#### **Abstract**

Freemium has grown tremendously in use and importance the last years, but research is still in its infancy. This thesis explore how companies that use freemium acquire customers through their existing users and customers. This thesis posit that the primary value of free users in freemium derive from making this acquisition process both more efficient and more effective, allowing a company to grow rapidly at a low cost.

The customer acquisition process was explored through qualitative interviews with high-level employees and investors in companies ranging from the Fortune 100 to failed businesses, and the research process was firmly based in grounded theory. Based on this process we proposed a conceptual framework — termed *crowdsourced customer acquisition* — which describe the customer acquisition process in freemium.

Crowdsourced customer acquisition entails giving some consumers access to a valuable service for free into perpetuity. This causes these users to become loyal and engaged, and through their engagement — most importantly word-of-mouth — other consumers become interested. By making the choice to try the service a "no-brainer" for these consumers the company acquire new users. These new users, in turn, can both bring in new users and be converted to paying customers. Learning and adapting based on these events the company can improve future user acquisition and conversion by increasing their efficiency and effectiveness.

In addition to this acquisition process, and because freemium is at a very early stage in research, we also proposed several avenues of further research based in the proposed acquisition process.

The primary managerial implication of this research is that is enable practitioners to reason about their freemium model to a much larger degree, *e.g.* in terms of formulating, understanding, analyzing, and sharing the company's customer acquisition model. The proposed framework can thereby be elemental in the process of designing a viable business around freemium.

The primary theoretical implication of this research is that it commence a deeper look into freemium itself, an area which is currently not well understood from a theoretical standpoint. It brings together several avenues of research to give a coherent view of one facet of freemium; thereby indicating that several of the research findings for traditional products and services also yield for freemium-based services.

# PREFACE

This work on *freemium* is part of my Master's thesis at the Norwegian University of Science and Technology (NTNU). My specialization is in the field of innovation and entrepreneurship at the Department of Industrial Economics and Technology Management (IØT), faculty of Social Science and Technology Management (SVT).

I HAVE HAD A BLAST writing this thesis. While writing I have been able to meet some of the most remarkable start-ups and established companies in the world and I have learned tremendously from conversing with incredibly smart and skilled people.

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# 1 INTRODUCTION

The aim of thesis is to explore how web-based companies that use *freemium* acquire new customers through their existing users and customers. The reason for exploring this acquisition process is the conviction that free users are at the core of this acquisition and that the value of consumers therefore goes beyond their monetary transactions with a company.

Skype, LinkedIn and LogMeIn are examples that showcase the potential value of free users. Skype was recently bought by Microsoft for \$8.5 billion, LinkedIn's market capitalization is more than \$8 billion and LogMeIn's market capitalization is just below \$1 billion. What these three companies have in common is that they have been able to build billion dollar businesses while only a single-digit percentage of their users pay to use their service.

THE WORD FREEMIUM is a combination of "free" and "premium", and the concept entails that a company offers a subset of its services to some users for free into perpetuity. Venture capitalist Fred Wilson popularized the concept, but as he himself say, "this ... has been around for a long time" (Wilson 2006b). Nevertheless, its position and importance in companies across the world has grown tremendously the last years (Miller 2009). At the same time we have seen a considerable increase in use of social media and social networks such as Facebook and Twitter, which have changed the way people engage online (Brown et al. 2007).

Even though fermium's importance has skyrocketed the last years, research is in its infancy. Except being mentioned in some articles and books by scholars and practitioners (e.g. Doerr et al. 2010; Shuen 2008; Teece 2010; Osterwalder and Pigneur 2010; Anderson 2009), none have yet explored freemium in-depth. Kozinets et al. (2010) say that "[as] markets change ... theories must also change to accommodate them." This is why freemium is now an important focal point of research.

Bekkelund (2011) proposes that it is possible to build a successful business using freemium; consequently it is crucial to begin understanding the components that lead to this success. van Riel *et al.* (2001) find that it is both difficult and expensive for a web-based company to acquire customers; Bekkelund (2011), however, proposes that *word-of-mouth* is at the core of easing this acquisition. This thesis is therefore built on the belief that understanding how companies acquire customers through their existing users and customers is crucial in understanding freemium.

We have termed this customer acquisition process *crowdsourced customer* acquisition. Crowdsourcing entails outsourcing tasks to an undefined, large group of people or a community — a "crowd" (Howe 2006). In this thesis, however, we see this crowd as a defined group — the company's existing users and customers.

THE PURPOSE of this thesis is then to explore how freemium-based companies acquire new customers through crowdsourcing the task to their existing users. This will enable a far better understanding of how to build a successful company based on freemium and a better understanding of the value of free users. The specific focus in this thesis is on the process itself and the position free users have in this process. As such there are three questions we will focus on answering:

- 1 What are the steps involved in the crowdsourced customer acquisition process?
- 2 What are the core elements of each step?
- 3 What is the role of free users in this process?

This thesis strives to take a high level view — thus, this is not about finding that one method that can give a firm a 3% increase in word-of-mouth. This is about the conceptual thinking involved in building a service that users spread and which consequently grows the firm's user and customer base even larger.

As research on freemium is at an early stage we take an explorative approach based in grounded theory. We base the research on qualitative interviews with high-level employees and investors in companies that use freemium. We explore a broad range of companies that use freemium — ranging from the Fortune 100 to failed businesses — in order to better understand the customer acquisition from different perspectives. As there is limited research on freemium we base this research on theory emerging from research.

#### 1.1 THE STRUCTURE OF THIS THESIS

We start this thesis with a literature review. Here the main focus is exploring value from the customers' point of view and value from companies' point of view, and we will therefore focus on *customer value* and *customer engagement*. Both of these are crucial in understanding crowdsourced customer acquisition. In the methodology chapter we explain how the research was conducted and discuss the credibility of the findings. After this we present the results and discuss them in relation to the findings in the literature review. Finally, in the conclusion we tie together the findings and discuss the contributions of this thesis. We also include the implications for industry and theory, and a discussion of limitations in the findings and potential future directions for research.

# 2 THEORY

To understand how freemium-based companies acquire customers we must explore several theoretical directions. We start with defining and clarifying what freemium is, before we go on to have a brief look at the research on *information goods* and *free*, and thus the context upon which this thesis is built.

To understand the customer acquisition process we must understand what customers value and what motivates them to engage and "spread the word" about a service. As freemium entails that many, if not most, of a company's users will never pay, the value of a user must be measured in something else than the traditional monetary sum that is paid to access a service. We must therefore understand what value a company receive from these free users.

Consequently, in this literature review we will explore customer value — i.e. value from the customers' point of view — and customer engagement, including the customer engagement value — i.e. value from the firms' point of view. We will also explore the antecedents and consequences of both customer value and customer engagement. This will give us an understanding of freemium customer acquisition both from customers' point of view and from firms' point of view.

As RESEARCH ON FREEMIUM is underdeveloped, this theory will give an understanding of customer value and customer engagement seen primarily from the perspective of more traditional premium offerings, which thus far has been the focus of research. Therefore the goal of this literature review is not to build a testable framework, but to build a theoretical starting point to understand and interpret the research results.

### 2.1 DEFINING FREEMIUM

Before we can go on to understanding customer acquisition in freemium we must properly understand what freemium is and entails. Wilson (2006a) defined freemium as follows:

Give your service away for free, possibly ad supported but maybe not, acquire a lot of customers very efficiently through word of mouth, referral networks, organic search marketing, etc, then offer premium priced value added services or an enhanced version of your service to your customer base.

This definition is ambiguous and the term has neither been further refined nor further clarified in academia. Because of this ambiguity practitioners use different terms to describe freemium, *e.g.* business model (Wilson 2006a), revenue model

(Parker 2008), pricing strategy (Lunn 2010), distribution model (Dahlquist 2010), marketing technique (Semeria 2009), and architectural model (Bhullar 2010).

In this thesis we will not classify freemium into either of these categories. We say that a company uses freemium if one of the company's services include a free version and a premium version, and where the free version is perpetually free. Consequently, it is not freemium if the company has a distinct free and a distinct premium service that are entirely different services. The free offering can include advertisements or other means of subsidizing users, but the users themselves do not pay to use the service.

Thus, freemium entails that at least some users can use the service into perpetuity without paying. This differs from what economists call *tying*, as the users are not required to buy the premium priced offer — it is not indispensable. It also differs from *free trials*, as these are time-limited.

#### 2.2 INFORMATION GOODS

"Information wants to be free. Information also wants to be expensive. ... That tension will not go away." — Brand (1988, p. 202)

An *information good* is anything that can be digitized (Varian 2001). An important feature of information goods is that they are expensive to produce and cheap to reproduce (Varian 1995, 2000). Pricing the product according to the marginal cost will *not* make sense in this context, since the marginal cost will be zero (or negligible) (Varian 2000; Shapiro and Varian 1999; Mahadevan 2000). Rather, it should be based on value (Varian 2000). On the other hand, Anderson (2009) argue that "practically everything Web technology touches" will end up as free for consumers, as the marginal costs are approaching zero and prices are approaching the marginal cost since "there's never been a more competitive market than the Internet."

#### 2.2.1 Electronic Services

*Electronic services* (e-services) refer, broadly speaking, to service delivery with the help of new media (Voss 2003), one of which is the Internet. It is thus an information good. Meuter *et al.* (2000) refer to e-services as *self-service technologies*, as customers are typically more prominent in the service production compared to traditional services. When we talk about freemium in this thesis it is in the context of these types of services.

E-services differ from traditional services in several distinct ways that can affect how customers are acquired. First of all, because of technological developments a firm is able to monitor users to a much larger degree and therefore better understand how they experience the service. This enable more efficient management of resources (Gummerus 2011).

Secondly, recent development in technology has enabled firms to cater to the needs of individual customers (Sharma and Sheth 2004). Thus, instead of producing the same product to every customer the product can be individualized to the customers' wants and needs much cheaper and much simpler than what has earlier been possible.

Thirdly, customers have access to a broader range of offerings and are better able to compare prices and product features online (Anderson and Srinivasan 2003; Sharma and Sheth 2004). This has several effects, among them more competitive pricing (Anderson and Srinivasan 2003; Anderson 2009). Lastly, customers have been relatively unwilling to pay for e-service content, even when they rate it as valuable (Gummerus 2011).

Generally, we can say that e-services liberate people with regards to when (time), where (place), by whom (actor) and with whom (constellations) (Normann and Mintzberg 2001, in Gummerus 2011).

# 2.2.2 Versioning

Versioning, *i. e.* differential pricing based on quality discrimination, lets consumers *self-select* into different groups according to their willingness to pay (Varian 2000). According to Varian (2000) the fundamental problem is to set the prices such that those users that are able and willing to pay high prices do so.

Determining a users willingness to pay is difficult as consumers are not eager to reveal their true willingness to pay (Varian 1995). As such, pricing needs to be based on something that correlates with willingness to pay, *e.g.* observable characteristics, such as memberships in certain social or demographic groups; or unobservable characteristics, such as the quality of the choice the consumer purchases. An interesting consequence of e-services is that recent developments in technology enable easier and faster experimentation with pricing plans to find out how much users are willing to pay. It has also become far easier to continuously monitor users and how they interact with the service, which enable faster feedback and therefore faster iterations.

### **2.3** FREE

When talking about free, there is a distinction between *gratis* and *libre* — which can be thought of as "free as in free beer" versus "free as in free speech," respectively.¹ When talking about free in this paper, the focus is on gratis, not libre.

IN TRADITIONAL ECONOMIC THEORY there is an inverse relationship between price and quantity demanded (O'Sullivan and Sheffrin 2003), but what happens when the price becomes zero? According to Shampanier *et al.* (2007) people perceive the benefits associated with free products as higher. Thus, decreasing the price to zero increases perceived value considerable more — people overreact to free products.

This overreaction has some interesting consequences. One of them is that users are more likely to choose a free service than one that costs money. Therefore we can expect that it is more likely that a user will at least try a service when it is free. When the marginal cost of an e-service is near zero and convincing a consumer to try a service is easier when it is free, the cost of acquiring a new user is naturally decreased, and can potentially be very low. Therefore a free service can potentially lead to considerable increase in new users without increasing the costs significantly. As such, it is crucial to understand the value of these free users, and also what the consequences are for the service when users are allowed to use it for free.

One potentially negative aspect of free, is that Shampanier *et al.* (2007) find that including a free offer decreases the demand for the more expensive product. Driving this effect can be that the decision to choose a free product is a much simpler decision (*e.g.* Tversky and Shafir 1992; Luce 1998; Iyengar and Lepper 2000; Diederich 2003). This can, understandably, have negative consequences for the company. Haruvy and Prasad (2001) find that in order to not cannibalize the premium offer, the quality of the free offer must be sufficiently low and the price of the premium offer must not be too high — but, importantly, the free offer must not be of too low quality; it must induce customers to use it. Thus, we see that there is a trade-off between these potential opportunities and threats related to giving away a service for free (Papies *et al.* 2010).

THERE IS MUCH additional work needed to properly understand the complexities of free products and services (Shampanier *et al.* 2007). The research thus far can, however, be broadly categorized into three categories (Jiang 2010):

<sup>1)</sup> This is how Richard Stallman, an American software freedom activist and computer programmer, differentiates software that is free to use and software that is freely available for users to change and extend (Stallman 2010).

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1 *Network externalities*, in which free adopters increase future adopters' valuation of a product or service.

- 2 Demonstration effects, in which users can try before they buy.
- 3 *Word-of-mouth effects*, in which free adopters help speed up the diffusion of a new product or service.

As word-of-mouth effects in the context of free have only been the focus of a few articles, we will shortly mention the findings before we go on to look more in depth on the other two effects.

Jiang and Sarkar (2009) find that even if other benefits do not exist, *i.e.* network externalities or demonstrations, a company can still benefit from giving away fully functioning software as the free adopters help speed up the diffusion process. According to Jiang and Sarkar (2009) the accompanying word-of-mouth to a free offer can increase a company's profit. In § 2.5.2 (p. 19) we will build a much better understanding of word-of-mouth by looking at some the considerable amount of research that has been performed on the subject outside of the research on free.

### 2.3.1 Network externalities

Direct network effects are present when the value of a product or service increases as more people use it (Katz and Shapiro 1985; Clements 2004) — the classic example being telephony, as having a telephone is only valuable if there are other people with compatible telephones. A contemporary example involving freemium is Skype.

One of the problems with free versions of a product or service, is, as we have mentioned, that it can cannibalize sales of the premium version; thereby lowering the profits for the firm (Haruvy and Prasad 1998; Shampanier *et al.* 2007). On the other hand, the price users are willing to pay is, in part and everything else being equal, determined by the number of users in the network to which the product belongs (Brynjolfsson and Kemerer 1996), and establishing this initial network is simpler when giving away the product for free (Haruvy and Prasad 2001). Thus, one potential value of free users is that they potentially enable a company to charge higher prices for the premium version.

As it is advantageous to achieve a significant share of the market quickly (Brynjolfsson and Kemerer 1996; Katz and Shapiro 1992), the initial purchase should be made as easy as possible. This is especially important since the network benefits are lower for the early adopters.

Two-sided network effects, which are also called two-sided markets, entails

that an increase in usage by one set of users increases the value of another distinct set of users, and vice versa (Parker and Van Alstyne 2005; Rochet and Tirole 2006). An example of this is Google. The more people that search on Google, the more value for advertisers. The advertisers value for consumers, however, is that they are the ones who pay and therefore keep the service free. According to Rochet and Tirole (2003, p. 990) "many if not most markets with network externalities are two-sided."

For two-sided markets, pricing is one of the most important strategies for a potential platform (Rysman 2009). Pricing is not only dependent on the demand and costs that consumers bring to one side of the market, but also how their participation affect participation and profit on the other side (Rysman 2009). Thus, we see that prices depend on demand elasticities and marginal costs on each side (Rochet and Tirole 2003, 2006; Weyl 2009), which means that lower prices on one side leads to higher prices or more participation on the other side.

What Parker and Van Alstyne (2005) finds, is that profit can be maximized even when pricing below marginal cost in the absence of competition, *e.g.* the product can be rationally given away for free into perpetuity, even when not competing. The key is low marginal costs, not non-rivalry. The reason for this potentially being profit-maximizing is that increased demand in a the premium goods market more than covers the cost of investment in the free goods market (Parker and Van Alstyne 2005; Rysman 2009).

A market where there are externalities between the users of the free version and the users of the premium version on the same service can be seen as a two-sided market (Parker and Van Alstyne 2005) — thus, some uses of freemium can be seen in terms of two-sided markets. The segment that contributes more to demand for the other is the market to provide with free goods (Parker and Van Alstyne 2005). Consequently this can be a way of choosing who to attract with a free version and who should be the focus of the premium version when using freemium, *e.g.* attracting consumers to the free offering and businesses or prosumers to the premium offering.

# 2.3.2 Demonstration Effects

Demonstrations play on the intrinsic features of the product, not the extrinsic. According to Faugère and Tayi (2007) a primary purpose of offering a free sample is to increase sales by providing first-hand experience for potential buyers. Being able to try a product before buying has been shown to play a significant role in the adoption of information technologies (Agarwal and Prasad 1997), and in their study of the market for Web server software Gallaugher and Wang (2002) find that

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trial versions are associated with price premiums. Gallaugher and Wang (2002) also find that being able to try the product before buying it help seed the initial market.

As freemium is based on having a free version, we can say that all freemium-based services have demonstration effects. They do, however, not necessarily have demonstration effects for all functionality, for all users. Yet again we can use Skype as an example. With Skype it is free to call other users of Skype while it costs money to call to a regular phone, thus only demonstrating the former for free.



As we have seen there is *some* research on free. Alas, it is currently underdeveloped with regards to our focus in this thesis. Most research is focused on open source, free trials, network effects, and giving away physical products for free. As Bekkelund (2011) find, however, word-of-mouth appears to be significantly more important for freemium-based companies than network effects.

What we have demonstrated in this section, however, is some of the potential value in free users. Through network effects a free user can increase the value of the service for another users, through demonstration effects a free user can be convinced to become a paying customer and through word-of-mouth a free user can spread the service to other consumers.

#### 2.4 CUSTOMER VALUE

Customer Value include insights into how users perceive the value of a service, and therefore what is required both to get new users into a service and what is required to get them engaged. Consequently, understanding customer value is at the core of understanding customer acquisition in freemium.

For the purposes of this thesis we will focus on two aspects of customer value in this section. First, we will build a better understanding of what customer value is and what it entails; then we will go on to look at what create customer value and what this value leads to, *i.e.* the antecedents and consequences of customer value.

IDENTIFYING AND CREATING customer value is regarded as an essential prerequisite for long-term survival and success for a firm (e.g. Drucker 2007; Woodruff 1997; Porter 1996; Huber et al. 2001; Payne and Holt 2001; Anderson and Srinivasan 2003). Nevertheless, there is little consensus in the literature about the

concept (Graf and Maas 2008; Gummerus 2011), *e.g.* as Sánchez-Fernández and Iniesta-Bonillo (2007, p. 440) say, there is "ambiguity with respect to the definition, dimensions, and measurement of perceived value."

Drucker (2007, p. 32) explains why customer value is important:

What the business thinks it produces is not of first importance — especially not to the future of the business and not to its success. What the customers thinks he is buying, what he considers 'value', is decisive — it determines what a business is, what it produces and whether it will prosper. The customer is the foundation of a business and keeps it in existence.

Similarly, Anderson and Srinivasan (2003, p. 133) say that "customer expectations continue to rise and, in fact, may be virtually infinitely elastic, so no company can rest on its laurels for long in offering the highest perceived value to customers."

# 2.4.1 Classifying Customer Value

Customer value has been defined in a variety of ways in the literature, but there is no generally accepted definition (Graf and Maas 2008; Gummerus 2011). Because of this variety we will focus on classifications of definitions as they succinctly describe general views on customer value.

According to Gummerus (2011) customer value definitions can be classified in four ways. She divides the literature into *means-end*, *benefits/sacrifices*, *experience*, and *phenomenological*. Graf and Maas (2008) uses the term *desired* customer value for the means-end approach and the term *perceived* customer value for the benefits/sacrifices approach. These are the terms we will use throughout this thesis.

Perceived customer value entails a trade-off between benefits and sacrifices, and the focus is on the concrete performance characteristics of the product or service — thus, value is seen as a cognitive judgment of utility (Zeithaml 1988).

Most conceptualizations of perceived customer value involve quality as the benefit and price as the sacrifice (Heinonen 2004); there is, however, no generally accepted measure of either (Graf and Maas 2008; Gummerus 2011). Examples of other measures of perceived customer value are Ravald and Grönroos (1996) who include relationship benefits and Ulaga (2003) who, in a B2B context, include time-to-market, know-how, and social benefits.

Desired customer value conceptualizes customer value as a part of a customer's value system (Graf and Maas 2008); the focus is on the value derived from specific

performance characteristics. Value can be appreciated at different levels of abstraction, product attributes being at the lowest, attribute performances at the middle, and goals and purposes at the highest level (Woodruff 1997). The consumer is assumed to make rational choices between these (Woodruff 1997).

Experiential value perceptions are based on interactions involving either direct usage or distanced appreciation of goods and services (Mathwick et al. 2001). Differing from both perceived and desired value, consumers are assumed to take emotional and irrational choices (Gummerus 2011). Experiential value is then about how much and what kind of value a customer receives through using the product, e.g. emotional, functional, or monetary.

In the experiential value research stream there is little attention given to sacrifices, since value is typically seen as a holistic assessment. Understanding this experiential value is important as there is an emerging *experience economy* (Mathwick *et al.* 2001; Pine and Gilmore 1998), and as "value is now centered in the experiences of consumers" (Prahalad and Ramaswamy 2004, p. 137, in Sandström *et al.* (2008)).

Phenomenological customer value entails that value is "always uniquely and phenomenologically determined by the beneficiary," and that customer value is idiosyncratic, experiential, contextual, and meaning-laden (Vargo et al. 2008). Thus, value is fundamentally derived and determined in use (Vargo et al. 2008). Yet again we see a customer as experiencing and determining value. Value is, however, more centered at the individual compared to experiential value, which is more about the consumer's experience of using the service.

FROM THESE FOUR VIEWS we see that the customer value construct is complex. In freemium we have three very different phases: before becoming a user, being a user and being a paying customer. Traditionally the choice of starting to use a service has involved a transaction between a consumer and a company; in freemium, however, for most consumers it only entails the choice to test a service — a choice which entail no money shifting hands. We can expect this to affect the customer value.

As both experiential value and phenomenological value is focused on the consumers experiences, we believe that these two will be important in understanding the customer value of the users on the free version. Desired and perceived are believed to give important insights into the users that are "still on the outside."

To understand the user acquisition process we must understand why and how these consumers choose to become users, and what gets existing users to become engaged and spread the service. Thus, we must understand the antecedents and consequences of customer value. This will be the objective of the two next sections.

# 2.4.2 Antecedents of Customer Value

There has been a considerable amount of research on antecedents of customer value, but there are no generally accepted factors.

#### In-use value

According to Grewal *et al.* (2003) there are four dimensions of perceived customer value. *Acquisition value* refers to the buyer's trade-off between benefits and sacrifices from acquiring the product or service. *Transaction value* refers to the pleasure of getting a good deal. *In-use value* represents the value realized when a service is used, and, lastly, *redemption value* is the price of the product at end-of-life.

Sandström *et al.* (2008) define in-use value as the evaluation of the service experience, *i.e.* the individual judgment of the sum total of all the functional and emotional experience outcomes. This value cannot be predefined — it is not a rational choice — but is defined by the user during the user consumption.

The Internet can have deep effects on all these dimensions (Grewal et al. 2003). For freemium we can assume a considerable increase in both transaction value and in-use value as free users get a good deal and can use a service for free while they also get value while using the service. As one have said, "customers are understandably happier when they are offered services for free" (Anderson and Narus 1995, p. 77, in van Riel et al. 2001). For e-services we can, however, presume that the redemption value is not applicable and therefore zero.

Thus, the free version can in itself be an antecedent of customer value as consumers will feel that they get a good deal (Shampanier *et al.* 2007). The fact that users can then experience the service without paying can increase the in-use value; thereby increasing the customer value.

As these value dimensions are broadly defined, we will now go on to explore more specific notions of value to build a deeper understanding of value from customers' point of view.

#### Valence, Product Quality, Price & Risk

Chen and Dubinsky (2003) create a framework for predicting perceived e-service value in pre-purchase situations. They find support for three antecedents to perceived customer value: valence of experience, perceived product quality, and price. They do not find support for a proposed negative effect of perceived risk on perceived customer value. Valence and quality were dependent variables described as follows:

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• *Valence* looked at ease-of-use of the web site, information relevance, and customer service, and thus at the emotional or attitudinal state aroused by the online experience. They found the valence to have a positive impact on perceived value.

• *Product quality* was found to have a positive impact on perceived customer value. This variable consisted of the valence of experience, the firm's reputation, and the product price. Of these the valence and reputation was found to have a positive impact. There was not support for a proposed positive relationship between price and quality. We can, however, see that certain external cues influence online users.

Whereas valence seems to be similar in notion to in-use value, product quality and price appears to be more related to acquisition value and transaction value when comparing this framework to the dimensions in Grewal *et al.* (2003).

In the literature there are several others that find factors that are similar in nature to valence of experience. Golik Klanac (2008), for example, find that comfort, appreciation and enjoyment increase customer value. Similarly, Okazaki (2008) include intrinsic enjoyment and escapism. Both of these views relate closely to the experience of using the service.

Looking at product quality, Golik Klanac (2008) include convenience, confidence and efficiency. Very similar to these, are the four factors proposed by Parasuraman *et al.* (2005): efficiency, system availability, fulfillment, and privacy. Okazaki (2008) include visual appeal and economic value. These are all factors that relate to having a product that users' perceive as having high quality, *e.g.* through getting the job done fast, by being visually appealing, by delivering on "its promises," and so on.

Unlike Chen and Dubinsky (2003) others have found support for perceived risk as a negative effect on customer value (e.g. Okazaki 2008). What Chen and Dubinsky (2003) do find about risk, however, is that price is positively associated and product quality inversely associated to risk while reputation is not significantly related to risk. They also propose that perceived risk may have a relationship with perceived customer value for expensive, infrequently purchased product.

### Functional, emotional & epistemic value

In their research on online banking, Ho and Ko (2008) determine customer value by three factors:

• *Functional value*, which relate to functional performance, economic utility, and the benefits associated with possessing the service.

- *Emotional value*, which describe customers' feelings when they experience an organization's products or services.
- *Epistemic value*, which is the capacity of services or products to provide novelty or curiosity and satisfy a desire for knowledge.

They also propose the impact of ease of use, usefulness, and costs (saved) on value, in addition to self-control — the perception of being in control — and customer readiness — in terms of role clarity, motivation, ability, and optimism. All these had a positive relationship with customer value, and customer value impacted the intention to continue use.

Thus, we see that basically these elements appear to be similar in nature to valence and product quality; the former matching emotional value, ease of use, self-control and customer readiness; the latter matching functional value and usefulness. Interestingly, Ho and Ko (2008) include novelty, which also Okazaki (2008) include, but which we have not seen in the other studies.

### Experiential Value Scale

Mathwick *et al.* (2001) develop what they call the *Experiential Value Scale*. They propose the typology of experiential value shown in Table 2.1. Reactive value derives from the consumer's comprehension of, appreciation for, or response to a consumption object or experience. Active value, on the other hand, implies an increased collaboration between the consumer and the firm. Mathwick *et al.* (2001) define the four dimensions as follows:

- Service excellence is the consumer's appreciation of delivered promises and performed functions the experience of using the website. It operates as an ideal, a standard against which judgments are ultimately formed (Holbrook 1994, in Mathwick *et al.* 2001).
- Customer Return on Investment (CROI) is the perceived return on cognitive, behavioral, or financial investments made by the consumer.
- *Playfulness* is reflected in the intrinsic enjoyment that comes from engaging in activities that are absorbing. The intrinsic enjoyment of playful exchange behavior serves as an end unto itself.
- *Aestethics* is reflected in two key dimensions: visual appeal and entertainment.

The distinction between playfulness and aesthetics is explained as follows: "as the customer crosses the line from spectator to participant, their role shifts

Intrinsic Value	Playfulness	Aesthetics
Extrinsic Value	CROI	Service Excellence
	Active Value	Reactive Value

Table 2.1: Typology of experiential value (Mathwick et al. 2001)

from one of distanced appreciation of aesthetic elements to co-producers of value" (Mathwick *et al.* 2001, p. 44). This is interesting as using the free offering plays at the user's intrinsic, active value, and thus we are beyond the perceived value itself. Thus, this scale is interesting as it goes one step further than the ones we have discussed so far, while still having strong connections to several of the factors mentioned.

What we see is that there is a considerable amount of antecedents mentioned and discussed in the literature. None have yet, however, been recognized widely (Gummerus 2011; Graf and Maas 2008). Broadly, however, we see that price, risk, valence and product quality appear in different forms and explanations as the basis of customer value. In the rest of this thesis we will collectively categorize these antecedents of customer value as *service quality*. Thus, this is similar to the definition in Santos (2003), which state that e-service quality is "the consumers' overall evaluation and judgment of the excellence and quality of e-service offerings in the virtual marketplace" (Santos 2003, p. 235).

## 2.4.3 Consequences of Customer Value

The are three factors that are usually mentioned in relation to the consequences of customer value:

- *Trust*, which according to Singh and Sirdeshmukh (2000, p. 156) "is a crucial variable that determines outcomes at different points in the process and serves as a glue that holds the relationship together."
- *Loyalty*, which can defined by in the context of e-services as "customer's favorable attitude toward an electronic business resulting in repeat buying behavior" (Anderson and Srinivasan 2003, p. 125).
- Customer Satisfaction, which according to Oliver (1997, in Anderson and Srinivasan (2003)) "may be best understood as an ongoing evaluation of the surprise inherent in a product acquisition and/or consumption experience." Similarly, Wangenheim

(2003) defines customer satisfaction as the outcome of a comparison between expected and perceived performance throughout the customer relationship.

Anderson and Srinivasan (2003) find that high perceived customer value together with trust has a moderating effect on the relationship between satisfaction and loyalty in e-services. They find that the higher the level of satisfaction, the higher the level of loyalty; indicating that higher customer value leads to more loyal customers. Additionally, Shankar et al. (2003) find that the relationship between satisfaction and loyalty is typically stronger for e-services than for traditional services. Satisfied customers are, however, likely to seek out competitors if they do not feel like they are getting the best value (Anderson and Srinivasan 2003; Chang et al. 2009; Boyer et al. 2002). Thus, high customer value is crucial as retaining customers is cheaper than attracting new customers (Reichheld et al. 1996; Reichheld and Schefter 2000).

In addition to finding support for a moderating effect of perceived value on the relationship between customer satisfaction and customer loyalty, Chang et al. (2009) also find support for quality as an antecedent of satisfaction. An interesting facet of Chang et al.'s (2009) study is that quality only impact customer satisfaction, not perceived customer value. However, we found service quality to be an antecedent of customer value in § 2.4.2 (p. 12), and according to Zeithaml et al. (2002) it is also an antecedent of customer satisfaction and intent to purchase. Several authors outside the realm of e-services also propose customer satisfaction as a consequence of experienced customer value (Gallarza and Gil Saura 2006; Shieh and Cheng 2007; Sparks et al. 2007; Wu and Liang 2009, e.g.). Thus, there are discrepancies in the theory with regards to precisely how these constructs relate to each other.

Focusing on neither satisfaction not loyalty, but only customer value, Chen and Dubinsky (2003) find a highly significant positive relationship between perceived customer value and purchase intention. Thus, increased perceived value leads to increased likelihood of purchasing.

WE SEE THAT customer value has an important role in creating loyal customers, but that there is still no consensus as to precisely how customer value, trust, loyalty, and customer satisfaction relate to each other.



Combining antecedents and consequences, we see that customer value is closely linked with service quality, customer satisfaction and loyalty. Roughly, service quality can be seen as an antecedent of customer value; satisfaction and loyalty can be seen as consequences. Thus, we are starting to see connections from creating a high-quality service to having satisfied and loyal customers, and that free can help create this satisfaction and loyalty through allowing consumers to experience the service for free. We can therefore expect that the customer value for many users will be significantly higher at the time of the first monetary transaction compared to a traditional service where the transaction occur before the service is experienced.

### 2.5 CUSTOMER ENGAGEMENT

"[Purchasing] is part of a social process ... It involves not only a one-to-one interaction between the company and the customer but also many exchanges of information and influence among the people who surround the customer." — Rosen (2002, p. 6, in Phelps *et al.* 2004)

The distinguishing feature of the new marketplace is that consumers are becoming a new source of competence for the firm (Prahalad *et al.* 2000); the focus is shifting from producer to consumer, and thus towards interactivity, connectivity, and ongoing relationships (Vargo and Lusch 2004). In virtual communities individuals have unprecedented opportunities to share information and interact with others even when no social ties exist (Bagozzi and Dholakia 2002; Butler 2001). Thus customers contribute to firms in many ways that are beyond direct transactions, *e.g.* in word-of-mouth activity, recommendations, helping other customers, blogging, writing reviews and in generating new product ideas (Kumar *et al.* 2010a; Van Doorn *et al.* 2010).

Customer Engagement is the active two-way interactions a customer has with a firm, with prospects and with other customers (Kumar et al. 2010a). Van Doorn et al. (2010) define customer engagement as the behavioral manifestation from a customer toward a brand or a firm which goes beyond purchase behavior. Kumar et al. (2010a), however, argue that the purchase behavior itself must be included when defining customer engagement. The manifestations can be both positive and negative and both intrinsically and extrinsically motivated (Kumar et al. 2010a). This personal two-way relationship between firms and customers that foster these

<sup>2)</sup> According to Kumar *et al.* (2010a, p. 298), "Given that the concept of customer engagement is novel and in the developmental phase, there are bound to be differing and at times conflicting opinions regarding its conceptualization."

two-way interactions, and thus creates a deeper and more meaningful connection between the company and the customer (Kumar *et al.* 2010a), is the core focus of this chapter.

What customer engagement entails is a focus not only on product quality and perceived value as the driver of firm performance, but also on customer-based metrics (Van Doorn *et al.* 2010). In order to achieve a long-term, sustainable competitive advantage a firm must be able to retain, sustain and nurture its customer base (Anderson *et al.* 2004; Gruca and Rego 2005; Rego *et al.* 2009), and without correctly valuing these non-transactional aspects customers can be undervalued or overvalued (Kumar *et al.* 2010a; Bijmolt *et al.* 2010; Wangenheim and Bayón 2007). Thus, understanding the value of a customers beyond the transaction itself is essential, and especially for freemium in which many, if not most, users do not pay — and therefore where the primary, and perhaps only, value of a user is in his or her engagement.

According to Van Doorn et al. (2010) a Customer Engagement Behavior — how a customer chooses to engage — has five dimensions: valence, form or modality, scope, nature of its impact, and customer goals. These can be described as follows: The customer's engagement can from a company's perspective be classified as positive or negative; the engagement can be expressed in different ways; it can be temporally momentary or ongoing and it can be geographically local or global; it can differ in how quickly it affects any constituents, its level of change affected within the target audience, in the number of people affected, and in its longevity; and the engagement can lastly differ in the purpose of which it is acted upon, e.g. to whom the engagement is directed, to what extent it is planned, and to what extent the customer's goals are aligned with the firm's goals (Van Doorn et al. 2010).

### 2.5.1 Antecedents & Consequences

To understand customer engagement we must understand its antecedents and consequences. In this thesis we will base this on Van Doorn *et al.*'s (2010) *Conceptual Model of Customer Engagement Behavior*. Research is, however, at an early stage with regards to these behaviors (Van Doorn *et al.* 2010).

Antecedents of customer engagement can be customer-based, firm-based, context-based, or some interaction among these (Van Doorn *et al.* 2010). Attitudinal antecedents are of the most important customer-based factors affecting customer engagement behaviors (Van Doorn *et al.* 2010). These include customer satisfaction, brand commitment, trust, brand attachment, and brand performance

perceptions. Generally, if either of these are very low or very high it can lead to engagement. We see here both customer satisfaction and trust mentioned as antecedents of customer engagement, which we have both found to be consequences of customer value (§ 2.4.3, p. 15).

Another customer-based factor is the customer's goals (Van Doorn *et al.* 2010). These goals can influence how the brand is used and consequently how customers engage with the brand. However, these goals can also be unrelated to the brand and product. Here we can see a potential connection to *desired* customer value.

Three other customer-based factors that affect customer engagement are individual customer traits and predispositions; disgust, regret, anger, or other affective states; and, finally, consumer resources such as time, effort, and money can affect customer engagement behaviors (Van Doorn *et al.* 2010).

The brand is one of the most important firm-based factors that affect customer engagement behaviors (Van Doorn et al. 2010), e.g. brands with higher reputation are more likely to engender higher levels of positive customer engagement behavior (de Matos and Rossi 2008). Another potential firm-based factor is development of processes and platforms that support specific customer actions, e.g. to enable customers to voice their concerns, compliments, suggestions, and ideas directly to the firm and its employees (Van Doorn et al. 2010). Managing the information environment of customers and providing rewards and other incentives are two other potential factors.

Context-based factors that affect customer engagement behaviors may largely arise from the political/legal, economic/environmental, social and technological aspects of the society within which firms and customers exist. Competitors and their actions also create a strong contextual force affecting customer engagement.

FROM THESE FACTORS we see a connection between customer engagement and customer value, and clearly in the direction of customer value being an antecedent of customer engagement. Thus, we are starting to see connections from service quality and other factors via customer value to customer engagement.

### 2.5.2 Word-of-mouth

Word-of-mouth is one way for users and customers to engage. Bekkelund (2011) proposes that word-of-mouth is as the center of understanding freemium, as it is one of the core elements that determine the success of a freemium-based company. Thus, we will here build an in-depth understanding of word-of-mouth in the context of customer engagement, to build on the initial understanding of word-of-mouth in the context of free in § 2.3 (p. 6).

In the words of Jansen *et al.* (2009, p. 2169), "word-of-mouth involves consumers sharing attitudes, opinions, or reactions about businesses, products, or services with other people." It has been shown to have significant impact on consumer choice (*e.g.* Arndt 1967; Richins 1983; Buttle 1998), as consumers perceive it to be more reliable, credible, and trustworthy than firm-initiated communications (Arndt 1967; Schiffman and Kanuk 2007). Trusov *et al.* (2009) find that word-of-mouth referrals have a strong impact on new customer acquisition. Word-of-mouth is also recognized as having a pivotal role with regard to diffusion of information throughout online communities (Sun *et al.* 2006). Nevertheless, not all word-of-mouth is equal (Duan *et al.* 2008; Hennig-Thurau *et al.* 2004; Wangenheim and Bayón 2007; Godes and Mayzlin 2004), *e.g.* with regards to who it affects, when it affects and how much it affects.

Positive word-of-mouth is considered a powerful medium for companies to influence consumers (Jansen *et al.* 2009; Trusov *et al.* 2009). Word-of-mouth is, however, multifaceted and typically hard to influence (Dellarocas 2003; Phelps *et al.* 2004; Leskovec *et al.* 2007). Misner and Devine (1999) describe word-of-mouth as the world's most effective but least understood marketing strategy.

Arndt (1967) was one of the first to research the influence of word-of-mouth on consumer behavior. He characterized word-of-mouth as oral, person-to-person communication between a receiver and a communicator whom the receiver perceives as non-commercial, regarding a brand, product or service. The advent of the Internet has however extended consumers' options for gathering unbiased product information from other consumers and provides the opportunity for consumers to offer their own advice (Hennig-Thurau *et al.* 2004). Compared to traditional word-of-mouth, online word-of-mouth is more influential due to its speed, convenience, one-to-many reach, and its absence of face-to-face human pressure (Phelps *et al.* 2004).

In addition to consumer behavior word-of-mouth has been shown to influence a wide variety of conditions, including awareness, expectations, perceptions, attitudes, and behavioral intentions (Buttle 1998). These influences can be both positive (e.g. File and Prince 1992) and negative (e.g. Richins 1983) — the negative has, however, been shown to have greater effect (Arndt 1967; Park and Lee 2009).

The Internet's accessibility, reach, and transparency has empowered companies to influence and monitor word-of-mouth as never before (Kozinets *et al.* 2010). It has also lead to significantly lower costs and faster delivery of word-of-mouth (Trusov *et al.* 2009). According to Brown *et al.* (2007) word-of-mouth is a "major part of online consumer interactions." A testimony to this is that Jansen *et al.* 

(2009) find nearly a fifth of microblogs<sup>3</sup> contain mention of a brand. With their broad reach these online consumer interactions thus have tremendous power to influence brand image and perceptions (Reynolds 2007; Shirky 2008)

On the Internet people appear to trust seemingly disinterested opinions from people that are outside their immediate social network, such as online reviews (Duan et al. 2008; Chevalier and Mayzlin 2006; Park and Lee 2009). One of the aspects that has enabled this trust is the geographical and temporal freedom provided by the Internet (Jansen et al. 2009). An example of this freedom is the increasing use of tools, such as blogs and social networks sites, to exchange product information (Cheung et al. 2008). Another interesting aspect of this freedom is that communicators tend to be more willing, honest and forthcoming with their opinion (Roed 2003).

Especially the rise and growth of online social networks has had a tremendous effect on word-of-mouth (Brown et al. 2007). These social networks have made it possible for one person to communicate with hundreds or even thousands of other people about products and the companies that provide them (Mangold and Faulds 2009). Consumers are also turning more frequently to various types of social media to conduct their information searches and to make their purchasing decisions (Lempert 2006; Vollmer and Precourt 2008, both in Mangold and Faulds 2009).

An interesting finding by Brown *et al.* (2007) is that online, web sites can be seen as primary actors, and that these "online communities can act as a social proxy for individual identification" (Brown *et al.* 2007, p. 2). Based on this, Brown *et al.* (2007, p. 10) defines online tie strength as: "The intensity of an interactive and personalized relationship between an individual and a Web site." There are however still uncertainties as to how tie strength affects word-of-mouth online (Kozinets *et al.* 2010) and regarding how these social ties are formed (Brown *et al.* 2007). Additionally, Kozinets *et al.* (2010) question the finding that web sites are the primary actors online.

Consumers are more inclined to depend on word-of-mouth when transparency of the product is high, when the product is complicated, when verification by objective evaluation criteria is difficult and when perceived risk is high (Ha 2002).

<sup>3) &</sup>quot;...microblogging is a new form of communication in which users can describe things of interest and express attitudes that they are willing to share with others in short posts (i.e., microblogs). These posts are then distributed by instant messages, mobile phones, email, or the Web" (Jansen *et al.* 2009, p. 2170).

Looking at risk Ha (2002) find that positive word-of-mouth can lower the performance risk perception, which was significantly related to product quality. They also find that positive word-of-mouth do not significantly affect consumer awareness of psychological, financial, and time-loss risk.

### Antecedents of word-of-mouth

There is still no single theory that dominates word-of-mouth research, but Hennig-Thurau *et al.* (2004) is the most prominent with regards to word-of-mouth motives (Cheung and Thadani 2010), hence this will be the primary focus here.

Hennig-Thurau *et al.* (2004) identify five main motivational categories of positive word-of-mouth:

- 1 *Social benefits*. Affiliation with a virtual community that enable a consumer to receive social benefits. Consumers engage in word-of-mouth to signify their participation in and presence with the community.
- 2 *Concern for other consumers*. Desire to help other consumers with their buying decisions, to save others from negative experiences, or both. One aspect of this is product quality, which Duan *et al.* (2008) find to have a positive impact on generating positive word-of-mouth.
- 3 *Positive self-enhancement*. Driven by a desire for positive recognition from others, *e.g.* being viewed as a connoisseur by other consumers.
- 4 *Economic incentives*. To receive some form of compensation from the platform operator. A well known example, at least among students, of this, is the file hosting service Dropbox.<sup>4</sup> In their free version they provide 2GB of free online storage, but this can be increased up to 8GB by referring new users.
- 5 *Advice seeking.* To acquire the skills necessary to better understand, use, operate, modify, and/or repair a product.

To understand how word-of-mouth differ among consumers and to which degree consumers are motivated by multiple factors, Hennig-Thurau *et al.* (2004) segment the consumers into four clusters:

- 1 *Self-Interested Helpers* are strongly driven by economic incentives and their concern for other consumers.
- 2 Multiple-Motive Consumers are motivated by a large number of factors.
- 3 *Consumer Advocates* are primarily concerned for other consumers.

4 *True Altruists* are both strongly motivated by helping other consumers as well as helping companies.

Among the four segments in the Hennig-Thurau *et al.* (2004) study it was the Multiple-Motive consumers who were most engaged in word-of-mouth.

Interestingly, one motivational concern is consistent among these segments — a concern for other consumers. As an important element of this concern is product quality, we can presume that quality is important in generating word-of-mouth. According to Duan *et al.* (2008) it is therefore possible for businesses to generate brand awareness without spending a huge amount on advertising and marketing. Also interesting when discussing quality is that consumers engage in word-of-mouth when their expectations are either surpassed or not met (Anderson 1998).

In their exploration of antecedents of word-of-mouth, Sun *et al.* (2006) find that individuals' enjoyment of experimenting with new products, their experience with the Internet and their social connections online are significant predictors for word-of-mouth. This is interesting when seen in connection with the rapid increase of social networks such as Facebook and Twitter over the last years, which entail that many have considerably more online connections than before. We can also assume that this increases peoples' Internet experience.

LOOKING AT EMAIL FORWARDING Phelps *et al.* (2004) find that targeting the right people is essential to any viral effect.<sup>5</sup> This entails understanding these consumers well enough to create something interesting and relevant. Spending to acquire not just any customer, but the "right" kind of customer is also emphasized by other scholars (*e.g.* Blattberg and Deighton 1996; Blattberg *et al.* 2001; Mathwick *et al.* 2010).

Phelps *et al.* (2004) also find that email messages that elicit a strong emotion are more likely to be forwarded. The four most likely reasons people pass-along email is because they see it as fun, they enjoy it, because it's entertaining and to help others (Phelps *et al.* 2004).

Another potential antecedent of future word-of-mouth is the brand reputation signaled by existing word-of-mouth (Amblee and Bui 2008). Word-of-mouth is also greater for websites with established reputations than for those that are

<sup>5)</sup> In this thesis I have included viral effects when discussing word-of-mouth. These concepts are similar in nature, and there is still disagreement about whether they are the same or distinct concepts (Phelps *et al.* 2004).

not (Park and Lee 2009). Consumers who are less familiar with a brand are also more susceptible to changing their brand evaluations based on the valence of the word-of-mouth (Sundaram and Webster 1999). Looking at movie reviews past research suggests that the best products usually have the most reviews (Amblee and Bui 2007; Liu 2006). Yet again we see that quality appears to be an antecedent of word-of-mouth.

Customer satisfaction has consistently been shown to engender positive word-of-mouth (e. g. Wangenheim and Bayón 2007; Anderson 1998; Sundaram et al. 1998; de Matos and Rossi 2008). Anderson (1998) show that the effect of customer satisfaction on word-of-mouth is strong at the extreme of the curve, i. e. when customers as very satisfied or very dissatisfied we can expect more word-of-mouth. Wangenheim and Bayón (2007) find that there is a complete chain from satisfaction, via word-of-mouth, to new customer acquisition. Additionally, Villanueva et al. (2008) find that customers that are acquired through word-of-mouth engage in word-of-mouth far more than other customers; bringing in twice as many new customers.



Thus, we see that customer engagement and especially word-of-mouth are powerful constructs that can significantly impact the likelihood of succeeding with freemium.

Through the theory we see a rough notion appear: service quality  $\rightarrow$  customer value  $\rightarrow$  customer satisfaction/loyalty  $\rightarrow$  customer engagement (*e.g.* word-of-mouth)  $\rightarrow$  customer acquisition. This gives a rough idea of how this theory is interrelated, and how quality eventually leads to acquiring new users. Additionally, when new customers are acquired we can expect this process to repeat as these new customers will experience value and start engaging. Thus we can see that there is a circularity to this process.

By better understanding customer engagement we are one step closer to understanding how customer acquisition works in freemium. In this section we have shown that more satisfied and loyal customers are more likely to be engaged, and this engagement can induce new users to try out the service; thereby further growing the user base and the possibility of converting people to paid.

### 2.6 THE VALUE OF CUSTOMERS

## 2.6.1 Customer Engagement Value

Measuring and managing the value of customers from a firm's point of view has traditionally focused on customer acquisition and retention (Kumar et al. 2010a), and therefore on the amount of money a company can earn from each customer directly. Freemium is, however, more opaque than the traditional way of doing business where each and every consumer pay for him- or herself. Consequently, in order to not undervalue or overvalue consumers based solely on their transactions with a firm (Kumar et al. 2010a), it is crucial to understand how these free users should be valued. To solve this problem Kumar et al. (2010a) introduce what he term the Customer Engagement Value,<sup>6</sup> which will be the focus of this section.

Kumar *et al.* (2010a) propose four components for calculating customer engagement value:

- Customer Lifetime Value,<sup>7</sup> which is the present value of all future profits generated by a customer. Customer lifetime value is the traditional way to measure the value of customers (e. g. Jain and Singh 2002; Berger and Nasr 1998; Kumar 2008; Gupta et al. 2006).
- Customer Referral Value, which is the value of incentivized referrals of new customers.
- *Customer Influencer Value*, which includes the customer's behavior to influence other customers, *e.g.* through word-of-mouth, and which therefore can be negative. While the customer referral value is extrinsically motivated, the customer influencer value is intrinsically motivated.
- *Customer Knowledge Value*, which is the value added to the firm by feedback from the customer.

Thus we see that this is about valuing the customer engagement behaviors we discussed in § 2.5 (p. 17), in addition to the actual transactions between customers and the firm. The total value of a customer is found by aggregating these four

<sup>6)</sup> Given that research on customer engagement itself is in the development phase (Kumar et al. 2010a), it is important to note that this research on customer engagement value is barely in its initial stages. It is, however, an interesting approach that sheds light on the value users have beyond their customer lifetime value. Thus, this understanding is crucial to understanding how there can be value in users that do not pay.

<sup>7)</sup> Kumar *et al.* (2010a, p. 299) state that "while theoretically [customer lifetime value] could be thought to include all aspects of value creation by the customer, in practice, as well as in the academic literature, it is repeatedly identified only with actual purchase behavior."

values. Thus far there has been no research on influencer and knowledge value (Kumar *et al.* 2010a), while Kumar *et al.* (2010b) explore referral value.

THE EXTENT TO which users and customers engage in conversations with other consumers and the firm can significantly influence a firm's value, especially as it potentially affects other users and customers both in terms of their engagement and their feedback (Kumar et al. 2010a). Consequently, focusing only on customer lifetime value can potentially lead to an overvaluation or undervaluation of the value of a firm's customers (Kumar et al. 2010a).

An important thing to note about customer engagement value is that it differs from looking just at customer lifetime value in one especially important way — it can be negative. Additionally, negative word-of-mouth is found to have more effect than positive word-of-mouth (Anderson 1998). Thus we see that this adds to our understanding of the valuation of customers, and in a way that can be crucial to understand when looking at freemium when many users do not pay.

Kumar *et al.* (2010a) propose a non-exhaustive set of behavioral, attitudinal, and network metrics than can shine a light on what each value entails and how it can be measured. These metrics are shown in Table 2.2.

THROUGH THE LENS of customer engagement value we can begin to understand how to measure the value free users add to a company. As we have mentioned, one aspect of e-services is that technological developments has enabled a company to monitor users to a much larger degree and therefore better understand how they experience the service (Gummerus 2011). One element of this is being enabled to better measure customer referral value, customer influencer value and customer knowledge value; thereby being able to learn and adapt based on the actions of free users.

#### 2.6.2 Customers as Assets

A company's customers are intangible assets that should be valued and managed (Gupta and Lehmann 2003), and according to Blattberg et al. (2001, p. 3) these assets should be maximized "just like any other asset." Persson and Ryals (2010, p. 421) define *customer assets* as "the relationships that a firm has with its customers," and that the value of those assets can be termed *customer equity*.

Gupta and Lehmann (2003) show that there is a strong link between customer and firm value. In their discussion looking at customers as assets entails that a firm measure and understand the customer lifetime value of their customers. This

	Behavioral	Attitudinal	Network
CLV	Acquisition rate, retention rate, acquisition channel, retention cost, purchase frequency, cross-buying, value of purchases, variance in spending	Satisfaction, purchase intent, brand value or equity, relationship commitment, firm understanding of customer needs, communication channel preference	Not Applicable
CRV	CLV of customers acquired from referrals, number of referrals	Likelihood to recommend, likelihood of being an opinion leader, tendency to use social media and blogs	Number of connections and level of interaction with prospects, tendency to be hub versus a weak link across hubs
CIV	clv of customers acquired from influence, number of reviews, product or service expertise, emotional valence of the reviews and interactions opinion leadership, tendency to recommend, and use social media and blogs		Number of connections and level of interaction with customers, tendency to be hub versus a weak link across hubs
CKV	CLV, product or service expertise	Likelihood to provide feedback	Number of connections and level of interaction with customers, and prospects, tendency to be hub versus a weak link across hubs

Table 2.2: A subset of the customer engagement value metrics proposed by Kumar *et al.* (2010a). CLV = Customer Lifetime Value, CRV = Customer Referral Value, CIV = Customer Influencer Value and CKV = Customer Knowledge Value.

encourages a more long term rather than short term view of their customers. Thus, this is part of the shift from a transactional view to a relational view of customers (Gupta and Lehmann 2003).

Viewing customers as assets focuses the attention on the customers rather than on product. Therefore there is greater focus and how the customers are valued, *e.g.* by looking at acquisition costs and the retention rate (Gupta and Lehmann 2003). Persson and Ryals (2010) lists several drivers of this value, *i.e.* the customer equity, of which he mention two as especially important: satisfaction and attitudinal loyalty. Thus, we again see two of the core elements of customer value, indicating that viewing customers as assets will also be important for freemium. We believe that augmenting this view with Kumar *et al.*'s (2010a) customer engagement value can give valuable insights into freemium. Focusing more on customers as assets is, however, outside the scope of this thesis.



As freemium entails that many, if not most, users will never pay, understanding how to value these customers is crucial when discussing customer acquisition; otherwise we can expect companies to acquire "the wrong customers," as the customers might be valued incorrectly. Here we have briefly looked at two ways to start understanding this valuation as they are expected to be central for our understanding of customer acquisition in freemium.

FINISHING UP the theory, we see that we have built a somewhat coherent view of the path from service quality via customer value and customer engagement to customer acquisition, including the notion of the value of these acquired customers and the notion that this is a circular process. The crucial aspects of this process appears to be service quality and word-of-mouth. We will now go on to explaining the research methodology in this thesis, before we go on to look at how this theoretical model compares to real world customer acquisition in freemium.

# 3 METHODOLOGY

It is the problem statement that determines the methodology used (Berg 2007). This paper investigates the customer acquisition process when using freemium. This is a wide problem statement in a field nearly void of research; this affects our methodological choices as it touches on ontological and epistemological considerations, choice of research strategy, choice of research design, on the specific methods for collecting data, and how the data is analyzed. These aspect are discussed in this chapter, before we present the results in the next chapter.

### 3.1 EPISTEMOLOGY & ONTOLOGY

Any research effort is framed by the world view of the researcher (Bryman 2008), both in terms of that which is known — ontological considerations — and that which can be known — epistemological considerations. Therefore this section clearly express the epistemological and ontological position this thesis is built upon.

Epistemologically this thesis is rooted in *hermeneutics*,<sup>1</sup> *phenomenology*,<sup>2</sup> *symbolic interactionism*,<sup>3</sup> and in Max Weber's notion of *verstehen* — and it is thus interpretative in nature. In the words of Bryman (2008, p. 694), *interpretivism* is about grasping "the subjective meaning of social action." Thus, this thesis seeks to answer the questions asked by gaining access to peoples' point of view. It is about *understanding* human behavior — which is basically what verstehen entails (Bryman 2008) — not *explaining* it.

From an ontological perspective this thesis is constructionist in nature. Thus, knowledge is seen as indeterminate and socially constructed (Bryman 2008). The former implies that a researcher always present a specific version of social reality, not one that is definitive; the latter implies that social phenomena are produced through social interaction and is in a constant state of revision (Bryman 2008).

Throughout the rest of this thesis we will not focus on discussing these elements, but they lay as the foundation for the choices made and how the research has been performed.

<sup>1) &</sup>quot;A term drawn from theology, which ... emphasizes the need to understand from the perspective of the social actor." (Bryman 2008, p. 694)

<sup>2) &</sup>quot;The phenomenologist views human behavior ... as a product of how people interpret the world. ... In order to grasp the meanings of a person's behavior, *the phenomenologist attempts to see things from that person's point of view.*" (Bogdan and Taylor 1975, pp. 13–14)

<sup>3) &</sup>quot;Symbolic interactionists argue that interaction takes place in such a way that the individual is continually interpreting the symbolic meaning of his or her environment and acts on the basis of this imputed meaning." (Bryman 2008, p. 17)

### 3.2 CHOICE OF RESEARCH STRATEGY

Researchers have recommended using qualitative methods to explore phenomena about which little is known or to to gain novel understandings about existing phenomena (Stern 1980, in Ulaga 2003). According to Eisenhardt (1989) a qualitative approach can make a significant contribution to theory development, and Strauss and Corbin (1998) state that such an approach can be used to obtain intricate details about the specific phenomenon under investigation.

As this thesis is epistomologically and ontologically based in interpretivism and constructionism respectively, and as the key theoretical themes of freemium are weakly developed, this thesis naturally lends itself to a qualitative methodology.

Hence, the choice of research strategy is based both in a subjective world view and because of its theoretical value. The aim of this research is to generate scientific propositions about this new phenomena that can be subject to further testing and verification.

Another important choice is whether or not ideas and theory should come before or after empirical research. In the former, *e.g.* as described by Popper (2002), one begins with ideas and then attempts to disprove or refute them through tests of empirical research. In contrast, in the latter some argue that research must occur before theory can be developed, *e.g.* Merton (1968, p. 103):

It is my central thesis that empirical research goes far beyond the passive role of verifying and testing theory; it does more than confirm or refute hypotheses. Research plays an active role: it performs at least four major functions, which help shape the development of theory. It initiates, it reformulates, it deflects, and it clarifies theory.

This thesis, with its primary focus on understanding a concept that is currently nearly void of research, is based on a *research-before-theory* model.

### 3.3 CHOICE OF RESEARCH DESIGN

The framework used for collecting and analyzing data in this thesis is based on a cross-sectional research design. This entails collecting data from more than one case — as we are interested in variation — at a single point in time (Bryman 2008). Thus, there is no time-ordering, and it is only possible to examine relationships between variables. Hence, there is no manipulation of variables.

#### 3.4 CHOICE OF RESEARCH METHOD

The research method used in this thesis is qualitative semi-structured interviews. Compared to a more structured interview this enable a larger degree of freedom to digress and therefore a lot of information can be gathered that could not have been forecasted (Bryman 2008). Thus, these interviews are well suited to gain in-depth knowledge about the subject area, and especially how the respondents themselves view the phenomenon that is being studied (Berg 2007). This is seen as especially important in this thesis with regards to its ontological and epistemological foundation.

The reason qualitative interviews are chosen in this thesis is best described by Patton (2002, p. 341):

We interview people to find out from them those things we cannot directly observe. The issue is not whether observational data are more desirable, valid or meaningful than self-report data. The fact is that we cannot observe everything. We cannot observe feelings, thoughts, and intentions. We cannot observe behaviors that took place at some previous point in time. We cannot observe situations that preclude the presence of an observer. We cannot observe how people have organized the world and the meanings they attach to what goes on in the world. We have to ask people questions about those things. The purpose of interviewing, then, is to allow us to enter into the other person's perspective. Qualitative interviewing begins with the assumption that the perspective of others is meaningful, knowable and able to be made explicit. We interview to find out what is in and on someone else's mind, to gather their stories.

As Patton (2002) explains, it is not necessarily that interviews give better data than other forms of qualitative research, but that the data that will shed light on the specific problem of this thesis is located in the minds of other people. We use interviews to access this knowledge.

### 3.5 SAMPLING

The respondents were not chosen randomly, they were sampled purposely to maximize the theoretical inferences that could be made from them (Eisenhardt 1989; Flyvbjerg 2006). We were concerned with information-richness (Kuzel 1999). According to Bryman (2008) purposive sampling is the primary sampling method in qualitative research. Additionally, Glaser and Strauss (1967) proclaim that prob-

ability sampling is not appropriate for qualitative research as it relies on statistical rather than theoretical criteria. Thus, the aim of this thesis is, in the words of Popay *et al.* (1998, p. 348), "to make logical generalizations to a theoretical understanding of a similar class of phenomena rather than probabilistic generalizations to a population."

The specific purposive sampling strategy used was theoretical sampling. Thus, the sampling was an ongoing process rather than a distinct and single stage (Bryman 2008). The process of finding and selecting cases comprised four steps. First of all a comprehensive collection of cases that had been or was still using freemium was assembled. This included collecting information about their use of freemium in order to build an understanding of how related they were to the subject at hand.<sup>4</sup>

Secondly, the found cases were classified according to how relevant they were for the thesis. This was an initial classification that changed during the interview process as the cases were found to be more or less relevant based on later findings.

Thirdly, an initial subset of the cases were chosen and interviewed. Lastly, there was the decision as to which cases to interview next in order to develop the theory as it emerged towards theoretical saturation. Thus, the interviews were used to inform and direct subsequent interviews.

The sampling pertained both to the level of individuals and to the level of companies. Thus, in some cases the company was the specific unit of interest, while in other interviews it was the individual. An example of this distinction is the difference between a company choosing to use freemium, and a specific investor connected to companies using freemium — they can both have valuable insights regarding freemium. We only interviewed people that had extensive knowledge and insight into how the given company used freemium.

We did not a priori specify a sample size, but ultimately interviewed 10 respondents from a wide range of experiences with freemium. These 10 respondents are summarized in Table 3.1. The respondents had from 1 to more than 7 years of experience with freemium. We discontinued interviewing after 10 interviews as we experienced theoretical saturation with regards to the framework created. This saturation was indicated by information redundancy.

<sup>4)</sup> This was possible for several reasons. First of all, as the cases relevant for this paper is all web-based it is possible to use their website to get an understanding of their use of freemium. Additionally the second generation of web sites, often termed *Web 2.0*, has increased the information sharing of companies. This include company blogs, conferences, podcasts, sharing sites such as Twitter (twitter.com), discussion sites such as Hacker News (news.ycombinator.com), Q&A sites such as Quora (quora.com), and many other places. Thus, many companies are openly discussing their use of freemium.

3.5. Sampling

Name	Why interviewed
Alpha	Initially used freemium, but had to change to only have paid accounts because they were not able to earn enough money on the free version.
Atlassian	Have experienced with a variation of freemium in which they put a very low price on a limited edition of a very expensive service, and give all the money earned on the "free" service to charity.
Beta	Have an interesting, and very extensive, freemium model were they allow all content that is publicly available on their site to use the free version.
Faculte	Had considerable problems with their freemium model, and were never fully able to get "the word going," and thereby increasing their user base.
Get Satisfaction	Started as a free-only service, but went freemium after some time. Have been very successful with their freemium model.
Google	Uses freemium inside a Fortune 100 company which have historically only focused on advertising. The other respondents use freemium on their core, and usually only, service
Heroku	Have been very successful with their freemium model and was recently sold for more than \$250 million.
Mark MacLeod	Venture Capitalist that has invested in many freemium-based companies.
SurveyMonkey YouSendIt	Have been very successful with their freemium model.  Have been very successful with their freemium model.

Table 3.1: Respondents and the rationale for why they were interviewed. Two of these respondents have been anonymized using the names Alpha and Beta.

### 3.6 DATA COLLECTION

As this thesis is based on the research-before-theory model the data collection occurred before the hypothesis was clearly developed. After the initial cases were chosen, data collection through semi-structured interviews began.<sup>5</sup> The interviews were taped and transcribed, yielding a reasonably large corpus of qualitative data.<sup>6</sup>

The initial collection of data was performed over a short period of time, described as "a single point in time" in § 3.3 (p. 30). For the purpose of this thesis, this time period of about 45 days is considered sufficiently short — and additionally very difficult to shorten further, as it depended on the the availability of respondents.

#### 3.7 DATA ANALYSIS

The overall approach to analysis in this thesis is based on the tenets of *grounded the-ory*, the most widely used framework for analyzing qualitative data (Bryman 2008). Grounded theory is about generating theory from data (Glaser and Strauss 1967), and thus it is inherently inductive. It should, however, be seen as an ideal as "it is rarely accepted that theory-neutral observation is feasible" (Bryman 2008). According to Strauss and Corbin (1998, p. 12) in grounded theory "data collection, analysis and eventual theory stand in close relationship to one another."

The key process in grounded theory is coding (Bryman 2008). This entails breaking data down into component parts, which are named. According to Strauss and Corbin (1990) there are three types of coding — open, axial, and selective — which were all closely adhered to in the process of analyzing the collected data in this thesis. The coding strategy was as wholly inductive as possible, without any focus on confirming already existing theory.

Open coding is the initial coding process. According to Strauss and Corbin (1990, p. 96) it is "the process of breaking down, examining, comparing, conceptualizing and categorizing data." This process yields *concepts*. In this process all the collected data was coded line by line, as recommended by Charmaz (2004). Each line was coded in nearly free form with no regards of the already existing concepts, in order to not be bound by them. The goal of this step was to characterize each line in and of itself. In this process the context within which they were said where tried kept, so the concepts would not lose their social setting.

<sup>5)</sup> The interview guide can be found in Appendix A (p. 81)

<sup>6)</sup> In total about 22,000 words of transcribed interviews.

After the initial coding was finished, the found concepts were analyzed for connections before all interviews were reprocessed, but this time they were constantly compared to the already existing concepts. Thus this second round — the axial coding — were focused on more thoroughly connecting elements that were found in the initial coding, as explained by Strauss and Corbin (1990). This process yields *categories* that are connected to each other. The axial coding was performed after each interview, and the data was here compared to both the current and the former interviews.

Selective coding recommends finding one core category around which the other categories are unified (Corbin and Strauss 1990). Gradually throughout the selective coding process the old concepts and categories were disregarded, and the interviews were reinterpreted based on the emerging model. The outcome of this coding process was the model that we will discuss in the next chapter.

### 3.8 RELIABILITY & VALIDITY

Evaluation of qualitative data is not as well-defined as for quantitative data, where *reliability* and *validity* are used, as these two concepts are seen as positivistically oriented (Bryman 2008). In addition to these two concepts, Bryman (2008) presents two other stances proposed by Lincoln and Guba (1985) and Guba and Lincoln (1994) for qualitative data — *trustworthiness* and *authenticity*. The latter has not been influential, but the former has. As such, we chose trustworthiness as the criteria for evaluating the qualitative research in this thesis.

Trustworthiness consists of four criteria: credibility, transferability, dependability, and confirmability.

## 3.8.1 Credibility

Credibility entails ensuring that the research has been performed in line with the canons of good practice (Bryman 2008). According to Polit and Hungler (1999, in Graneheim and Lundman (2004)) this touches on the match between the observations and the theoretical ideas developed. To ensure rigor in the analysis a number of methods were employed, as recommended by Huberman and Miles (1994). In this thesis we performed *respondent validation*, *i.e.* letting members of the social world studied confirm the findings (Bryman 2008), and *triangulation*, *i.e.* using multiple and different sources, methods, investigators, and theories when studying a social phenomena (Denzin 1978).

Respondent validation was performed through sending the framework created to all persons that were interviewed for feedback. Half of the initial respondents gave feedback on the proposed model. Triangulation was performed through interviewing different types of sources — companies that have succeeded with freemium, companies that have failed with freemium, companies that have tried variations of freemium, and investors.

## 3.8.2 Transferability

Transferability refers to the extent to which the research can be generalized or transferred to other contexts or settings (Trochim 2001, in Bryman 2008). According to Lincoln and Guba (1985) this is the responsibility of the generalizer, however, Geertz (1973) recommends producing *thick descriptions*, *i.e.* rich descriptions that enable others to make judgments about the possible transferability.

In this thesis transferability is primarily fulfilled through verbatim transcriptions of all performed interviews, in addition to clearly stating the process in which the data is collected and analyzed, including keeping control of all used codes, categories and themes in the coding process.

## 3.8.3 Dependability

Dependability entails ensuring that collected data is stable and consistent over time. According to Lincoln and Guba (1985) researchers should adopt an *auditing approach*, ensuring complete records of all phases of the research process.

In addition to transcribing all interviews verbatim, a complete record of all contacted persons have been kept. Additionally the entire process of analyzing the data, and the process of writing the thesis itself, has been done under *version control.*<sup>7</sup> Thus it is possible to fully trace each step from creation to finish — and as such a reasonably complete record is kept for the entire process of writing the thesis, which enable each step to be audited.

## 3.8.4 Confirmability

Confirmability is concerned about showing that the researcher has acted in good faith — thus, if the results could be confirmed or corroborated by others (Bryman 2008). An important element of confirmability is respondent validation

<sup>7)</sup> According to Fischer *et al.* (2003) version control "contain large amounts of historical information that can give deep insight into the evolution of a software project." As such it is also seen as a good enough method of keeping a sufficient amount of data for auditing in this thesis.

(Lincoln and Guba 1985). The primary technique, however, is audits of the research process and findings (Lincoln and Guba 1985).

As already discussed this thesis has performed successful respondent validations, however a thorough audit has not been performed because of limited resources.

## 3.8.5 Fit, relevance, workability & modifiability

In addition to trustworthiness, there are four concepts specifically mentioned for grounded theory to ensure the validity of a research project, namely *fit*, *relevance*, *workability*, and *modifiability* (Glaser and Strauss 1967; Glaser 1978, 1998).

#### Fit

Starting with fit, it is concerned with how closely the concepts created relate to the empirical situations they were drawn from (Glaser and Strauss 1967). Categories should emerge from data, and not be selected based on some established theoretical perspective (Lomborg and Kirkevold 2003). There are several aspects that ensure this fit in this thesis. First, we have had considerable focus on theory emerging from data; thus no theory was read before the interview process started. Towards the end of the interview process a couple of articles were read to augment the questions with new thoughts and ideas. Thus, we believe that there is a strong fit with "the real world." Additionally, fit is ensured by constant comparison between the data gathered and the codes, categories and themes discovered throughout the entire research process. It is also ensured through respondent validation.

#### Relevance

Relevance is about dealing with the real concerns of participants, and not something that is only of academic interest (Glaser and Strauss 1967). This thesis is specifically oriented on an area of research that is currently under-developed. As freemium itself is heavily used — and indeed misused — this thesis has considerable practical value. We believe, however, that this thesis will primarily be of value to those that are considering using freemium. As this thesis is high-level in nature, most companies that use freemium, at least those with success, already have the basics right. Thus, for them it might be primarily valuable as a framework to augment their views and to yield new thoughts and ideas for further improvement.

#### Workability

A workable theory should provide predictions, explanations and interpretations; thereby making the theory useful for participants (Olson and Raffanti 2004; Glaser and Strauss 1967). We believe that as this thesis is high-level, it has considerable power to explain and predict the freemium customer acquisition process. One reason for this belief is that it is built on very different companies' experience with freemium, and was confirmed to apply to half for half of the companies through the respondent validation.

#### Modifiability

A modifiable theory is one that can be altered and adapted when new relevant data is compared to the existing data (Glaser and Strauss 1967). We believe that one element of easily being able to alter and adapt a theory is that it is simple. We have not tried to explain every little detail about customer acquisition, but the broad strokes, and thus we believe that it is a modifiable theory.

# 4 RESULTS & DISCUSSION

In this chapter we present and discuss the research findings and propose a conceptual framework for understanding customer acquisition in freemium. As research on freemium is at such an early stage, we also propose avenues for further research. These propositions are not a part of the conceptual framework per se, but highlight areas that need further research. These propositions will augment the propositions in Bekkelund (2011).

One aspect of this novel research is that several of the areas discussed have not been studied by others, especially in the context of free services; consequently, some findings are backed only based on interviews and not existing theory. That is, however, one of the consequences of being in the fringe.

AFTER THE OPEN CODING and the further analysis of these codes in the axial coding there were two subsets of codes that stood out, both in being mentioned most often and in being strongly interconnected. The first of these was *how to get users in*; the second, *how to make money from these users*. This indicated that acquiring customers consist of two distinct steps: acquiring users and then converting them to paid customers — the first primarily user-driven; the second primarily company-driven.

As described in § 3.7 (p. 34), these two categories discovered in the axial coding were pursued further in the selective coding. This yielded one central theme for the collected data — that *free users can be valuable*. The interviews where then reprocessed with regard to this main theme. This process gave the six categories and their core elements presented in Table 4.1. These six categories are the primary focus of this analysis. It is important to note that theoretical saturation pertains to the framework itself, not to a full theoretical saturation of each of the steps — which is consistent with the overall purpose of this thesis being high-level and conceptual in nature, while still focusing on answering the more specific questions.

## 4.1 CURRENT & FUTURE CUSTOMERS

First we will explore the respondents reflections regarding their current and potential future customers. This comprise consumers that are not using the service, users that are using the free version and the paying customers — i.e. the market opportunity and how to capitalize on it.

Category	Core Elements		
Current & Future Customers	Large Markets, Culture of Free, Expect Churn		
Add value	Product as Marketing, Considerable Value in		
	Free Version, Customer Service		
Customer Engagement	Word-of-Mouth, Viral Loops, Little Traditional		
	Marketing		
Simple Choice	Less Friction, Free as Marketing, Considerable		
	Value in Free Version, Consumers Expect Free		
Learn & Adapt	Freemium is Heterogeneous, Metrics are Impor-		
	tant, Feedback, Data-driven Adaptation		
Conversion	Creating a funnel, B2C → B2B, Gradual Conver-		
	sion, Value-Based Pricing		

Table 4.1: Core categories and the core elements they include

## 4.1.1 Large Market

Customer acquisition starts with who *can* be acquired. To succeed with freemium there is a consistent perception among the respondents that the market must be large. This supports Bekkelund's (2011) proposition that freemium depends on a large addressable market.

Mark MacLeod: If you're going to build a meaningful revenue base, you need to have a very large user base to start with. It only works with very large market segments and market opportunities.

The key rationale for this perception among the respondents is that most users — often over 90% — will not pay to use the service and that market size therefore is an especially important metric. YouSendIt goes even further and states that "freemium businesses don't tend to work in verticals." He argues that freemium works for products that are "very horizontal, that any organization, any individual can use."

Thus far there have been no academic works discussing market specifics such as size when using freemium. Consequently there is considerable work needed to understand which market opportunities are most advantageous when using freemium. Two interesting things that appear through the interviews is that the focus on large markets 1) can be driven by venture capitalists, as market size is a central evaluation criterion for them (Tyebjee and Bruno 1984), and as, in the

words of Alpha, "major capital" is needed when using freemium; and 2) it can be a confirmation bias, and that there are possibilities for freemium in smaller markets because of near zero marginal costs (Varian 2000; Shapiro and Varian 1999; Mahadevan 2000), fast time-to-market (De Grosbois *et al.* 2010), cheap and efficient customer acquisition (Trusov *et al.* 2009; Villanueva *et al.* 2008), and value-based pricing (Varian 2000).

## 4.1.2 Culture of Free

From the interviews there is a clear notion that succeeding with freemium relies on having a *culture of free* — i.e. fully accepting that most users may never pay directly, but instead indirectly through bringing in users that eventually become paying customers. Thus, understanding that free is idiosyncratic, calling for a different mindset.

According to Mark MacLeod, "You have to be really open to having those free users. ... You have to treat them as first-class citizens." Similarly, Get Satisfaction say, "We don't try to convert everybody, we are happy for them to be in free." The respondents appear to focus on the long term aggregate profitability of users instead of looking at the free users as *free riders*<sup>1</sup>. The reason for this is that "free, engaged users are quite valuable," according to Mark MacLeod. YouSendIt state that this culture of free is an aspect that many established companies have not yet grasped:

There's not a lot of established companies that understand that it's not just a "we'll put it on our website, we'll do a little bit of email marketing, and then people understand it and start to use it and convert."

To understand what this *culture of free* entail and how to operationalize this — intentionally ambiguously defined — construct, further research is needed, *e.g.* in better understanding how free and freemium differ from the traditional way of doing business and how it affects a company's strategy for capitalizing on market opportunities.

**Proposition 1.** Long term success with freemium relies on having a culture of free.

<sup>1)</sup> A *free rider* is someone who contribute little or nothing while enjoying the benefits (Kim and Walker 1984)

### 4.1.3 Churn

One aspect of free versions, according to Alpha, is that a service "will by definition get less serious sign-ups." Similarly, Get Satisfaction state that "there is an inverse relationship to cost and churn." Thus, we are starting to see some of the negative consequences of free services and why it is important to understand the dynamics of the free users. According to YouSendIt, "it is very easy to build a non-profitable business."

**Proposition 2.** Churn is higher among the free users than among the paying customers.

Customer retention has been the focus of several articles (e.g. Blattberg and Deighton 1996; Blattberg et al. 2001; Reinartz et al. 2005; Thomas 2001), and has been shown to have a direct impact on revenue and profitability (e.g. Reichheld et al. 1996; Reichheld and Schefter 2000). For example, it has been shown that retaining customers is far cheaper than attracting new customers Reichheld and Schefter (2000). Additionally, Hogan et al. (2003) show that the value of loosing a customer can be considerable when accounting for the lost social effects, such as potentially lost word-of-mouth, and especially so for early adopters.

However, findings for paying customers might not be directly transferable to free services. One aspect of this is that choosing a free service might be a far simpler choice than choosing a paid-only service (Tversky and Shafir 1992; Luce 1998; Iyengar and Lepper 2000; Diederich 2003; Shampanier et al. 2007), and that it is therefore easier to lose these users. Another is that *free* users are not necessarily as profitable overall as paying customers, and that it is therefore not as important to focus on keeping *all* users in the system.

Additionally, Get Satisfaction state that "You can spend a lot of time trying to deal with the churn problem at the very low end, when in reality you will get fly-by-night users." It might be that shorter retention among free users is one aspect of the culture of free. Understanding the relationship between retention and profit for the free users is important in understanding freemium profitability; thus further research is needed.



To summarize this step, the respondents appear to see their free users as an *asset*, not as customers that do not pay. This asset should be valued, managed, and maximized, as we would expect from the theory (e.g. Gupta and Lehmann 2003;

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Blattberg *et al.* 2001; Persson and Ryals 2010). However, where the theory mainly focuses on the customer lifetime value, the respondents focus is more in the direction of customer engagement value; thereby including their non-monetary values.

The respondents seem to see users as assets in a way that is analogous to perceiving them as an extended marketing department. The goal is not to get all free users to pay directly, but to maximize the *aggregate* profit. Consequently, the focus is on optimizing the customer engagement value of each user. Thus, some of the values, such as customer lifetime value, might be zero for individual users while still maximizing total company profits because of the value these users add through knowledge, influence and referrals.

The main aspect of this is that the respondent perceive the free users differently.

#### 4.2 ADD VALUE

According to the respondents the free version must have considerable value. What we can see from the interviews is that freemium entails using the product as marketing, and if the users do not get enough value from the free version, the company will see a low conversion rate to the paid version.

## 4.2.1 Product as Marketing

Among the respondents there is a clear focus on using freemium to maximize profit by using the same rationale as Faugère and Tayi (2007) describe for offering free samples: increasing sales by providing a first-hand experience. According to Mark MacLeod, freemium "begins and ends with great product. The product is the marketing, and that's why you have a free version." Atlassian say that an "incontrovertible offer" is needed; that is what "will get the initial people in the door," and he further explains:

We'll get a bigger return . . . if the people who are using the freemium offer are actually getting something of significant value.

On the same subject Get Satisfaction say that "the free [users] are leads which can ultimately be converted if we are adding value." One of the core aspects of this is that the users can experience the service. According to Heroku this is done so "people don't have to make a purchasing decision until they've actually experienced the value themselves."

Thus, the rationale is that a high-quality service is needed to satisfy users in order to convert them. This corresponds to our findings in the literature review (§ 2.4.2, p. 12). We see that there is a strong focus on achieving this satisfaction through experiencing the service, and thus through building the in-use value.

In-use value appears to be at the core of understanding customer value in freemium, *e.g.* as Heroku say, "rather than having a huge sales force, we provide this free very valuable service to prove the value." Thus understanding and operationalizing this construct appears to be crucial in understanding customer value in freemium.

**Proposition 3a.** The fundamental customer value dimension in freemium is in-use value.

**Proposition 3b.** Significant in-use value of the free version leads to increased customer acquisition.

#### 4.2.2 Free vs. Paid

Choosing what to include in the free version, and what not to include, appears to be an important element of succeeding with freemium. YouSendIt state that the free version "has to have to core experience." Similarly Mark MacLeod add:

With most cases, it should be a fully functional product so that you can have a complete experience. It can't be just a partial experience, because then conversion is just not going to happen.

We can assume, however, that the more value in the free version, the less reasons users might have to convert to pay — it might lead to a cannibalization of the premium offer (Haruvy and Prasad 2001). Thus, we see that free versus paid is a balancing act; it is about utilizing the demonstration effect (§ 2.3.2, p. 8) to get people to convert and/or get people to spread to service, but the value must not be large enough to detract from the reasons to convert to pay.

**Proposition 3c.** Significant in-use value of the free version leads to increased customer engagement.

**Proposition 3d.** *Too high in-use value in the free version can lead to cannibalization of the premium offering.* 

Importantly, adding value does not necessarily mean adding more features and thus complexity. Faculte, which had significant problems with their freemium

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model, say, "we had so much complex functionality that had to be explained. ... I think we lost many users because we were so hung up on these complex features." According to SurveyMonkey, "avoiding feature creep is critical, only expose things that are relevant for at least 80% of your audience." This resonates with the focus on ease of use in several of the customer value antecedents in § 2.4.2 (p. 12), e.g. Chen and Dubinsky (2003) who include ease-of-use and information relevance in their "valence of experience" variable and Ho and Ko (2008) who include ease of use and self-control.

## 4.2.3 Beyond the Service Itself

Adding value is, however, not only about the service itself, as Mark MacLeod explains:

And the product is not just about what the user experience is online, it's the whole package. It goes back to the importance of loving your users, giving them massive hand holding and support. That whole experience is really key to building a large engaged user base.

Get Satisfaction say that "you need people who can talk to [those] that are trying to figure out how to get the most out of it." According to SurveyMonkey, "when you give quality customer support to free users, they feel a strong affinity to your brand." And according to Mark MacLeod, "giving your users lots of love and support and attention is very highly correlated with keeping those users for a long time."

Several of the antecedents on customer value discussed in § 2.4.2 (p. 12) include notions in this direction, *e.g.* valence of experience in Chen and Dubinsky (2003) and appreciation in Golik Klanac (2008). In addition to these this also appear to relate to the emotional value mentioned by Ho and Ko (2008), which relate to the customers' feelings when experiencing the service. Thus, we see a clear connection to the service quality construct, which entailed a broader view than just the product itself.

The interviews appear to indicate that there is a clear relationship between adding this extra layer on top of the product, *i. e.* better customer service, and the length of a time a user use the system.

**Proposition 4.** Better customer service leads to longer customer retention.



We see that adding value is about building a long term relationship with the users; not just letting them use a service for free. SurveyMonkey say, "love your users and they will love you back." The goal is to get satisfied and loyal users that end up converting — which we will explore further in § 4.6 (p. 55) — or end up engaging with other users — which we will explore further in the next section.

#### 4.3 CUSTOMER ENGAGEMENT

All respondents are heavily focused on engaging the free users. Primarily the focus is on word-of-mouth, but there is a also a focus on having a viral loop in the service, *i. e.* using the service inherently means sharing it with others, and a focus on avoiding traditional marketing.

## 4.3.1 Word-of-mouth

According to Heroku, "word-of-mouth was paramount, without it we wouldn't exist." He further clarifies:

That's one of the prerequisites I think you need for a freemium model. If you are giving something away for free, and are looking to covert 1, 2, 10, 20% of those guys to paid, if they are not telling other people or they are not taking something they use at home to work, then subsidizing that free use is not worth the time.

Similarly Atlassian states that "to get the freemium going you need to have word-of-mouth," and that for them "word-of-mouth is extremely important. Always has been." These findings clearly support the proposition in Bekkelund (2011) stating that strong word-of-mouth effects is vital for success with freemium.

Hofacker *et al.* (2007, p. 31) explain the word-of-mouth process in a way that is clearly similar to the process we have outlined here, and in a way which also show the importance of word-of-mouth:

Attract customers with a competitive value proposition and easy-to-use website, retain them with superior service, develop them into profitable customer segments, consult with them to gain valuable information, and convert them into brand evangelists so they will acquire new customers for the brand.

Atlassian calls these engaged users "word-of-mouth agents":

Now 18 months later we've got an army of over 100 000 people that have signed up, and we have word-of-mouth agents that feel somewhat indebted to our organization because they've got such a good deal. And they've become word-of-mouth agents for our brand.

Heroku uses the term "goodwill" to describe this phenomena: "With us they can use it for free forever, and that goodwill gets people talking. When that promoter star goes up we expand in the community."

Using the classification in Hennig-Thurau *et al.* (2004), we see that helping the company — or perhaps a better classification in this case is rewarding the company — is one factor in generating word-of-mouth. Interestingly, however, is that Hennig-Thurau *et al.* (2004) find that this factor had no impact on generating word-of-mouth in their study. In Hennig-Thurau *et al.* (2004), however, word-of-mouth is based on comments written on opinion platforms, which is just a subset of what word-of-mouth entails in this context.

Hennig-Thurau *et al.* (2004) mention two segments of users that can be a part of explaining the strong focus of rewarding the company among the respondents, namely the *Multiple-Motive Consumers* and the *True Altruists*. More research is however needed to understand how word-of-mouth is generated when using freemium and what the different characteristics of these users are.

**Proposition 5a.** Giving free access to a valuable service is an antecedent of goodwill.

**Proposition 5b.** Goodwill is an antecedent of word-of-mouth.

Here we use the term goodwill instead of helping the company, as it appears to be more a form of reward than a helping act per se. Similarly to Hennig-Thurau *et al.* (2004), it is thought to be a result of a consumer's satisfaction with a product, but additionally it is thought include the pleasure from receiving value for free. This goodwill can also be supported by equity theory, which suggest that individuals desire equitable and fair exchanges (Hennig-Thurau *et al.* 2004; Oliver and Swan 1989), and that users will therefore help the company in order to equalize the ratio between them.

## 4.3.2 Viral Loops

To get the word going in the niche, the respondents talk about different strategies. Several focus on creating *viral loops*, *i.e.* that using the product inherently entails sharing it. One of the classical example of viral loops is Hotmail. They gave away a free email service, but attached the line "Get your private, free email at

http://www.hotmail.com" to every message sent, leading them to grow extremely fast (Jurvetson 2000). According to Mark MacLeod, "if there's a viral loop that's baked into your product, then [the free users] are adding to your user base because they're helping attract new users." He state that virality is one of the key aspects of free users.

SurveyMonkey go as far as stating that "anything that promotes virality should be free to keep your viral flow going," and adds, "Don't inhibit your own virality by limiting usage of the product in silly ways that don't actually cost you anything."

One of the clear upsides of building in this virality is in customer acquisition, *e.g.* as SurveyMonkey states: "[we have done] very little [to acquire customers] — our product is very viral since every user that creates a survey and sends it out is telling 10s, 100s or 100os of others about our survey tool." This is from a company that sells to several Fortune 500 companies without having a sales team at all, indicating some of the potential value in freemium.

Similarly YouSendIt states:

And the nice thing about the YouSendIt service, is that it's a viral product. ... [You] can't use the service without inviting someone else to the party. ... YouSendIt may be a special case, but in the history of the company I think 90% of the user acquisition has been through product. ... [Free] users are the ones that ultimately bring in the people that will pay.

**Proposition 6.** *Including a viral loop increases the growth rate.* 

## 4.3.3 Little Traditional Marketing

Among the companies interviewed there was nearly no focus on marketing, and especially traditional marketing. An example of this is Heroku, which was sold for more than \$250 million, who said: "So far we have done no marketing. And we have really done no sales." Similarly Atlassian said, "Our marketing spend on traditional advertising and banner display and Google ads is just a fraction of what other companies do."

According to Get Satisfaction:

Our marketing is primarily people coming into contact with our product, seeing other people talk about their experience with our product — through Twitter, Facebook, blogs and stuff — and our thought leadership, or content that we create.

The respondents did not see the value in traditional marketing, especially at an

early stage, as they see it as more expensive and less effective than engaging their users and market through them. According to Mark MacLeod:

Unless you have really high conversions, you don't want to be relying on paid acquisition. ... And even if your per user economics are profitable, it just becomes a linear growth equation. For every dollar I'm spending, I have a certain amount of customer lifetime value.

In addition to marketing through their users, most of the respondents focused on social media such as Twitter, *e.g.* Atlassian say, "When we were initially launching Twitter was very good. Its inexpensive and can get the word out in a very spontaneous way." This is as we can expect as it is both cheap and as consumers are turning more frequently to various types of social media to conduct their information searches and to make their purchasing decisions (Lempert 2006; Vollmer and Precourt 2008, both in Mangold and Faulds 2009).

Word-of-mouth appears to be more effective than traditional marketing, as expected from theory (*e.g.* Arndt 1967; Schiffman and Kanuk 2007; Villanueva *et al.* 2008). Additionally it is far cheaper, according to the respondents. Many of the respondents have grown from their initial stages by focusing only on their customers' engagement. This opens interesting possibilities. When Internet-based technologies enable shorter time to market (De Grosbois *et al.* 2010), the marginal costs of information goods are nearly zero (Varian 2000; Shapiro and Varian 1999; Mahadevan 2000) and the cost of marketing is approaching zero, interesting possibilities emerge.

#### 4.4 SIMPLE CHOICE

For a consumer to become a user or paying customer several respondents talk about minimizing the barrier to entry — making it a simple choice. Heroku explains it as follows:

You've got to have a product that is easy ... to understand. It's got to be easy to understand, easy to become aware, easy to get started and using it, easy to gain value, and then easy to talk about it. Those are really paramount.

There appears to be several core elements of this simple choice. One of them is that choosing a free service is a simpler choice, which is what we would expect from research (e.g. Tversky and Shafir 1992; Luce 1998; Iyengar and Lepper 2000;

Diederich 2003; Shampanier *et al.* 2007). Another aspect is that there must evident value in the free version to get people to try it out. A part of this is "minimizing friction", *i.e.* making the process fast and simple. According to SurveyMonkey, "avoiding feature creep is critical, only expose things that are relevant for at least 80% of your audience."

Kim et al. (2008) find that trust and perceived risk have strong impact on consumers' purchasing decision online. Interestingly, most research on purchasing decisions classify electronic purchases as inherently risky (Kim et al. 2008; Featherman and Pavlou 2003), and Featherman and Pavlou (2003) bring the same conclusion to e-services, especially focusing on e-services having "long-term implications." However, with freemium the initial decision is not a purchase decision per se, as there is no monetary transaction, and neither is the choice to test a service necessarily long-term. Both these aspects might alleviate the risk perception considerably. SurveyMonkey, when discussing this initial decision, say that there should be "no risk for the user." Several of the other respondents echoed similar notions.

Kim *et al.* (2008, p. 546) define risk in terms of "uncertain negative outcomes", which we believe to be valid also for freemium; a better understanding of what these uncertainties are is however crucial in order to understand the perceived risk in this context. As mentioned, the aspect of free in itself being a simpler choice is indicated by several authors, but the crucial element for freemium is understanding this aspect of free together with the other aspects that might affect the decision to *try* the service, *e.g.* ease of use, brand reputation, word-of-mouth, and so on — elements which we include in the service quality construct in § 2.4.2 (p. 12). Featherman and Pavlou (2003) include seven facets of risk: Performance, financial, time, psychological, social, privacy, and overall. Thus, we see that beyond free there are several crucial elements to explore and understand. For example, we know that consumers are turning more frequently to various types of social media to conduct their information searches and to make their purchasing decisions (Lempert 2006; Vollmer and Precourt 2008, both in Mangold and Faulds 2009).

Importantly for freemium is that this choice to try occurs before experiencing the service. Thus, in-use value which we have discussed earlier is far less important for this decision. At this point the choice appears to be more about benefits and sacrifices, and thus perceived value. In their study of e-services, Featherman and Pavlou (2003) use the Technology Acceptance Model created by Davis (1989). This model include two basic variables, perceived usefulness and perceived ease of use, which both appear to be valuable in understanding this step. With regards to these two variables we see an interesting perspective from Faculte, who failed in their use of freemium:

If you had just encountered our website — just stumbled across it — you had not known what on earth you'd use it for.

Faculte also said, "We had so much complex functionality that needed to be explained." For the companies that have had success with freemium there seemed to be a strong focus on simplicity. As SurveyMonkey summarized: "make a simple product that is easy to use." According to Heroku the attention span of most users is very short and it is therefore important to have an *awareness-to-use benefit* "measured in minutes".

We can see another interesting perspective from another respondent. According to YouSendIt, when they created their service they had the following goal: "We do one thing, and we do it better than anyone in the world, and we are going to do it better than anyone for the rest of our lives." Thus, for them it was about positioning the brand in the minds of consumers.

These indications might suggest that a more specific research on freemium in the context of the Technology Acceptance Model might prove valuable, as we see that both perceived usefulness and perceived ease of use might be crucial elements of perceived risk in the free version. Based on this discussion, we can propose the following:

**Proposition 7a.** Having a free version decreases perceived risk.

**Proposition 7b.** *Increasing perceived value in the free version decreases perceived risk.* 

**Proposition 7c.** The lower the perceived risk of the free version, the more likely consumers are to try the service.

What this simple choice entails seems to be very different from case to case. Some want the hurdle to be as low as possible, others want a somewhat larger hurdle to "[weed] out the free-riders that always want to get something for nothing," as Alpha said. The point is to create a simple choice for the users the company want to get in.



In sum, this step is about making the choice to try a company's service as simple as possible. It is about enticing users to try it out. Operationalizing this simple choice construct is an important avenue of further research. Quality appears to be central to understanding this construct, but also simplicity and reputation.

#### 4.5 LEARN & ADAPT

From the interviews is appears that to be successful with freemium it is crucial to learn from users and customers. For several of the respondents this entailed being obsessed with metrics; for others it was mainly about being focused on having a relationship with the users and actively learning from them. This step is about learning what works, what does not work, and also about getting ideas and thoughts from the user base. As Google said:

We're looking for quick reach, looking for basically more customers, more insights, we want more people to tell us "We like your applications because of X, we don't like them because of Y."

## 4.5.1 Freemium is heterogeneous

The reason learning and adapting is crucial when using freemium is, according to Google, because "everyone has a different journey of freemium." By learning from the users the company can see where customers get value; thereby discovering what the users are willing to pay for and how much, and also to find out how to get the most effective and efficient engagement from users. It is about understanding and maximizing the value of the users from the company's perspective. This is as we would expect from the theories on valuing users from the company's perspective (§ 2.6, p. 25), as it otherwise would be easy to undervalue or overvalue users in this context (Kumar et al. 2010a). When many do not pay directly, it is crucial to understand their value to the company.

The general knowledge seem to be that freemium is a "numbers game," and as it is far more opaque than regular payment models, having a deep knowledge and understanding about the users and how they behave is critical. According to YouSendIt it is "very easy to build a non-profitable business." One of the reasons this is important is according to Atlassian:

There's room for permutations. We didn't have a formula. We just experimented. That's how we found out what works for us. It's just trial and error.

The learning process is about finding and improving the right value for the target customers, and finding the right way to create a simple choice to get the user in. It is also about tweaking the process to understand what works and what does not work for the company — and it is thus about maximizing the aggregate profit.

## 4.5.2 The Value of Users

Learning and adapting is primarily about understanding the value of users and customers value from the company's point of view; whereas adding value, simple choices and customer engagement are more about the value from the users' and customers' point of view. Thus, an essential element of this step is understanding the customer engagement value of users (§ 2.6.1, p. 25). According to YouSendIt:

[When] the user comes in for free, we know exactly how much the average free user cost us to serve over the lifetime, we know, on average, how long it takes us, and how much it costs us, to convert them into a paid user, we know how much it cost to serve them as a paid user, we know with pretty good certainty how long the will stick around before they churn out. So that's cost of acquisition, cost to serve, and how much revenue we will extract from that period is what lifetime value it adds up to be.

#### And he also state:

We measure all of these every week — week over week, month over month, year over year. "Did it cost us more this week than it did last week to acquire a customer because we are doing more programs or less programs?", "Are we starting to see some fatigue, are they starting to churn out a little faster or are they sticking around longer?"

Google talks about their thought process in finding those users who are most likely to convert:

Mine your active users, what do the most active ones do? Storage levels, activity, certain roles, certain types of features. Are there inflection points where you best customers tend to start off?

Thus, we see that there is a focus on customer lifetime value. Through the interviews it appears as though several of the respondents do not have the same degree of measures on the other values we have discussed — they appear to have a more qualitative measure than the quantitatively focused customer lifetime value. We have seen this qualitative focus throughout our discussion of customer engagement (§ 4.3, p. 46) and adding value (§ 4.2, p. 43). Some of the respondents however, discuss this specifically, *e.g.* YouSendIt:

We're not as good at that as I want us to be, but we're pretty good at saying "When I bring a user, he will bring in five more users in the first 20 months."

We also see some of this from Mark MacLeod:

... they're ... providing product feedback, generating support requests, and all these things that are ultimately going to help you build a better product.

Thus, both aspects of customer influencer value and customer knowledge value are mentioned, but they appear to be measured differently by the companies.

**Proposition 8.** Customer engagement value is at the core of understanding the value of customers when using freemium.

## 4.5.3 Adapting

There are two consequences of learning and adapting. The first is understanding the value of users, how to get them to convert and how the sales funnel looks. The second is in understanding the service so it can be optimized further with regards to the free users, *e.g.* what gets a user to engage even more.

According to Google one of the most important elements of freemium is that e-services enable an enormous amount of insight, because you can collect data of everything the user does. He says, "That's obviously where hosted software is key. You can now get that insight. It's perfect for the business analysts." He also state the key to success is having "an experimental framework [in order] to test and move quickly."



In total, what we see among these companies are a strong focus not only on customer lifetime value, but on other metrics which focus more on how much revenue the users bring in, not just how much a company can earn directly from each customers. Thus, this support the basic idea in Kumar *et al.* (2010a) that it is crucial to understand not only the customer lifetime value, but the entire customer engagement value.

Throughout the interviews, thoughts both in the direction of customer influencer value and customer knowledge value where discussed by the respondents. Several mention that understanding these numbers is essential in order to properly understand the business. The core focus, however, appear to be on aggregate customer lifetime value, and especially the cost of acquiring a customer. The reason for this focus might go back to what we discussed earlier about seeing users as assets,

4.6. Conversion 55

and specifically something in the direction of an extended marketing department. Thus, knowing how much this marketing department costs and how much it brings in is important, but really understanding the lifetime value of users is essential to understanding the profitability of the business. According to Get Satisfaction, "understanding the quantity versus quality equation ... is important."

### 4.6 CONVERSION

Through the interviews it becomes very clear that the conversion process is heterogeneous. SurveyMonkey state that "most users that will upgrade typically do so fairly quickly," while on the other extreme, YouSendIt state that "there is a very long customer life cycle — a person might be a free user for 18 months before they convert." Generally, the focus seemed to be more on the latter than the former — and thus implying that conversion usually is based on experiencing the service over a long time. As YouSendIt say, "you need to have a way to keep people engaged."

#### 4.6.1 Sales Funnel

According to Mark MacLeod, "there must be a very clear differentiation and a compelling reason to upgrade to the premium version, and a clear upgrade path." This focus on creating a sales funnel is consistent among the respondents, *e.g.* YouSendIt say, "There's a whole lifetime of touchpoints that you need to use to convert," and according to SurveyMonkey:

Freemium gives you lots of in-product ways to convert users to paying customers, by identifying smart "triggers" or features that are disabled for free users, you have a lot of nice ways to help upgrade someone to a paid product.

Faculte, however, had problems with their sales funnel: "[the free users] didn't understand why they needed the paid offering."

A company with an especially interesting perspective, was YouSendIt. They had decided that they wanted to go for a 10% conversion rate, and they were very focused on not "nagging" at all the free users to convert:

So I always look at "how do I do it so that I don't bother 90% of people, but it really resonates with the 10% that I think can be paid users?"

## 4.6.2 Gradual Conversion

Gradual conversion appear to be the norm across the respondents. As Beta explains, "Basically our conversion rate is super high for people that signed up two years ago, a little bit less high for one year ago, and then it just goes down from there." Thus, looking at one new user it is perhaps a 1% likelihood of the user converting the first month, maybe 5% during the first year, and 20% after two years.

There are two important aspects of this gradual conversion. First, it supports the importance of understanding and adapting based on the users' and customers' actions, which we explored in the previous section. Thus, the more the company is able to learn from and adapt to their customers, the more likely are they to provide the "right" value to the "right" customers. We can expect this to lead to increased conversion, as the customers in-use value increase. Focusing on acquiring not just any customer, but the "right" kind of customer is also emphasized by several scholars (e.g. Blattberg and Deighton 1996; Blattberg et al. 2001; Mathwick et al. 2010).

Second, we can expect that the longer someone experience the service, the more value they will receive, and the more satisfied and loyal they will become. We can expect this to increase the switching costs (Chen and Dubinsky 2003); thereby increasing lock-in. Additionally, there might be positive consumption externalities, *i.e.* the service increases in value as it is used (Viswanathan 2005). Thus, as long as users are satisfied and receive value, we propose that users are likely to convert to pay when their needs outgrow the free version.

**Proposition 9.** A users likelihood of converting increases over time.

**Proposition 10.** The longer a user is allowed to use a service for free, the higher the lock-in.

#### $4.6.3 \quad B2C \rightarrow B2B$

Several of the respondents had started as purely business-to-consumer businesses; gradually focusing on business-to-business as more and more users start requesting their service at their workplace, *e.g.* as Beta say, "It's our goal to have the people using the site be convinced that it's awesome and then have them go convince the business decision person." Similarly, Heroku say, "So these guys are experiencing that at home, and they are able to take that story to work."

Thus, it appears that these businesses are building credibility among consumers before moving towards businesses. Instead of paying for awareness through traditional marketing, they used the companies' employees to "get in". Beta explains

their thought process around this: "no one is going to trust us. We are just another ad on Google. But they are probably going to trust their employees."



Generally, the focus on conversion seem to strongly build on creating satisfied and loyal users through adding value; thereby converting them to the premium offering when their needs outgrow the free version.

#### 4.7 CROWDSOURCED CUSTOMER ACQUISITION

Combining these six categories and mapping the connections between them we propose the model in Figure 4.1. Succinctly, we can say that crowdsourced customer acquisition entails giving free users considerable value. This causes these users to become loyal and engaged, and this engagement brings in new users. These new users, in turn, can both bring in new users and be converted to paying customers. By learning from these events the company can improve future user acquisition and conversion.

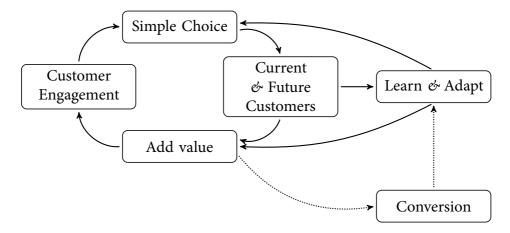


Figure 4.1: Conceptual Framework for Crowdsourced Customer Acquisition in Freemium

In the introduction (Chapter 1, p. 1) three questions were put forth under the umbrella of understanding crowdsourced customer acquisition. The first of these pertained to the steps involved in crowdsourced customer acquisition and the second pertained to the core elements of each step. We have strived to be thorough

in presenting each step of the framework and its most important elements while still focusing on the "larger picture" and maintaining a high-level view of customer acquisition in freemium.

The last question pertained to the role of free users in this acquisition process. What we see from the framework created is that the primary value of free users is in their ability to drive the *user* acquisition — to bring in new users. In many ways we can say that the *user* acquisition process is what is actually crowdsourced, not the *customer* acquisition. The final customer acquisition step starts then a user is acquired and "the company takes over." However, as one respondent said, and which was echoed by all the respondents, the "free users are the ones that ultimately bring in the people that will pay."

Another important aspect of the free users is the amount of learning a company can do based on them, both in terms of feedback and in terms of monitoring and building an understanding of the value of the service to the users and customers. Through this learning process the company can adapt in order to maximize profits.

#### Respondent Validation

In the respondent validation this framework received positive feedback. Especially the aspect of the product being the marketing was a focus among the respondents that returned feedback, and that this is a very important element to focus on, and especially with regards to what gets user engaged on the free version and what gets them to convert to the paid version. One of the the validators say, "A lot of premium features are things like better customer service and more storage space, and that's not enticing enough for me to want to pay you a monthly fee." The reasoning is that many product categories are saturated and highly competitive.

Another element of the conversion process is an avid focus on monitoring and testing in order to understand "what works and what doesn't." Additionally, one validator state that the learning "doesn't happen on its own." Thus, the company must focus on "pushing the feedback process" in order to get feedback from the users and customers.

Most of the feedback that added to the model focused on company-driven elements, and generally the feedback regarding the user-driven elements — which is the focus of the thesis — received positive feedback.

# 5 CONCLUSION

This paper has explored the customer acquisition process in freemium. There are three primary contributions of this thesis. First, it proposes a conceptual framework for discussing how customers are acquired when using freemium. This gives important insight and understanding of a highly used and important model in real life businesses, but which currently is a novel concept in research.

This conceptual framework starts to build an ontology for customer acquisition in freemium. This include a taxonomy for discussing the acquisition process which enable better reasoning about the different aspects of customer acquisition in freemium for both scholars and practitioners. With this as a basis it is possible to start building a deeper understanding of how freemium works in both of these realms.

Another important aspect of the conceptual framework is the proposed connections between service quality, customer value, customer satisfaction, customer loyalty, customer engagement (e.g. word-of-mouth) and customer acquisition in the realm of freemium. These are concepts which have been discussed extensively in research, as we saw throughout Chapter 2 (p. 3), but which are still surrounded by little consensus, especially within the realm of e-services and for free users. This works contributes important insights to this work.

Second, this study extends the current research on free by building a better understanding of the value of free users and their potential impact on a business. This research has shown the considerable potential value in these free users for e-services beyond what has been shown before. It has also shown that research on this area is of significant importance. As mentioned above, one respondent summarized the importance as follows: "free users are the ones that ultimately bring in the people that will pay."

Third, it proposes several important avenues of further research for better understanding freemium, based both in current academic literature and in interviews with respondents with many years of experience with the model. Throughout the model it is clear that research on freemium is in its infancy, and that considerable efforts is needed to properly understand freemium, both from a managerial and academic point of view. This thesis has not tried to answer all of these problems, but laid the groundwork and created a conceptual model for further research to understand the aspect of free users in freemium.

#### 5.1 LIMITATIONS

There are several limitations of this research that should be noted.

First, the interviews were stopped when theoretical saturation occurred for the framework itself, not for each step in the model. Further research is needed both in order to clearly understand each of these steps better and in order to operationalize them further.

Second, the respondents, while spread from Fortune 100 to failed business, come from a geographically limited area. Thus, researching freemium and this framework outside this area is crucial. It is also crucial to research freemium in a broader range of companies, *e.g.* with regards to market size and with regard to the type of service. There might also be cultural differences that apply.

Third, this research represents a cross-sectional snapshot of a point in time while the phenomenon builds over time. This reduces the ability to make definitive causal statements about the findings which are iterative in nature. One aspect of this is for example how to get this process going, what different actions lead to, how these steps can be optimized, and so on.

Fourth, all respondents had services primarily focused on consumers that actively use social media and social networks, which makes customer engagement and word-of-mouth more likely. Understanding freemium in a less vocal community is essential to understand the bounds of freemium.

Fifth, as companies' existing users and customers primarily drive the user acquisition process, there is still much work needed in order to understand the final conversion process. We have given some insights into this process in this thesis, however, this has been limited as our focus has been on the crowdsourcing aspect.

Sixth, the amount of respondent validation was sparser than desired. About half returned feedback, but the amount of feedback by each validator was limited. We can think of some possible reasons for this. First, when asking for validation we might not have been clear enough on what we wanted feedback on and how much. Second, the document to get feedback on might have been too large. Third, the model might have been too academically described, not primarily focusing on these validators problems directly.

#### 5.2 MANAGERIAL IMPLICATIONS

Most importantly, the proposed conceptual framework enable practitioners to reason about their freemium model to a much larger degree, *e.g.* in terms of formulating, understanding, analyzing, and sharing the company's customer acquisition model, which is one aspect of the company's business model (Osterwalder 2004).

This can enable a company to better understand each step of the process and additionally give insights into how they can optimize it.

One potential way of using this framework is to map it to how a company currently operates. It is then possible to investigate each step by itself to see where there are potential problems and were the company should focus. For example, if a company is very good at engaging their customers, but have not been able to create a simple choice, this model can be a starting point of understanding how to fix this problem. Must research is however needed in order to better operationalize each step.

The proposed framework can also be used by practitioners in the process of designing a viable business around freemium. Currently there exist neither academic nor non-academic works specifically focused on freemium that these companies can use to create their model. This work starts to resolve one these missing components — the customers acquisition process.

Lastly, an important managerial implication is that the framework gives a better understanding of the value of free users, and how a company can build its business to utilize this value in order to maximize profits.

## 5.3 THEORETICAL IMPLICATIONS & FUTURE WORK

This study commence a deeper look into freemium itself, an area which is currently not well understood from a theoretical standpoint. As freemium is growing in use among practitioners, understanding it theoretically is important. We have tried to bring together several avenues of research to give a coherent view of one facet of freemium — customer acquisition through existing users and customers. This thesis has shown that freemium is a complex problem, which relate to many different areas of research. With this paper's exploratory study of a young field we have provided an enhanced picture of freemium.

One especially important theoretical implication of this thesis is in showing that several of the research findings for traditional products and services also yield for free services. It has also shown the power inherent in customer value and customer engagement, and that there are significant possibilities and interesting research areas within these fields that are still unanswered.

Another important implication is the proposed framework in itself. This framework can serve as the foundation for further research on freemium. An especially important area is building a far deeper understanding of each step in the model.

The proposed model include relationships between quality, customer value, satisfaction, loyalty, engagement, and customer acquisition, similar to the rough outline we discussed throughout the literature review in Chapter 2 (p. 3). Thus, this thesis adds support to several of the earlier findings, especially as this process has been based on theory emerging from research, and as no articles were therefore read and used to create the model, only to put it in context with the existing literature.

As RESEARCH ON FREEMIUM is in its infancy an important aspect of this thesis is suggestions for future research. We have already proposed several avenues of research throughout the discussion, but we will now propose some broader avenues of research that is needed to move the understanding of freemium forward both managerially and academically.

#### The value of customers

All word-of-mouth is not equal (Duan et al. 2008; Hennig-Thurau et al. 2004; Wangenheim and Bayón 2007; Godes and Mayzlin 2004). Similarly we can expect that not all users are equally profitable. Thus, further understanding the customer engagement value of users in freemium is important. One possible future work is classifying users similar to the classification Hennig-Thurau et al. (2004) create for word-of-mouth (which we presented in § 2.5.2 (p. 22)) to enable a company to reason about their existing users and who they want to attract. Another possible future work is in better understanding how the customer value plays out over time. Many respondents mentioned that users might stay on the free version for years before converting to pay. Thus, understanding the implications this yield for a company is crucial to understand the impact of free users.

### Longitudinal study

As mentioned among the limitations to this study, this research is just a snapshot of freemium-based companies at a specific moment in time. Trusov *et al.* (2009, p. 90) say that "empirical evidence is currently scant regarding the relative effectiveness of [word-of-mouth] marketing in increasing firm performance over time." Thus, performing a longitudinal study might prove very valuable in understanding freemium and how effective the proposed crowdsourced customer acquisition process is over time. In a longitudinal study we are also better able to discuss the direction of causality (Bryman 2008).

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#### Negative word-of-mouth

Research has repeatedly shown that negative word-of-mouth is at least equally, if not more, influential than positive word-of-mouth in affecting attitudes (Arndt 1967; Park and Lee 2009). Among the respondents, however, nearly none had experienced considerable negativity. And in the few cases negativity was mentioned, it was mentioned as a very temporary element which had little effect. Thus, understanding how negative word-of-mouth affect the customer acquisition process is important.

What if everyone goes freemium?

In 1971 Herbert Simon wrote (Simon 1971, pp. 40–41):

... in an information-rich world, the wealth of information means a dearth of something else: a scarcity of whatever it is that information consumes. What information consumes is rather obvious: it consumes the attention of its recipients. Hence a wealth of information creates a poverty of attention and a need to allocate that attention efficiently among the overabundance of information sources that might consume it.

We can bring this same logic to freemium. One of the core aspects of freemium is getting people to try the service and then using the service itself as marketing. But what happens when more and more services start using freemium? Will people start using these multitude of services? These are important questions to answer in order to understand the long-term impact of freemium.

# BIBLIOGRAPHY

- R. Agarwal and J. Prasad. The Role of Innovation Characteristics and Perceived Voluntariness in the Acceptance of Information Technologies. *Decision Sciences*, 28(3):557–582, 1997.
- N. Amblee and T. Bui. Can brand reputation improve the odds of being reviewed on-line? *International Journal of Electronic Commerce*, 12(3):11–28, 2008.
- N. Amblee and T.X. Bui. The impact of electronic-word-of-mouth on digital microproducts: An empirical investigation of amazon shorts. In H. Österle, J. Schelp, and R. Winter, eds., *Proceedings of the Fifteenth European Conference on Information Systems*, pp. 36–47, St. Gallen, 2007. University of St. Gallen.
- C. Anderson. *Free: The Future of a Radical Price*. Hyperion, New York, NY, USA, 2009.
- E.W. Anderson. Customer Satisfaction and Word of Mouth. *Journal of Service Research*, 1(1):5–17, August 1998.
- E.W. Anderson, C. Fornell, and S.K. Mazvancheryl. Customer satisfaction and shareholder value. *Journal of Marketing*, 68(4):172–185, October 2004.
- J.C. Anderson and J.A. Narus. Capturing the value of supplementary services. *Harvard Business Review*, 73(1):75–83, 1995.
- R.E. Anderson and S.S. Srinivasan. E-satisfaction and e-loyalty: A contingency framework. *Psychology and Marketing*, 20(2):123–138, February 2003.
- J. Arndt. Role of Product-Related Conversations in the Diffusion of a New Product. *Journal of Marketing Research*, 4(3):291–295, August 1967.
- R.P. Bagozzi and U.M. Dholakia. Intentional social action in virtual communities. *Journal of Interactive Marketing*, 16(2):2–21, 2002.
- K.J. Bekkelund. Suceeding With Freemium. January 2011. URL http://kimjoar.net/files/succeeding-with-freemium.pdf.
- B.L. Berg. *Qualitative Research Methods for the Social Sciences*. Allyn & Bacon, Boston, MA, USA, sixth edition, 2007.
- P.D. Berger and N.I. Nasr. Customer lifetime value: Marketing models and applications. *Journal of Interactive Marketing*, 12(1):17–30, 1998.

66 Bibliography

S. Bhullar. Business Model 101: Why Startups Often Fail at Freemium, October 2010. URL http://www.pluggd.in/freemium-business-model-and-startups-297/. Retrieved May 19, 2010.

- T.H.A. Bijmolt, P.S.H. Leeflang, F. Block, M. Eisenbeiss, B.G.S. Hardie, A. Lemmens, and P. Saffert. Analytics for customer engagement. *Journal of Service Research*, 13(3):341–356, August 2010.
- R.C. Blattberg and J. Deighton. Manage marketing by the customer equity test. *Harvard Business Review*, 74(4):136–144, 1996.
- R.C. Blattberg, G. Getz, and J.S. Thomas. *Customer Equity: Building and Managing Relationships as Valuable Assets*. Harvard Business Press, Boston, MA, US, 2001.
- R. Bogdan and S.J. Taylor. *Introduction to Qualitative Research Methods: A Phenomenological Approach to the Social Sciences*. Wiley, New York, NY, USA, 1975.
- K.K. Boyer, R. Hallowell, and A.V. Roth. E-services: Operating strategy—a case study and a method for analyzing operational benefits. *Journal of Operations Management*, 20(2):175–188, 2002.
- S. Brand. *The Media Lab: Inventing the Future at M. I. T.* Penguin Books, New York, NY, USA, 1988.
- J. Brown, A.J. Broderick, and N. Lee. Word of Mouth Communication Within Online Communities: Conceptualizing the Online Social Network. *Journal of Interactive Marketing*, 21(3):2–20, 2007.
- A. Bryman. *Social Research Methods*. Oxford University Press, Great Clarendon Street, Oxford, UK, third edition, 2008.
- E. Brynjolfsson and C.F. Kemerer. Network Externalities in Microcomputer Software: An Econometric Analysis of the Spreadsheet Market. *Management Science*, 42(12):1627–1647, December 1996.
- B.S. Butler. Membership size, communication activity, and sustainability: A resource-based model of online social structures. *Information Systems Research*, 12(4):346–362, December 2001.
- F.A. Buttle. Word of Mouth: Understanding and Managing Referral Marketing. *Journal of Strategic Marketing*, 6(3):241–254, 1998.

H.H. Chang, Y.H. Wang, and W.Y. Yang. The impact of e-service quality, customer satisfaction and loyalty on e-marketing: Moderating effect of perceived value. *Total Quality Management & Business Excellence*, 20(4):423–443, 2009.

- K. Charmaz. Grounded Theory. In M.S. Lewis-Beck, A. Bryman, and T.F. Liao, eds., *The SAGE Encyclopedia of Social Science Research Methods*. SAGE Publications, Thousand Oaks, CA, US, 2004.
- Z. Chen and A.J. Dubinsky. A conceptual model of perceived customer value in e-commerce: A preliminary investigation. *Psychology and Marketing*, 20(4): 323–347, April 2003.
- C.M.K. Cheung and D.R. Thadani. The State of Electronic Word-of-Mouth Research: A Literature Analysis. In *PACIS 2010 Proceedings*, 2010. URL <a href="http://aisel.aisnet.org/pacis2010/151">http://aisel.aisnet.org/pacis2010/151</a>.
- C.M.K. Cheung, M.K.O. Lee, and N. Rabjohn. The impact of electronic word-of-mouth: The adoption of online opinions in online customer communities. *Internet Research*, 18(3):229–247, 2008.
- J.A. Chevalier and D. Mayzlin. The effect of word of mouth on sales: Online book reviews. *Journal of Marketing Research*, 43(3):345–354, August 2006.
- M.T. Clements. Direct and indirect network effects: Are they equivalent? *International Journal of Industrial Organization*, 22(5):633–645, 2004.
- J.M. Corbin and A. Strauss. Grounded Theory Research: Procedures, Canons, and Evaluative Criteria. *Qualitative Sociology*, 13(1):3–21, 1990.
- D. Dahlquist. New Openfeint Service Helps Developers Go Freemium, December 2010. URL http://www.macworld.com/article/156225/2010/12/openfeint\_ofx. html. Retrieved May 19, 2011.
- F.D. Davis. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3):319–340, September 1989.
- D. De Grosbois, U. Kumar, and V. Kumar. Internet-based technology use and new product time-to-market: The moderating effect of product innovativeness. *International Journal of Innovation Management*, 14(5):915–946, 2010.
- C.A. de Matos and C.A.V. Rossi. Word-of-Mouth Communications in Marketing: A Meta-Analytic Review of the Antecedents and Moderators. *Journal of the Academy of Marketing Science*, 36(4):578–596, 2008.

C. Dellarocas. The Digitization of Word of Mouth: Promise and Challenges of Online Feedback Mechanisms. *Management Science*, 49(10):1407–1424, October 2003.

- N.K. Denzin. *The Research Act: A Theoretical Introduction to Sociological Methods*. McGraw-Hill, New York, NY, US, second edition, 1978.
- A. Diederich. Decision Making Under Conflict: Decision Time as a Measure of Conflict Strength. *Psychonomic Bulletin & Review*, 10(1):167–176, March 2003.
- J. Doerr, A. Benlian, J. Vetter, and T. Hess. Pricing of Content Services—An Empirical Investigation of Music as a Service. In M.L. Nelson, M.L. Shaw, and T.J. Strader, eds., *Sustainable e-Business Management*, volume 58 of *Lecture Notes in Business Information Processing*, pp. 13–24. Springer Berlin Heidelberg, New York, NY, US, 2010.
- P.F. Drucker. *The Practice of Management*. Butterworth–Heinemann, Oxford, UK, 2007.
- W. Duan, B. Gu, and A.B. Whinston. Do Online Reviews Matter?—an Empirical Investigation of Panel Data. *Decision Support Systems*, 45(4):1007–1016, November 2008.
- K.M. Eisenhardt. Building Theories From Case Study Research. *The Academy of Management Review*, 14(4):532–550, October 1989.
- C. Faugère and G.K. Tayi. Designing Free Software Samples: A Game Theoretic Approach. *Information Technology and Management*, 8(4):263–278, December 2007.
- M.S. Featherman and P.A. Pavlou. Predicting e-services adoption: A perceived risk facets perspective. *International Journal of Human-Computer Studies*, 59(4): 451–474, 2003.
- K.M. File and R.A. Prince. Positive word-of-mouth: Customer satisfaction and buyer behaviour. *International Journal of Bank Marketing*, 10(1):25–29, 1992.
- M. Fischer, M. Pinzger, and H. Gall. Populating a release history database from version control and bug tracking systems. In 19th IEEE International Conference on Software Maintenance (ICSM'03), p. 23. IEEE Computer Society Press, 2003.
- B. Flyvbjerg. Five Misunderstandings About Case-Study Research. *Qualitative Inquiry*, 12(2):219–245, April 2006.

M.G. Gallarza and I. Gil Saura. Value dimensions, perceived value, satisfaction and loyalty: An investigation of university students' travel behaviour. *Tourism Management*, 27(3):437–452, 2006.

- J.M. Gallaugher and Y.M. Wang. Understanding Network Effects in Software Markets: Evidence From Web Server Pricing. *MIS Quarterly*, 26(4):303–327, December 2002.
- C. Geertz. *Thick Description: Toward an Interpretive Theory of Culture*, chapter 3, pp. 3–30. Basic Books, New York, NY, US, 1973.
- B.G. Glaser. Theoretical Sensitivity: Advances in the Methodology of Grounded Theory. Sociology Press, Mill Valley, CA, US, 1978.
- B.G. Glaser. *Doing Grounded Theory: Issues and Discussions*. Sociology Press, Mill Valley, CA, US, 1998.
- B.G. Glaser and A.L. Strauss. *The Discovery of Grounded Theory: Strategies for Qualitative Research.* AldineTransaction, Piscataway, NJ, US, 1967.
- D. Godes and D. Mayzlin. Using Online Conversations to Study Word-of-Mouth Communication. *Marketing Science*, 23(4):545–560, 2004.
- N. Golik Klanac. Dimensions of customer value of website communication in business-to-business relationships. *Journal of Business Market Management*, 2 (3):153–165, 2008.
- A. Graf and P. Maas. Customer value from a customer perspective: A comprehensive review. *Journal Für Betriebswirtschaft*, 58(1):1–20, 2008.
- U.H. Graneheim and B. Lundman. Qualitative Content Analysis in Nursing Research: Concepts, Procedures and Measures to Achieve Trustworthiness. *Nurse Education Today*, 24(2):105–112, February 2004.
- D. Grewal, G.R. Iyer, R. Krishnan, and A. Sharma. The internet and the price-value-loyalty chain. *Journal of Business Research*, 56(5):391–398, May 2003.
- T.S. Gruca and L.L. Rego. Customer satisfaction, cash flow, and shareholder value. *Journal of Marketing*, 69(3):115–130, July 2005.
- E.G. Guba and Y.S. Lincoln. Competing Paradigms in Qualitative Research. In N.K. Denzin and Y.S. Lincoln, eds., *Handbook of Qualitative Research*, pp. 105–117. SAGE Publications, Thousand Oaks, CA, US, 1994.

J. Gummerus. *Customer Value in E-Service: Conceptual Foundation and Empirical Evidence*. PhD thesis, Svenska handelshögskolan, 2011.

- S. Gupta and D.R. Lehmann. Customers as assets. *Journal of Interactive Marketing*, 17(1):9–24, 2003.
- S. Gupta, D. Hanssens, B. Hardie, W. Kahn, V. Kumar, N. Lin, N. Ravishanker, and S. Sriram. Modeling customer lifetime value. *Journal of Service Research*, 9(2): 139–155, November 2006.
- H.-Y. Ha. The effects of consumer risk perception on pre-purchase information in online auctions: Brand, word-of-mouth, and customized information. *Journal of Computer-Mediated Communication*, 8(1), October 2002.
- E. Haruvy and A. Prasad. Optimal Product Strategies in the Presence of Network Externalities. *Information Economics and Policy*, 10(4):489–499, December 1998.
- E. Haruvy and A. Prasad. Optimal Freeware Quality in the Presence of Network Externalities: An Evolutionary Game Theoretical Approach. *Journal of Evolutionary Economics*, 11(2):231–248, 2001.
- K. Heinonen. Reconceptualizing customer perceived value: The value of time and place. *Managing Service Quality*, 14(2/3):205–215, 2004.
- T. Hennig-Thurau, K.P. Gwinner, G. Walsh, and D.D. Gremler. Electronic Word-of-Mouth via Consumer-Opinion Platforms: What Motivates Consumers to Articulate Themselves on the Internet? *Journal of Interactive Marketing*, 18(1): 38–52, 2004.
- S.H. Ho and Y.Y. Ko. Effects of self-service technology on customer value and customer readiness: The case of internet banking. *Internet Research*, 18(4): 427–446, 2008.
- C.F. Hofacker, R.E. Goldsmith, E. Bridges, and E. Swilley. E-services: A synthesis and research agenda. In H. Evanschitzky and G.R. Iyer, eds., *E-Services: Opportunities and Threats*, volume 1. DUV, Wiesbaden, Germany, 2007.
- J.E. Hogan, K.N. Lemon, and B. Libai. What is the true value of a lost customer? *Journal of Service Research*, 5(3):196–208, February 2003.
- M.B. Holbrook. The nature of customer value: An axiology of services in the consumption experience. *Service Quality: New Directions in Theory and Practice*, pp. 21–71, 1994.

- J. Howe. The rise of crowdsourcing. *Wired Magazine*, 14(6):1–4, 2006.
- F. Huber, A. Herrmann, and R.E. Morgan. Gaining competitive advantage through customer value oriented management. *Journal of Consumer Marketing*, 18(1): 41–53, 2001.
- A.M. Huberman and M.B. Miles. Data Management and Analysis Methods. In N.K. Denzin and Y.S. Lincoln, eds., *Handbook of Qualitative Research*, pp. 428–444. SAGE Publications, Thousand Oaks, CA, US, 1994.
- S.S. Iyengar and M.R. Lepper. When Choice Is Demotivating: Can One Desire Too Much of a Good Thing? *Journal of Personality and Social Psychology*, 79(6): 995–1006, 2000.
- D. Jain and S.S. Singh. Customer Lifetime Value Research in Marketing: A Review and Future Directions. *Journal of Interactive Marketing*, 16(2):34–46, 2002.
- B.J. Jansen, M. Zhang, K. Sobel, and A. Chowdury. Twitter Power: Tweets as Electronic Word of Mouth. *Journal of the American Society for Information Science and Technology*, 60(11):2169–2188, November 2009.
- Z. Jiang. How to Give Away Software With Successive Versions. *Decision Support Systems*, 49(4):430–441, November 2010.
- Z. Jiang and S. Sarkar. Speed Matters: The Role of Free Software Offer in Software Diffusion. *Journal of Management Information Systems*, 26(3):207–240, 2009.
- S. Jurvetson. What exactly is viral marketing. *Red Herring*, 78:110–112, 2000. URL <a href="http://sites.google.com/site/kehowells/viral-marketing.pdf">http://sites.google.com/site/kehowells/viral-marketing.pdf</a>. Retrieved June 2, 2011.
- M.L. Katz and C. Shapiro. Network Externalities, Competition, and Compatibility. *The American Economic Review*, 75(3):424–440, June 1985.
- M.L. Katz and C. Shapiro. Product Introduction With Network Externalities. *The Journal of Industrial Economics*, 40(1):55–83, March 1992.
- D.J. Kim, D.L. Ferrin, and H.R. Rao. A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decision Support Systems*, 44(2):544–564, 2008.
- O. Kim and M. Walker. The free rider problem: Experimental evidence. *Public Choice*, 43(1):3–24, 1984.

R.V. Kozinets, K. de Valck, A.C. Wojnicki, and S.J.S. Wilner. Networked Narratives: Understanding Word-of-Mouth Marketing in Online Communities. *Journal of Marketing*, 74(2):71–89, March 2010.

- V. Kumar. Customer Lifetime Value. now publishers, Inc, Delft, Netherlands, 2008.
- V. Kumar, L. Aksoy, B. Donkers, R. Venkatesan, T. Wiesel, and S. Tillmanns. Undervalued or Overvalued Customers: Capturing Total Customer Engagement Value. *Journal of Service Research*, 13(3):297–310, August 2010a.
- V. Kumar, J.A. Petersen, and R.P. Leone. Driving Profitability by Encouraging Customer Referrals: Who, When, and How. *Journal of Marketing*, 74(5):1–17, September 2010b.
- A.J. Kuzel. Sampling in Qualitative Inquiry. In B.F. Crabtree and W.L. Miller, eds., *Doing Qualitative Research*. SAGE Publications, Thousand Oaks, CA, US, second edition, 1999.
- P. Lempert. Caught in the web. *Progressive Grocer*, 85:12–18, 2006.
- J. Leskovec, L.A. Adamic, and B.A. Huberman. The Dynamics of Viral Marketing. *ACM Transactions on the Web (TWEB)*, 1(1), May 2007.
- Y.S. Lincoln and E.G. Guba. *Naturalistic Inquiry*. SAGE Publications, Thousand Oaks, CA, US, 1985.
- Y. Liu. Word of mouth for movies: Its dynamics and impact on box office revenue. *Journal of Marketing*, 70(3):74–89, July 2006.
- K. Lomborg and M. Kirkevold. Truth and Validity in Grounded Theory–a Reconsidered Realist Interpretation of the Criteria: Fit, Work, Relevance and Modifiability. *Nursing Philosophy*, 4(3):189–200, October 2003.
- M.F. Luce. Choosing to Avoid: Coping With Negatively Emotion-Laden Consumer Decisions. *Journal of Consumer Research*, 24(4):409–433, March 1998.
- B. Lunn. Study: SaaS Pricing Is Still Opaque and Freemium Is Rare, January 2010. URL http://www.readwriteweb.com/enterprise/2010/01/analysis-saas-pricing-is-still.php. Retrieved May 19, 2010.
- B. Mahadevan. Business Models for Internet-Based E-Commerce: An Anatomy. *California Management Review*, 42(4):55–69, 2000.

W.G. Mangold and D.J. Faulds. Social Media: The New Hybrid Element of the Promotion Mix. *Business Horizons*, 52(4):357–365, 2009.

- C. Mathwick, N. Malhotra, and E. Rigdon. Experiential value: Conceptualization, measurement and application in the catalog and internet shopping environments. *Journal of Retailing*, 77(1):39–56, 2001.
- C. Mathwick, J. Wagner, and R. Unni. Computer-mediated customization tendency (CMCT) and the adaptive e-service experience. *Journal of Retailing*, 86(1):11–21, 2010.
- R.K. Merton. *Social Theory and Social Structure*. Free Press, New York, NY, USA, 1968.
- M.L. Meuter, A.L. Ostrom, R.I. Roundtree, and M.J. Bitner. Self-service technologies: Understanding customer satisfaction with technology-based service encounters. *The Journal of Marketing*, 64(3):50–64, July 2000.
- C.C. Miller. Ad Revenue on the Web? No Sure Bet, May 2009. URL http://www.nytimes.com/2009/05/25/technology/start-ups/25startup.html. Retrieved June 5, 2011.
- I.R. Misner and V. Devine. *The World's Best Known Marketing Secret: Building Your Business With Word-of-Mouth Marketing*. Bard Press, Austin, TX, US, second edition, 1999.
- R. Normann and H. Mintzberg. *Reframing Business: When the Map Changes the Landscape*. Wiley, Hoboken, NJ, US, 2001.
- S. Okazaki. Exploring experiential value in online mobile gaming adoption. *CyberPsychology & Behavior*, 11(5):619–622, 2008.
- R.L. Oliver. *Satisfaction: A Behavioral Perspective on the Customer*. M.E. Sharpe, Armonk, NY, US, 1997.
- R.L. Oliver and J.E. Swan. Consumer perceptions of interpersonal equity and satisfaction in transactions: A field survey approach. *The Journal of Marketing*, 53(2):21–35, 1989.
- M. Olson and M. Raffanti. Grounded Learning: An Application of Grounded Theory in Educational Practice. Paper presented at the Grounded Theory Symposium, Alexandria, va, us, July 2004. URL http://home.mindspring.com/~tagregory/sitebuildercontent/sitebuilderfiles/RO.pdf.

A. Osterwalder. *The Business Model Ontology – A Proposition in a Design Science Approach.* PhD thesis, HEC Lausanne, 2004.

- A. Osterwalder and Y. Pigneur. *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers.* John Wiley and Sons, Hoboken, NJ, US, 2010.
- A. O'Sullivan and S.M. Sheffrin. *Economics: Principles in Action*. Pearson Prentice Hall, 2003.
- D. Papies, F. Eggers, and N. Wlömert. Music for free? how free ad-funded downloads affect consumer choice. *Journal of the Academy of Marketing Science*, pp. 1–18, 2010.
- A. Parasuraman, V.A. Zeithaml, and A. Malhotra. Es-qual: A multiple-item scale for assessing electronic service quality. *Journal of Service Research*, 7(3):213–233, 2005.
- C. Park and T.M. Lee. Information Direction, Website Reputation and ewom Effect: A Moderating Role of Product Type. *Journal of Business Research*, 62(1): 61–67, January 2009.
- A. Parker. Pay to Remove Ads?, May 2008. URL http://blog.andrewparker.net/2008/05/12/pay-to-remove-ads/. Retrieved May 19, 2011.
- G.G. Parker and M.W. Van Alstyne. Two-Sided Network Effects: A Theory of Information Product Design. *Management Science*, 51(10):1494–1504, October 2005.
- M.Q. Patton. *Qualitative Research and Evaluation Methods*. SAGE Publications, Thousand Oaks, CA, US, third edition, 2002.
- A. Payne and S. Holt. Diagnosing customer value: Integrating the value process and relationship marketing. *British Journal of Management*, 12(2):159–182, June 2001.
- A. Persson and L. Ryals. Customer assets and customer equity: Management and measurement issues. *Marketing Theory*, 10(4):417–436, December 2010.
- J.E. Phelps, R. Lewis, L. Mobilio, D. Perry, and N. Raman. Viral marketing or electronic word-of-mouth advertising: Examining consumer responses and motivations to pass along email. *Journal of Advertising Research*, 44(4):333–348, 2004.

B.J. Pine and J.H. Gilmore. Welcome to the experience economy. *Harvard Business Review*, 76:97–105, 1998.

- D.F. Polit and B.P. Hungler. *Nursing Research: Principles and Methods*. Lippincott Williams & Wilkins, sixth edition, 1999.
- J. Popay, A. Rogers, and G. Williams. Rationale and Standards for the Systematic Review of Qualitative Literature in Health Services Research. *Qualitative Health Research*, 8(3):341–351, May 1998.
- K.R. Popper. Conjectures and Refutations: The Growth of Scientific Knowledge. 2002. First published in 1963 by Routledge & Kegan Paul.
- M. E. Porter. What Is Strategy? *Harvard Business Review*, 74(6):61–78, November 1996.
- C.K. Prahalad and V. Ramaswamy. *The Future of Competition: Co-Creating Unique Value With Customers*. Harvard Business Press, Boston, MA, US, 2004.
- C.K. Prahalad, V. Ramaswamy, and Harvard University. Harvard Business Review. Co-Opting Customer Competence. *Harvard Business Review*, 78(1):79–90, 2000.
- A. Ravald and C. Grönroos. The value concept and relationship marketing. *European Journal of Marketing*, 30(2):19–30, 1996.
- L.L. Rego, M.T. Billett, and N.A. Morgan. Consumer-based brand equity and firm risk. *Journal of Marketing*, 73(6):47–60, November 2009.
- F.F. Reichheld and P. Schefter. E-loyalty. *Harvard Business Review*, 78(4):105–113, 2000.
- F.F. Reichheld, T. Teal, and D.K. Smith. *The Loyalty Effect*. Harvard Business School Press, Boston, MA, US, 1996.
- W. Reinartz, J.S. Thomas, and V. Kumar. Balancing acquisition and retention resources to maximize customer profitability. *Journal of Marketing*, 69(1):63–79, 2005.
- G. Reynolds. *An Army of Davids: How Markets and Technology Empower Ordinary People to Beat Big Media, Big Government, and Other Goliaths.* Thomas Nelson Inc, Nashville, TN, US, 2007.
- M.L. Richins. Negative word-of-mouth by dissatisfied consumers: A pilot study. *The Journal of Marketing*, 47(1):68–78, 1983.

J.C. Rochet and J. Tirole. Platform Competition in Two-Sided Markets. *Journal of the European Economic Association*, 1(4):990–1029, June 2003.

- J.C. Rochet and J. Tirole. Two-Sided Markets: A Progress Report. *The RAND Journal of Economics*, 37(3):645–667, 2006.
- J. Roed. Language learner behaviour in a virtual environment. *Computer Assisted Language Learning*, 16(2):155–172, 2003.
- E. Rosen. *The Anatomy of Buzz: How to Create Word-of-Mouth Marketing*. Crown Business, New York, NY, US, 2002.
- M. Rysman. The Economics of Two-Sided Markets. *The Journal of Economic Perspectives*, 23(3):125–143, 2009.
- R. Sánchez-Fernández and M. Iniesta-Bonillo. The concept of perceived value: A systematic review of the research. *Marketing Theory*, 7(4):427–451, December 2007.
- S. Sandström, B. Edvardsson, P. Kristensson, and P. Magnusson. Value in use through service experience. *Managing Service Quality*, 18(2):112–126, 2008.
- J. Santos. E-service quality: A model of virtual service quality dimensions. *Managing Service Quality*, 13(3):233–246, 2003.
- L.G. Schiffman and L.L. Kanuk. *Consumer Behavior*. Pearson Prentice Hall, Upper Saddle River, NJ, US, ninth edition, 2007.
- D. Semeria. Freemium Shmeemium, June 2009. URL http://lmframework.com/blog/2009/06/freemium/. Retrieved May 19, 2011.
- K. Shampanier, N. Mazar, and D. Ariely. Zero as a Special Price: The True Value of Free Products. *Marketing Science*, 26(6):742–757, 2007.
- V. Shankar, A.K. Smith, and A. Rangaswamy. Customer satisfaction and loyalty in online and offline environments. *International Journal of Research in Marketing*, 20(2):153–175, 2003.
- C. Shapiro and H.R. Varian. *Information Rules: A Strategic Guide to the Network Economy*. Harvard Business Press, 1999.
- A. Sharma and J.N. Sheth. Web-Based Marketing: The Coming Revolution in Marketing Thought and Strategy. *Journal of Business Research*, 57(7):696–702, July 2004.

K.F. Shieh and M.S. Cheng. An empirical study of experiential value and lifestyles and their effects on satisfaction in adolescents: An example using online gaming. *Adolescence*, 42(165):199, 2007.

- C. Shirky. *Here Comes Everybody: The Power of Organizing Without Organizations*. Penguin Group, City of Westminster, London, UK, 2008.
- A. Shuen. Web 2.0: A Strategy Guide Business Thinking and Strategies Behind Successful Web 2.0 Implementations. O'Reilly Media, Inc., Sebastopol, CA, US, 2008.
- H.A. Simon. Designing Organizations for an Information-Rich World. In M. Greenberger, ed., *Computers, Communications, and the Public Interest*, volume 1. Johns Hopkins University Press, Baltimore, MD, US, 1971.
- J. Singh and D. Sirdeshmukh. Agency and trust mechanisms in consumer satisfaction and loyalty judgments. *Journal of the Academy of Marketing Science*, 28(1): 150–167, 2000.
- B. Sparks, K. Butcher, and G. Pan. Understanding customer-derived value in the timeshare industry. *Cornell Hotel and Restaurant Administration Quarterly*, 48 (1):28, 2007.
- R. Stallman. The Free Software Definition, 2010. URL <a href="http://www.gnu.org/philosophy/free-sw.html">http://www.gnu.org/philosophy/free-sw.html</a>. Retrieved Jun 10, 2011.
- P.N. Stern. Grounded theory methodology: Its uses and processes. *Journal of Nursing Scholarship*, 12(1):20–23, 1980.
- A. Strauss and J.M. Corbin. *Basics of Qualitative Research: Grounded Theory Procedures and Techniques.* SAGE Publications, Newbury Park, CA, US, 1990.
- A.L. Strauss and J.M. Corbin. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. SAGE Publications, Thousand Oaks, CA, US, second edition, 1998.
- T. Sun, S. Youn, G. Wu, and M. Kuntaraporn. Online word-of-mouth (or mouse): An exploration of its antecedents and consequences. *Journal of Computer-Mediated Communication*, 11(4):1104–1127, July 2006.
- D.S. Sundaram and C. Webster. The role of brand familiarity on the impact of word-of-mouth communication on brand evaluations. In E.J. Arnould and L.M. Scott,

eds., *Advances in Consumer Research*, volume 26, pp. 664–670. Association for Consumer Research, Provo, UT, US, 1999.

- D.S. Sundaram, K. Mitra, and C. Webster. Word-of-mouth communications: A motivational analysis. In J.W. Alba and J.W. Hutchinson, eds., *Advances in Consumer Research*, volume 25, pp. 527–531. Association for Consumer Research, Ann Arbor, MI, US, 1998.
- D.J. Teece. Business Models, Business Strategy and Innovation. *Long Range Planning*, 43(2-3):172–194, 2010.
- J.S. Thomas. A methodology for linking customer acquisition to customer retention. *Journal of Marketing Research*, 38(2):262–268, 2001.
- W.M.K. Trochim. *The Research Methods Knowledge Base*. Atomic Dog Publishing, Mason, OH, US, second edition, 2001.
- M. Trusov, R.E. Bucklin, and K. Pauwels. Effects of Word-of-Mouth Versus Traditional Marketing: Findings From an Internet Social Networking Site. *Journal of Marketing*, 73(5):90–102, September 2009.
- A. Tversky and E. Shafir. Choice Under Conflict: The Dynamics of Deferred Decision. *Psychological Science*, 3(6):358–361, November 1992.
- T.T. Tyebjee and A.V. Bruno. A Model of Venture Capitalist Investment Activity. *Management Science*, 30(9):1051–1066, September 1984.
- W. Ulaga. Capturing value creation in business relationships: A customer perspective. *Industrial Marketing Management*, 32(8):677–693, November 2003.
- J. Van Doorn, K.N. Lemon, V. Mittal, S. Nass, D. Pick, P. Pirner, and P.C. Verhoef. Customer Engagement Behavior: Theoretical Foundations and Research Directions. *Journal of Service Research*, 13(3):253–266, August 2010.
- A.C.R. van Riel, V. Liljander, and P. Jurriens. Exploring consumer evaluations of e-services: A portal site. *International Journal of Service Industry Management*, 12(4):359–377, 2001.
- S.L. Vargo and R.F. Lusch. Evolving to a New Dominant Logic for Marketing. *The Journal of Marketing*, 68(1):1–17, January 2004.
- S.L. Vargo, P.P. Maglio, and M.A. Akaka. On value and value co-creation: A service systems and service logic perspective. *European Management Journal*, 26(3): 145–152, 2008.

H.R. Varian. Pricing Information Goods. In *Proceedings of Scholarship in the New Information Environment Symposium, Harvard Law School.* Citeseer, 1995.

- H.R. Varian. Versioning information goods. In B. Kahin and H.R. Varian, eds., *Internet Publishing and Beyond: The Economics of Digital Information and Intellectual Property*, pp. 190–202. MIT Press, Cambridge, MA, US, August 2000. URL http://people.ischool.berkeley.edu/~hal/Papers/version.pdf.
- H.R. Varian. Markets for Information Goods. In K. Okina and T. Inoue, eds., *Monetary Policy in a World of Knowledge-Based Growth, Quality Change and Uncertain Measurement*. Macmillan Press, New York, NY, US, 2001. URL http://people.ischool.berkeley.edu/~hal/Papers/japan/japan.pdf.
- J. Villanueva, S. Yoo, and D.M. Hanssens. The Impact of Marketing-Induced Versus Word-of-Mouth Customer Acquisition on Customer Equity Growth. *Journal of Marketing Research*, 45(1):48–59, February 2008.
- S. Viswanathan. Competing across technology-differentiated channels: The impact of network externalities and switching costs. *Management Science*, 51(3):483–496, 2005.
- C. Vollmer and G. Precourt. *Always on: Advertising, Marketing and Media in an Era of Consumer Control.* McGraw-Hill Professional, New York, NY, US, 2008.
- C.A. Voss. Rethinking paradigms of service: Service in a virtual environment. *International Journal of Operations & Production Management*, 23(1):88–104, 2003.
- F.v. Wangenheim. Situational characteristics as moderators of the satisfaction-loyalty link: An investigation in a business-to-business context. *Journal of Consumer Satisfaction Dissatisfaction and Complaining Behavior*, 16:145–156, 2003.
- F.v. Wangenheim and T. Bayón. The Chain From Customer Satisfaction via Word-of-Mouth Referrals to New Customer Acquisition. *Journal of the Academy of Marketing Science*, 35(2):233–249, 2007.
- E.G. Weyl. Heterogeneity in Two-Sided Markets. Unpublished Manuscript, Harvard University, 2009.
- F. Wilson. The Freemium Business Model, March 2006a. URL http://www.avc.com/a\_vc/2006/03/the\_freemium\_bu.html. Retrieved Jun 8, 2010.

F. Wilson. My Favorite Business Model, March 2006b. URL http://avc.blogs.com/a\_vc/2006/03/my\_favorite\_bus.html. Retrieved Jun 8, 2010.

- R.B. Woodruff. Customer value: The next source for competitive advantage. *Journal* of the Academy of Marketing Science, 25(2):139–153, 1997.
- C.H.J. Wu and R.D. Liang. Effect of experiential value on customer satisfaction with service encounters in luxury-hotel restaurants. *International Journal of Hospitality Management*, 28(4):586–593, 2009.
- V.A. Zeithaml. Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *The Journal of Marketing*, 52(3):2–22, July 1988.
- V.A. Zeithaml, A. Parasuraman, and A. Malhotra. Service quality delivery through web sites: A critical review of extant knowledge. *Journal of the Academy of Marketing Science*, 30(4):362–375, 2002.

## A INTERVIEW GUIDE

As explained in Chapter 3 (p. 29), the interview process was adaptive and changed depending one the information gathered and the analysis performed. Thus, there was no specific interview guide that was determined before interviews started and stayed consistent throughout the process. However, generally the following questions were the basis for the interviews:

- Why did you choose to use freemium?
- What have been the most important aspects of free? What have you gained?
- What is the value of these free users?
- How do you choose what to include in the free version vs the paid version?
- Is there a difference in how you acquired your first 1000 customers and how you acquire another 1000 customers now?
- How important is word-of-mouth?
- Have you taken steps to increase this word-of-mouth?
- How important is free in driving word-of-mouth?
- Do you specifically target key influencers? People that spread more than others.
- How much do you depend on your own marketing and how much do you depend on acquiring customers through your existing users?
- What drives growth in your premium version?
- Is there a difference in how you grow paid customers vs free customers?
- How much do you focus on growing free users?
- Jason Fried has said that for 37Signals "most paid users started on pay," do you see the same effect?
- What are the most important things to get right when you are using freemium?
- Have you focused on going viral? If so, how?
- Where is your word-of-mouth? Where does your product spread? (e.g. Twitter, Facebook, offline, ...)
- How do you acquire customers?
- How have you gradually changed how you acquire users?
- Are there any specific things you have tried that have succeeded or failed significantly?
- The super-general end question: How do you succeed with freemium?

These questions were supplemented with new questions that focused on the elements the respondent talked about. Thus, several times we digressed way beyond these questions and gathered information we had not expected beforehand.