the tomatoes and the cucumber that I buy. I don’t want a vegetable or milk that is too big or too small or has expiration problems. None of this is transparent with the app and that’s why I’m not comfortable buying this stuff virtually. But then products like paper towels, glass cleaner etc. are hard to carry and don’t go bad so these kind of things I would save and buy at one time. The experience itself also costs money so I would probably do bulk purchases of big, heavy products. I tend to shop 4 times a week, quite often, so I think I would still keep up that kind of rhythm but supplement that with the app shopping. But the app should definitely show me only products that are available to be sent to my house.

Author: I think the app only allows you to do that because apparently there are many people using the app as a shopping list that they use at a physical store.
TS: Yeah. One more thing: I tend to find any online shopping especially with flight tickets stressful at the check out phase. I tend to get anxious at that moment when there’s no turning back. Did I book the wrong flight? Did I get too many fruits? Did I accidentally click on something I don’t want to buy? When the products came to me I felt like I had to check my order and what my delivery contained. Doing this electronically adds some of those steps and some of that anxiety of committing to a digital transaction and then relying on someone else to fulfill the transaction. This doesn’t happen at a grocery store. I can just turn off my brain and relax.

Author: Yeah, it kind of reminds me of professional shopping where you’re ordering a truckload of something and you have to check the inventory.

TS: Yeah, and in the store you are in charge of your basket. You double check them throughout your purchasing experience. You are looking at your basket and putting them on the conveyor belt. That’s how you double-check if you’ve got enough and the right items. I usually only buy one basket at a time because if I buy any more than that the food will probably go bad before I get to eat it. If I hadn’t filled up my basket myself I wouldn’t get that visual reference of my shopping cart being full or empty. You are reading this impersonal list which isn’t as informative as actual products or pictures in front of you.

Author: Interesting. Did you use any other parts of the app besides the shopping? Recipes etc.?

TS: I tried the recipes, but it was generally a bad experience because a lot of the food was so exotic that I wouldn’t have the patience to cook it anyway even if I bought the products. Just to test it out I clicked on something that had salmon on it for example and then it would add 9 extra products to my shopping list and over 20 euros. The recipes were built so that you would cook a meal for 2 people, but it was forcing you to buy over 20 euros of stuff for that meal which didn’t really seem realistic. And then I actually have screenshots of the price changing on depending when I clicked it, for example uunitomaatti, so I had this parmaggiano cheese and 2 table spoons of that cheese and when I added the product to my cart it’s 37 euros and 90 cents. I thought that this is not going to happen. Then I tried it again and it recalculated the quantity and the sum suddenly became 5 euros. First it did one by one kilo, it didn’t factor in the portion
quantity. There was something wrong with the app calculation so that it didn’t do it. I had to delete it and then try it again and then it came out as 1 by 0.2 kilograms. So then it took the recipe into account as in ”this guy only needs this amount of whatever”. Any other recipies that I tried to buy were more expensive than I was ready to pay.

Author: Didn’t any of the recommendations in the service such as popularity rankings or recommendations by other users did they affect your buying behavior?

TS: There were these little hearts with numbers on them, but they all had fifty which I interpreted as 50 people have liked this products, right? And every product can’t have 50 likes, so I kinda started to disregard that heart alltogether. There was a point where I browsed through the offers section, but then it wouldn’t tell me how much of an offer it is, what would you usually pay so I couldn’t really gauge the degree of the offer for me to get excited to purchase it. That’s how I usually buy stuff – if I’m at the cheese section and there’s a cheese on sale I’ll buy that, but otherwise I’ll probably get the normal thing I get.

Author: Did you use any of the social functions inside the app or check what people had written there?

TS: Uh, no. Hold on I’ll open the app. I don’t read that much Finnish which may have factored in there. I think it had gone to the point where I had clicked around too much and spending a bit too much time on this food shopping thing and had reached my saturation point.

Author: I see. Do you know anyone else who uses the app?

TS: No, not this app. My sister uses the peapod service that has been out in the US for a number of years. My order was nine thousand something so I was surprised that that many people had actually used it. I was doubtful that so many Finnish people had actually used the app. I’d be surprised if 10 000 people have used this app when it has been open. Oh yeah, and the glass cleaner I got had a broken cap so the glass cleaner had leaked into the bag, which I wasn’t very happy about. Otherwise the products were ok, lettuce was pretty fresh, the tomatos were ok.

Author: Did you bring up the broken cap to the delivery guy or did you notice it after?
TS: I noticed it after he left. The majority of the liquid was still inside, but the cap had just gotten smashed. It was unpleasant, but not something I was going to complain about. Very little liquid leaked out of the bottle itself. That wouldn’t have happened if I had shopped in person.

**Author:** Are there any factors that would make the social functions inside the app more interesting for you? Think of anything.

TS: I tend to shop on my own. It’s a pretty solitary thing. I don’t get particularly excited by food. I don’t do it by recipe, which people might be more social about. The only way I would integrate socialness into it would be if I was cooking for a party or sharing recipes or getting food suggestion for a party or a picnic, but that’s not the way I shop so I don’t think I would ever…

**Author:** Were you worried about privacy when you used this?

TS: No. I logged in through facebook, but as far as I know there were no facebook posts to my profile. I was worried that the products that I would select would go to my facebook page, but then I knew it was something I had to double check in the morning. They didn’t ask me for my payment details, I just forgot to bring my wallet when the delivery guy came. Other than the Facebook connection I wasn’t sure how that was going to go, but that was the only privacy issue.

**Author:** If we look at online shopping in general, what do you usually buy digitally and what physically?

TS: I usually buy things in person that I need to try out like clothes or electronics and then stuff that I’m willing to buy without testing like books, travel or books.

**Author:** What products are you least likely to buy online?

TS: Fresh fruits and vegetables.

**Author:** How did this experience with Foodie altogether influence your view on online shopping and how will your shopping behavior in the near future?

TS: I would like the online shopping experience to mimic more of the human shopping experience. It felt a bit too robotic. You are looking at thumbnails of pictures in a grid.
The pictures are really grainy and you can’t read any of the text on the products so it was very inhuman. Grocery shopping is so personal, you are picking all the products that you will feed yourself and your family with. And like I said about the basket, using sizes and scales of food to judge quantities and stuff I think those kind of things, if introduced right, could make digital shopping more natural.

Author: In what kind of situations would you use an app like Foodie?

TS: I think I would have to be at home comfortably and able to calmly flip through the app and I would need to be able to open the refrigerator and be able to look around the house. Do I have toilet paper? Do I have cleaning products? I think that was a big key step. I also wanted to get a big enough order to be able to justify the high delivery price. If I would just be putting my shopping list together in the subway train I wouldn’t be able to think of all the products I need without having that reference point of my kitchen and my living room.

Author: What about people who break down the process in two parts. They make a written shopping list at home with a pen and paper and the second step is to obtain the actual products. Let’s say that that would be made so that the person is used to using such an app and then makes a shopping list and finds those products on a bus and orders everything on the same bus – what do you think about that?

TS: So if they make a shopping list and they can submit that just to be purchased? Yeah, maybe. Again the problem is that you can’t just make a shopping list of whatever you want. It’s so restricted by the inventory of what the store carries. Even simple stuff like bananas, you have to choose between what kind of banana you have and what kind is available. You can’t have this quick one click buy with the shopping list because when you submit your list you’ll have to check they have all the products and if they don’t, you’ll have to pick something new and if they have an alternative you’ll have to check that. If they could overcome that kind of multistep staging it would help a lot more.

Appendix 5: Summary of interview questions arranged by question

15. What do you use Foodie.fm for?
AR: Ordering food online.
HT: Viewing recipies, ordering food online.
LL: Ordering food online.
NK: Ordering food online.
TL: Viewing recipies, making shopping lists, checking the locations of grocery stores.
TS: Ordering food online, viewing recipies.

**Summary of answers: The drivers of usage among the 6 responents were:**
Ordering food online (5), Viewing recipes (3), Making shopping lists (1) and Checking locations of grocery stores (1)

16. In what kind of situations and how often did you use Foodie.fm? If you used Foodie in the store, please describe the process. Describe typical usega scenarios. How long does a typical session last?

AR: The order went fine otherwise, but I couldn’t find the order button. After I found the button, it took me a few minutes, but before that I wasted tens of minutes over the course of a few usage sessions. The usage was pretty straight forward, but there were also some usability issues.

HT: I was leaving work, on the move and didn’t have anything else to do. Browsing through the recipies takes an amount of concentration that I couldn’t do much else. I used quite a lot of my time to surf those recipies and the actual check out process was quite fast.

LL: I used Foodie at home after work after Antti asked me to try this application. I wasn’t too hungry at that time either. I ended up buying sushi ingredients since my girlfriend’s parents had just visited us and we made sushi for them.

NK: I bought some heavy products late at night at home. I was thinking about what things have run out and I need to replenish. The buying process lasted for around 30 minutes and the actual check out phase was only a few minutes.

TL: I have used Foodie 20 times within one year. A typical session usually takes 5-10 minutes when I am looking at the recipies. If I am doing something else, usually I need even less time. I sometimes prepare in advance by looking at the refrigerator and thinking what I would like to eat, but most of my usage happens close to the shop.
TS: I used foodie on the couch after work on my iPad. The exploration phase took around 10-15 minutes. Later on I wasted close to an hour on trying to find, which stores actually had the products I wanted available after the store I had initially selected didn’t have all those fancy products I wanted to buy. I spent a long time clicking and redirecting products. The experience was slow and frustrated.

Summary of answers: 4/6 users mentioned identified using Foodie in the evening after work. The 1st time users spent between 10-30 minutes exploring the application and the check out process was faster than this for all users except AR and TS who needed tens of minutes to check out their purchased items due to usability issues (hidden button and counterintuitive availability of products).

17. Does your purchasing behavior using Foodie differ somehow from your ordinary shopping style?

AR: Mostly heavy items. I don’t order frozen foods since I am doubtful of whether they will survive the delivery or not.
HT: It was hard to scale the recipes for many people. The ginger I bought was huge, too much for one person. It was interesting that the delivery cost 10 euros although I have an Alepa store so close to my home. I see this service fitting better shops that are not around the corner and have long queues, just like Stockmann’s high quality food desk in Helsinki.
LL: There’s a grocery store 200 meters from my apartment, Foodie asks 10 euros for delivery and I need to budget a 2-hour time window to receive the products. Because of this I usually wouldn’t use Foodie that much, but when I do I buy more stuff than usually in a physical store.
NK: I focused on large quantities of heavy products because the delivery fee is fixed and I didn’t have to worry about carrying the goods home myself.
TL: If I don’t have Foodie, I usually end up buying stuff that I always buy. Foodie helps me find new interesting recipes. I may also look at recipes with my friends at the cottage and then we vote, which recipe to pick and then someone buys the goods from the store.
TS: The experience was much slower than a real-life experience. I would probably buy big, bulk orders due to the fixed delivery fee. I also would still buy things like cucumbers and bread from a physical store since I want to see those before buying.
also get more anxious at the checkout phase of digital shopping, especially with flight
tickets since I feel that even if I make even one misclick, there is no turning back at that
point anymore.

**Summary of answers:** All 5 respondents that indicated they were using Foodie to
shop for items online mentioned that the fixed delivery pricing makes them order
bulk order sizes of products. 2/5 of these online shoppers mentioned that they tend
to focus on heavy products and avoid frozen or quickly aging fresh products when
using Foodie. The users of the recipe service mentioned that Foodie brings
diversity to their cuisine and the absence of the app results in them buying their
usual shopping cart of products.

18. **Did you have a look at product information or recipes? What kind of
information did you search for in the service? Describe the typical search
situation.**

AR: I briefly flipped through some recipes. I didn’t use them this time, but in the future
they could be a great way to support cooking. I didn’t use the search function either, but
just searched using the icons.

HT: I checked out the products that had a special offer. Then I used the visual search as
well as the dedicated search field. I have allergies and thus a special diet so I looked
closely at what each product contained. I shopped using some recipes while removing
products that I already had in my fridge and adding products that I wanted use to create
a new taste.

LL: I looked at the recipes and product details. I was thinking of what to eat and the
salmon roll sushi seemed interesting so I took those. I was also looking at the terms of
delivery. When does the food arrive? I couldn’t find that information before the very
end of the order process.

NK: There was a recipe popularity ranking that was somewhat helpful, but I didn’t pay
a lot of attention to the recipes since the products I bought were mostly non-foodstuffs.

TL: I look mostly at recipes of foods that I haven’t cooked yet or familiar foods that
need a new twist.

TS: I had a look at the recipes, but in general they were a bad experience since most of
them were too exotic for me to have the patience to cook. The recipes were also built so
that even a meal for two forced me to buy products worth over 20 euros. About the
product details, I was searching for a Heinz Ketchup in a special bottle, but once I found it, the product didn’t have any pictures available so I decided not to buy it at all.

Summary of answers: The product information played an important role to some users; one examined each purchase closely due to his allergy, another one decided not to buy Heinz Ketchup because it didn’t have photograph of the product. 6/6 users had tried using the recipe section of Foodie. 3/6 users had experience on shopping based on recipes. One user was not that interested in the recipes since he was focusing mostly on non-foodstuff items. One user thought the recipes were too exotic for him to cook. One user believed he was going to try the recipes some other time.

19. Did the recommendations of the service somehow affect your buying behavior or image of the recipes?

AR: -

HT: I saw the hearts and percentage numbers inside the service, but it was unclear to me where those metrics come from. Are they numbers representing popularity, sales or how much the merchant himself values each item? I started laughing when I saw that one of my friend had like a pasta carbonara recipe last year and it was still on top of my feed.

LL: I had a quick look at the recommendations, but I don’t think they really affected my decision making.

NK: Not this time, but in the long term there would be an impact. If I am unsure between two options the recommendations would help me choose.

TL: They don’t consciously affect my decisionmaking, but unconsciously I think they may affect me a little.

TS: Every product had 50 hearts that seemed like Facebook "likes” and since every product can’t have the same number of likes I started to disregard that figure altogether.

Summary of answers: The respondents didn’t believe the recommendations affected their behavior very much: little effect (2 respondents), no effect (1 respondent), structure of remmendation system unclear (2 respondents).

20. Do you utilize the social aspects for the service? If not, why?
AR: I saw these functions, but I didn’t use them this time.
HT: I use the recipe functionality for variation and inspiration. I don’t want to see a status update for all things that my friends have done, but all the most important and interesting ones would be cool to share. Posts that are trying to sell or advertise something to me are annoying.
LL: I think it’s good that you are able to share good recipes and the products required with your friends.
NK: I didn’t really use the social functions, but I read other people’s comments.
TL: I have used them maybe 2 times in total (out of around 20 times of usage). I think I liked some recipe and commented on something that a friend of mine cooked up.
TS: No. I don’t read that much Finnish which may have factored in there. I was also a bit frustrated with my shopping experience in general so I didn’t feel like clicking around anymore.

Summary of answers: The 5 people using Foodie for the first time hadn’t used the social functions of the app. The experienced user (around 20 total sessions) said he had used the social functions 2 times.

21. Did the opinions of other users affect your purchase behavior or image of the products/recipes?

AR: -
HT: Not really. The fact that my friend was liking that same pasta carbonara recipe since last year made me laugh though.
LL: This time they didn’t affect me, but I think recipe recommendations from friends are valuable.
NK: In the long term there would be an impact. If I am unsure between two options the recommendations would help me choose.
TL: I think unconsciously a little bit.
TS: No. I don’t read that much Finnish which may have factored in there. I was also a bit frustrated with my shopping experience in general so I didn’t feel like clicking around anymore.
Summary of answers: 3/5 respondents answers can be interpreted that “in the long run the opinions of other Foodie users may have minor effect on my usage”. The other 2 didn’t believe there was an effect.

22. Do your family members or friends use Foodie.fm? Describe situations of usage where you use the service with others.

AR: -
HT: Yes, one of my friend looks up recipies with the service, but he has never ordered anything. I think he also uses the service as a memo to remember everything once he enters the shop.
LL: -
NK: I don’t know other people who use Foodie.
TL: At least one friend uses Foodie.
TS: I don’t know any people who use Foodie.

Summary of answers: 2/6 respondents knew another person who is using Foodie.

23. What would make you use the social functions more?

AR: -
HT: I don’t know if the social functionalities are the most important thing of an app like this. To me the best thing Foodie can offer is the variation so I don’t have to make that same pasta carbonara every time. Also, I wouldn’t want to read updates from friends like “Today I had some chicken wok”. I would block such users from my stream immediately. Sharing such everyday things is unnecessary, but sharing exceptionally good recipies or opinions are very interesting and those should be shared. Selling and advertising will quickly become annoying.
LL: I think it would be great if I could submit my own recipies. People participate in all kinds of recipe competitions anyway, so that would a natural way to enchance the social aspect of the app.
NK: A recipe competition would be nice.
TL: My usage of the social functions has been mostly experimental. I suggested the Foodie people that they should add a function that allows users to add their own recipies. If a function like this would be added, I would probably use the social functions more.
TS: For me shopping is a solitary thing and I don’t get particularly excited about cooking. The only way to integrate socialness to it for me would be to sharing recipes or getting food suggestions for a party or a picnic, but that’s not the way I shop so I don’t know if I would ever use those.

Summary of answers: Submitting own recipes (3/6), recipe competition (2/6), challenging others to suggest a recipe for a special event (1/6)

24. Are you worried about privacy in the service? Have you altered the privacy settings? Do worries about privacy affect how you use the service?

AR: No. When you are dealing with the Internet, everything will be stored anyway so I have learned how to behave on the Internet.

HT: -

LL: No. If one is concerned with privacy on the Internet one shouldn’t share any personal details online anyway. The Internet is the same everywhere.

NK: No. Nowadays everything is on the Internet anyway so it doesn’t make sense to worry about things like this.

TL: I have updated my information inside the service, but I am not particularly worried about anything. As a student my income is so low that I don’t even mind if someone looks at my data.

TS: No, I wasn’t worried about Foodie knowing my contact information, but I was more worried about the products I had selected going to my Facebook page. I had to double check to make sure that hadn’t happened.

Summary of answers: None of the 6 respondents were worried about giving personal information to Foodie. One user was concerned if the Foodie app had been updating his Facebook page with some updates.

25. What do you buy online in general?

AR: Extraordinarily large clothes and shoes on the Internet, since there is no shop for me. I have quite many bad experiences from the selection of physical shops. Also electronics prices are the best on the Internet.

HT: I buy books online since physical stores have only a limited offering. I also order bicycle parts or other hard-to-get goods online. I don’t really buy so much stuff with my
mobile phone – maybe like bus tickets, Spotify music or softdrinks from vending machines.

LL: I buy clothes from the store. I could buy them online too if I tried them on first in a store. I haven’t gone through the trouble to do that myself, but a friend of mine does that often. We also rent a lot of movies online with my girlfriend using services like Voddler and iTunes. I haven’t bought any music CDs in years, I buy all of my music digitally nowadays. I prefer using a computer over a tablet or a smartphone since that is the easiest way to type fast.

NK: I buy books that are not available in physical stores. I had thought about buying food online before. I usually book e.g. flights and hotels online.

TL: -

TS: I buy stuff online that I am willing to buy without testing like books and and travel. I usually try stuff like clothes or electronics before buying and thus buy them physically. I am least likely to buy fresh fruits and vegetables online.

Summary of answers: ONLINE Price, selection, non-unique products that have no best before date restrictions

26. How did this experience affect your behavior?

AR: -

HT: The experience was positive for me and I can see myself using this service in the future to save time

LL: I don’t see any big changes coming because of this experience. If my life becomes more hectic or lazy, then maybe I’ll consider using things like these more. I like buying stuff online, but maybe I don’t use money to so many things in general. Eating, buying clothes and content like movies, music and book to ones life is already something.

NK: I used to think services like Foodie are for the countryside where physical stores are scarce, but this is pretty handy in the city as well if you are for example sick and at home or don’t have a car to ride to a distant store.

TL: -

TS: My experience with Foodie felt a bit too robotic and I’d like online shopping to mimic the human experience more.
Summary of answers: None of the respondents reported major changes in their life due to this experiment. However, 3/6 said that they are now slightly more open to using Foodie like services for convenience e.g. when they are ill.

27. When would you use Foodie? When wouldn’t you?

AR: When I am limited in terms of my movement e.g. sick or coming home after a long trip and want to relax. The delivery may also be a bit cheaper. The selection of an Internet shop should also be better than in a physical shop.

HT: It’s always good to go to a physical store when something is missing and there is an urgent need for it because the delivery time of Foodie is so long. Another good use case is when you are cooking something with friends and you want to make something special. Foodie suits recurring purchases best. Foodie suits also purchases that would otherwise require traveling far.

LL: I would use it when I need something fast and no one is able to help me. Maybe this works best for people with kids at home. You know, parents order and kids can receive the food at home.

NK: When I’m sick or far away from a physical store without a car.

TL: -

TS: I would use it at the comfort of my own home so I could easily look around the house and see what I am missing. I probably wouldn’t be able to do this well enough on the subway train. I would also focus on large quantities to justify the large delivery fee.

Summary of answers: 5/6 would use Foodie to save time, money and the need to physically.

28. Other comments?

AR: -

HT: -

LL: -

NK: It would be great if each recipe would have a visible price tag attached to it so a student like myself could quickly estimate the financial impact of the culinary decisions I’m making. I also would like to add a gradually ascending reward system to the shopping so that you get X % off of your purchase with the percentage being higher if you shop more.
TL: It would be great if the service would add all products of a specific recipe at once to my shopping cart. Also, it would be great if the service would be intelligent and suggest me recipes that I would probably be interested in.

TS: -

Summary of answers: prices for complete recipes and personally tailored suggested recipes were brought up.