**Aalto University
School of Economics**

The adoption of social media in reaching and interacting with customers: Case - The Finnish telecommunications industry

Information Systems Science

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Purpose of the study

The purpose of this study is to look into the usage of social media in business to reach and interact with the customers. The study builds upon earlier research on social media, social network theories and theories of user acceptance of technology. The aim of this study is to get a clear view of the adoption levels and the activities taken in social media in the Finnish telecommunications industry via three chosen case companies.

Methodology

First an extensive overview of previous research related is conducted. The aim of this is to get a profound understanding of the foundations and constructions of social media as well as the attributes behind user acceptance and acting in social networks. Based on this knowledge a research framework is formulated to provide a structure for the empirical research. This research framework is translated into focus points that guide and support the empirical research. The empirical part is qualitative, conducted via observations and interviews of the case companies. The observation is conducted during a 14-day period in which every company's activities are mapped three times. The observations are conducted in 5 particular social media tools chosen for this research. Interviews are conducted for gaining a deeper insight into the results of the observations as well as to ensure all possible activities have been taken into account.

Findings

The key finding in this research is that the usage of social media varies greatly from company to company and has not yet been adopted to its fullest potential. Even though the companies may have extensive efforts in some tool, the overall usage of the tools and especially linking them into a larger context seems to be problematic for the companies. All three case companies have activities in social media, but use the tools very differently with different objectives. The involvement in social media varies from true interaction and collaboration with the customers to a simple passive presence. The interviews also reveal that the companies do not consider social media as more than one channel among others, but still recognize potential in it when able to attract enough users.

Keywords: social media, telecommunications, Facebook, Twitter, YouTube, corporate blog, crowdsourcing

Sosiaalisen median käyttö asiakkaiden tavoittamisessa sekä vuorovaikutuksessa asiakkaiden kanssa: Case – Telekommunikaatioala Suomessa

Tutkimuksen tarkoitus

Tutkimuksen tarkoituksena on tutkia sosiaalisen median käyttöä liiketoiminnassa, asiakkaiden tavoittamisessa sekä vuorovaikutuksessa asiakkaiden kanssa. Tutkimus perustuu aiempiin tutkimuksiin sosiaalisesta mediasta, sosiaalisten verkostojen teorioista sekä kuluttajien teknologian hyväksyntä teorioista. Tämän tutkimuksen tavoitteena on saada selkeä kuva suomalaisten telekommunikaatioalan yritysten käytön tasosta sekä toiminnasta sosiaalisessa mediassa käyttäen kolmea case-yritystä.

Tutkimuksen toteutus

Alussa suoritetaan laaja katsaus aiempiin tutkimuksiin. Tavoiteena on kehittää syvä ymmärrys sosiaalisen median perustasta ja rakenteista sekä niistä ominaisuuksita, jotka ohjaavat kuluttajien teknologian hyväksyntää sekä käyttäytymistä sosiaalisissa verkostoissa. Tähän perustuen suunnitellaan tutkimuksen viitekehys, joka tuo tutkimukseen rakenteen. Viitekehys jaetaan pienempiin fokusointiosiin, jotka ohjaavat ja tukevat empiiristä tutkimusta. Empiirinen osuus on kvalitatiivinen ja sisältää havainnointia ja haastatteluja. Havainnointi suoritetaan 14 päivän ajanjakson aikana, jolloin jokainen case-yritys kartoitetaan kolme kertaa. Havainnointi suoritetaan yhteensä viidessä eri työkalussa, jotka on valittu tätä tutkimusta varten. Haastatteluilla pyritään saamaan syvempi näkemys havainnoinnin tuloksista sekä varmistamaan, että kaikki mahdollinen on otettu havainnoinnissa huomioon.

Tutkimuksen tulokset

Tutkimuksen avainhavainto on, että sosiaalisen median käyttö liiketoiminnassa vaihtelee huomattavasti yritysten välillä. Sosiaalisen median käyttö ei myöskään vielä ole tavoittanut täyttä potentiaaliaan. Vaikka osa yrityksistä onkin jo sijoittanut huomattavasti joihinkin sosiaalisen median työkaluihin, sosiaalisen median käyttö yhtenä kokonaisuutena vaikuttaa olevan ongelmallista yrityksille. Kaikki kolme yritystä ovat sosiaalisessa mediassa mukana, mutta käyttävät eri työkaluja ja ovat asettaneet eri tavoitteet. Mukanaolo vaihtelee aidosta vuorovaikutuksesta ja yhteistyöstä passiiviseen läsnäoloon. Haastattelut paljastavat myös, että case-yritykset näkevät sosiaalisen median yhtenä kanavana muiden joukossa, mutta näkevät myös siinä olevan potentiaalia, jos käyttäjämäärät saadaan riittävän suuriksi.

Avainsanat: sosiaalinen media, telekommunikaatioala, Facebook, Twitter, YouTube, yritysblogi, crowdsourcing

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1 Introduction

Social media is one of the hot discussion topics in today's world. Everyone wants their part of it, but most of us have so far only scratched the surface of the pool of opportunities of social media. Otala and Pöysti (2008) talk about the benefits of social media and it's standing in today's business world. Social media offers companies a fresh way to attract new young talent. The young generation has grown up with social media tools and expects to be able to utilize them also for their work. Thus companies providing this option are at the top of their list when deciding upon future work places.

The social media tools of today are also an answer to the ever fastening work life pace and fragmentation of both work and workers with regards to location and time (Otala, 2008). With the help of social media tools you are "live" all the time as long as you have an Internet connection, which in the Western world today can be considered a certainty. With the rapid increase of mobile solutions for utilizing online social media tools we have also cut the need to have your laptop; now it's all a click away in your pocket. For example Facebook has reported that in 2009 already 65 million users use Facebook via a mobile medium compared to 20 million users in 2008 (Lehto, 2009). That would mean that every third user used a mobile device for access.

Even though being in the Internet can no longer be considered as bringing a competitive advantage to a company, not being there at all, however, does set the company at a competitive disadvantage (Lehtimäki et al 2009). We can no longer talk about presence in the Internet as a company building and maintaining its own website, but rather it is real-time presence and interaction. Social media offers possibilities in thought leadership, increasing brand awareness, increasing demand and improving customer loyalty (Äkkinen, 2010). Social media and the participatory economy is today's customer relationship management (CRM). In several business areas the noise around messages in traditional medias has reached a point where it is very difficult to get through and thus companies need to reinvent ways to reach their customers.

Social media can be used for both a company's internal purposes as well as for

external communication and development (Otala, 2008). It is not just a marketing channel, but a tool for every level of the company from HR to senior level management (Äkkinen, 2010). Social media tools can be used in for example direct recruiting, information gathering, sales and marketing, interaction with customers, development of new ideas, orientation of new employees and internal communications. The possibilities grow as we familiarize ourselves with the social media tools. This thesis examines the adoption of social media tools in the Finnish telecommunications industry and offers some future possibilities of development in this area.

1.1 Research gap

Even though social media is one of the current topics, there exists a gap in research. Social media as a term began to rise to people's awareness in the beginning of the millennium (Lietsala et al., 2008). During the past years it has quickly created it's foothold in the minds of the consumers and is becoming a part of their daily lives, just like morning coffee. The companies are not embracing social media, but look at it as a potential tool with downsides. Many still have doubts and have taken a lookout position before engaging themselves in too far.

There exists a clear gap in research of "the value of web 2.0 applications as marketing tools and ways to maximize the effectiveness of these tools" (Constantinides, 2008). Information is lacked in how to incorporate these tools into a company's marketing strategy, how to ensure they bring additional business value and how to use them in customer acquisition and retention. The academic world has not yet fully embraced the subject as it is still fairly new and fresh and companies are only beginning to realize the potential of social media.

1.2 Research objectives and research questions

The primary objective of this thesis is to examine the structure of social media and the tools it offers and further research how these are adopted in the Finnish

telecommunications industry. The telecommunications industry was chosen due to the nature of their business. Even with the decrease in importance of network effects after moving from price discrimination between calls to different operators to a flat rate pricing, it would seem rational that telecommunications companies would be interested in incorporating social media into their business.

The secondary objective of this thesis is to formulate future development proposals for the Finnish telecommunications industry as to how, where, when and whether they should be active in social media. Interaction with the customers should create value to both parties. Social media offers a wide range of tools for this purpose, but as in any business activities thought should be put into where and how to focus. Examining the possible strategies for the companies would not be beneficial without also researching the potential benefits to be gained from implementing these strategies.

The third objective is to also provide new information to the research pool of social media utilization. There is a rising interest in this subject, both from the pragmatic and academic sides, and the focus in research will certainly shift towards this direction. As the utilization of social media in the pragmatic world increases, also the need to gain insight from research increases.

The objectives of this thesis are translated into three main research questions as follows:

Research question 1: What is the level of the adoption of social media in the Finnish telecommunications industry?

Research question 2: What is the level of interactivity within the activities in social media in the Finnish telecommunications industry?

Research question 3: How could the presence of the Finnish telecommunications companies in social media be developed further in order to gain business benefits?

1.3 Structure of the thesis

This thesis is divided into six main sections. In the introduction the motives for the research are presented together with the research objectives and research questions. The second section looks at social media, its definition and structure and development through time. It also provides some examples of successful social media campaigns and presents measurement metrics for measuring the results of a social media campaign. The section ends with a picture of the future of social media.

The third section examines different social and technology theories and lays the ground for the coming research and analysis. The structure of social networks and trust in these networks is examined. Also the creation and importance of social capital is discussed. The section ends with the theory of network effects and three main user acceptance theories. The fourth section introduces the Finnish telecommunications industry and the companies chosen for the analysis. At this point only the background and related general information on the companies will be presented.

The fifth section introduces the research methodologies to be used as well as the results of the research. At this stage the different actions taken by the companies in regards of social media are introduced as well as the analysis of the results and its implications for future research. The final section presents the conclusions of this research. List of references can be found at the end of the thesis paper.

2 Social media

The generation Y, people born in the late 80's and early 90's (Otala, 2008), that grew up surrounded by electronic media, when mobile phones and the Internet were already invented, has a different viewpoint to life compared to the older generations. These young people are looking for experiences; they want to live their life to the fullest and enjoy it as they go. It is not enough for them to read the news from the morning paper and catch up with friends in the evenings and weekends; they want to be updated on what is going on throughout their day, they want to be the first to have the news and they also expect their friends and family to be just a click away: whenever, wherever. They want to be entertained and want to be able to share the best jokes with their friends with no delay. They want to be surrounded by their friends all the time, be it physically or virtually. Social media answers to this exact need.

2.1 Definition

Social media is a combination of sociology and technology. There exists no one universally accepted definition of social media. Wikipedia offers the following definition: *"Social media is media designed to be disseminated through social interaction, created using highly accessible and scalable publishing techniques. Social media supports the human need for social interaction, using Internet- and web-based technologies to transform broadcast media monologues (one to many) into social media dialogues (many to many). It supports the democratization of knowledge and information, transforming people from content consumers into content producers.".*

One of the simplest and easiest to understand is the definition offered by Hintikka (2007). He defines social media as *services based on a sense of community, information generation and sharing.* Many define social media as an umbrella term bringing together different practices related to the online content and the people involved in it (Lietsala et al., 2008). Lietsala discusses social media as having emphasis on the sharing of content with the help of applications based on social

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software. Social software refers to a piece of code, a software and a technology, whereas social media includes the content and the active social roles in the production and usage.

Social media is largely interaction and sharing. Users can generate content (user-generated content, UGC), create new content (user-created content (UCC)) or bring content from elsewhere (user-driven content (UDC)) (Lietsala, 2008). Lehtimäki et al. define social media as *"the new information channel on the internet. Web 2.0 tools are applications using this channel."* Figure 1 illustrates this definition of social media where social media consists of a sense of community, user-generated content and web 2.0 tools and together they result in network effects, many-to-many communication and collective intelligence.
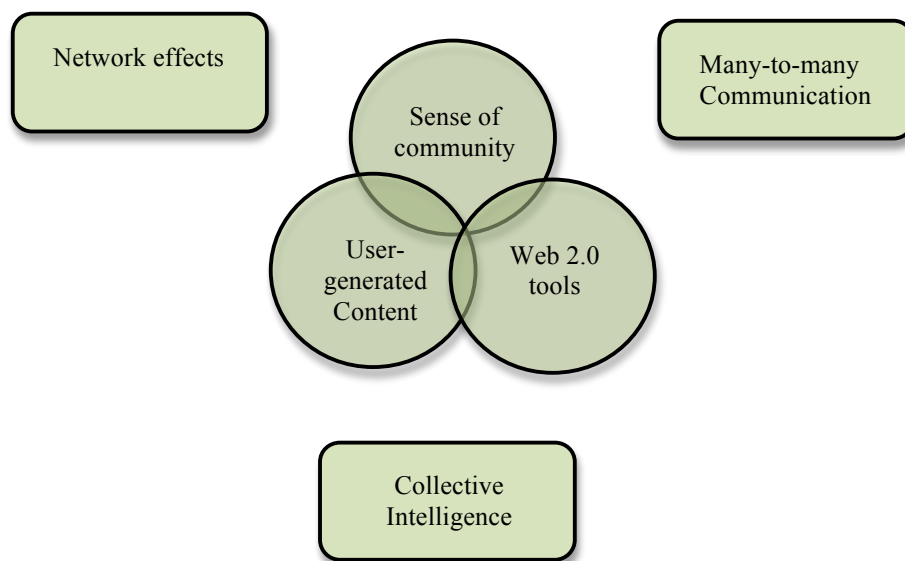
Figure 1 The formation of social media (Lehtimäki et al, 2009)

Collective intelligence refers especially to the social side of social media. Interaction among users and collaboration and content contribution creates a pool of intelligence. One could say it is teamwork in a digital environment. The many-to-many communication is a step away from one-to-one and one-to-many communication. In many-to-many communication the structure becomes more complex and the number

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of connections increases rapidly. Network effects refer to increasing value to both individual users as well as the network as a whole with increasing network size.

Otala and Pöysti (2008) see social media as more than just a technical solution. They see it as a cultural solution, rather a culture of communal information. Social media offers new procedures, a whole new way of functioning. It is against the traditional hierarchical organization and rather includes everyone. According to Otala and Pöysti social media is an open and honest culture where all participants are appreciated and everyone's input is welcomed.

2.2 The rise of social media

There are currently over 1,7 billion Internet users worldwide. According to a study conducted by Execution Primary Research in September 2008 in the UK, Germany, France and Spain, broadband Internet and mobile phones are among the last things people would be willing to give up during tough economic times (Hohol, 2009). Even though television is still the most popular media among young people in Finland, Internet and especially the social network sites are gaining more popularity (TNS Gallup, 2009). According to TNS Gallup nearly 40% of young people in Finland use Messenger whereas only 28% read newspapers. Already in 2008 38% of Finns went online to read a blog and 30% to write a message to a discussion board or a news groups (Tilastokeskus, 2008).

In 2010 an estimated number of over 400 million people worldwide were using Facebook when only a few years back the corresponding figure was 100 million. Facebook users come from 170 countries and Facebook offers 70 different language versions. YouTube, the video sharing site, is the second largest search engine in the world leaving behind Yahoo and Microsoft (Tietokone, 2008). Social media is also used in career advancement: Finnish managers already spend on average 10 hours per month on social networking sites and 90% of them believe it helps them in their work (Korhonen, 2009).

One of the accelerators behind the social media growth has been the rapid development in storage capabilities of computers (Otala, 2008). When there has been more storage capacity available for a lower price, the amount of information provided has increased fast. When again there's more information available the focus has shifted towards more effective searches in order to find the required information easier. Social media offers tools for structuring the information and guiding users towards information they are interested in.

The Internet has changed our lives in unforeseeable ways. Consider for example the way music is bought; since 2004 over six billion iTunes downloads have been bought (Hohol, 2009). What needs to be kept in mind is that this is only iTunes, on top of that there are similar services such as Nokia Music Store and Spotify, not to mention the peer-to-peer networks from the illegal side of music sharing and downloading. Since July 2008 one billion applications have been downloaded for iPhone and iPod Touch (Hohol, 2009). And it does not stop there. New applications are being developed continuously and the consumers are ready and willing to buy.

In business traditional consumption patterns are being broken and especially young consumers are looking for new products and services online. Online advertising spending has become threefold since the year 2000, being approximately 24 billion US dollars in 2008 (Hohol, 2009). With the rise of e-commerce in the early days of the Internet there was a movement of traditional sales business models from the real world to the online environment. Brick-and-mortar stores saw the opportunity in reaching a wider audience with the help of the Internet. Today businesses are moving from traditional transactional online functionality to co-creation of products and services i.e. collaborative sites where high quality participation from the users is the basis of it all (Ganley et al., 2009). This trend is also visible in the world's most popular sites ranked by global traffic: YouTube (3rd), Facebook (4th), Wikipedia (7th), Blogger.com (8th) and MySpace (11th) (Alexa.com, June 2009).

The Internet and the online social networks have also become powerful tools in politics. The election of Barack Obama as the president of the United States has been

said to be greatly due to a very successful campaign online. Altogether 14.7 million hours of Obama's videos on YouTube were viewed during the election and he had four times as many friends on Facebook compared to his opponent John McCain (Hohol, 2009). The rapid rise of social media is also very visible in the growing user figures of platforms such as Facebook which crossed the line of 300 million users in September 2009, only having had crossed 200 million the same year in April (Kotilainen, 2009). In February 2010 the corresponding figure was already 400 million.

2.3   Social media tools

The range of social media applications is wide. Lietsala (2008) makes a division into six subgroups by genre: 1) content creation and publishing tools, 2) content sharing, 3) social networks, 4) collaborative productions, 5) virtual words and 6) add-ons. Figure 2 below examines the main practices of each of the six genres.

Genre	Main practices
content creation and publishing tools	Production, publishing, dissemination
content sharing	Sharing all kinds of content with peers
social networks	Keeping up the old and building new social networks, self promotion etc.
collaborative productions	Participation in collective build productions
virtual worlds	Play, experience and live in virtual environments
add-ons	Adoption of practices from one site to another. Transforms a service into a feature of another site or adds new use-value to the existing communities and social media sites through 3rd party applications.

Figure 2 Six social media genres and their main practices (Lietsala, 2008)

Also Wikipedia divides the different applications into six main groups and gives some examples of each as follows:

1) Communication

> **Blogs:** Blogger, LiveJournal, Open Diary, TypePad, WordPress, Vox, ExpressionEngine, Xanga
>
> **Micro-blogging / Presence applications:** Twitter, Plurk, Tumblr, Jaiku, fmylife
>
> **Social networking:** Bebo, BigTent, Facebook, LinkedIn, MySpace, Orkut, Skyrock, Hi5, Ning, Elgg
>
> **Social network aggregation:** NutshellMail, FriendFeed
>
> **Events:** Upcoming, Eventful, Meetup.com

2) Collaboration

> **Wikis:** Wikipedia, PBwiki, wetpaint
>
> **Social bookmarking (or social tagging):** Delicious, StumbleUpon, Google Reader, CiteULike
>
> **Social news:** Digg, Mixx, Reddit, NowPublic
>
> **Opinion sites:** epinions, Yelp

3) Multimedia

> **Photo sharing:** Flickr, Zooomr, Photobucket, SmugMug, Picasa
>
> **Video sharing:** YouTube, Vimeo, sevenload
>
> **Livecasting:** Ustream.tv, Justin.tv, Stickam, Skype
>
> **Audio and Music Sharing:** imeem, The Hype Machine, Last.fm, ccMixter

4) Reviews and Opinions

> **Product Reviews:** epinions.com, MouthShut.com
>
> **Business Reviews:** yelp.com
>
> **Community Q&A:** Yahoo! Answers, WikiAnswers, Askville, Google Answers

5) Entertainment

> **Media & Entertainment Platforms:** Cisco Eos
>
> **Virtual worlds:** Second Life, Habbo Hotel, The Sims Online, Forterra
>
> **Game sharing:** Miniclip, Kongregate

6) Other

> **Information aggregators:** Netvibes, Twine (website)

The most common tools are blogs, podcasts, social networks, online communities, content communities, forums and bulletin boards, content aggregators and virtual worlds.

2.3.1 Blogs and podcasts

Blogs can be in text, video, audio or image format. A blog is a diary published on the web. Most often blogs have a theme they follow, but a blog can also talk about a

variety of things. According to Tilastokeskus (2008) 5% of Finns maintain their own blog, but already 38% read blogs on the Internet. Blogs link to each other creating the blogosphere, the network of blogs in the Internet. Blogging offers the possibility to communicate and for companies to strengthen customer relationships, build brand image, generate leads, improve customer service, enhance company reputation and improve search engine rankings (Lehtimäki et al., 2009).

In addition to the benefits blogging offers, there are some pitfalls to be avoided. The subject of blogging must be interesting to the followers; otherwise the blog will not generate interest. It should also be current and updated at regular intervals. The writings in a blog must be truthful and transparent and aim at interaction between the blogger and the followers. Successful blogs generate a great number of subscribers, but also are referred to by others. (Lehtimäki et al., 2009) Microblogging is a rapidly growing media for communication on the web. For example Twitter offers a platform for microblogging, users can post messages up to 140 characters. Here the challenge is how to say everything in 140 characters and still be interesting enough to attract followers.

Podcasts are audio files that are downloadable from the Internet or can be streamed over the Internet. Podcasts can also include video and are the called videocasts. The content can be informative, commercial or simply entertaining. Podcasts at their best offer immediacy, low cost and flexible time duration (Lehtimäki et al., 2009). They can be used for many of the same objectives as blogs, but also face the same difficulties: how to make them known and interesting enough to attract followers.

2.3.2 Social networks

The social network sites in the Internet primarily have three main functions: 1) to build and present one's own profile to others, 2) articulate the users who belong to one's social network and 3) create and maintain connections to other users. Interactions can happen between people who already know each other or the sites can be used to get to know new people. (Ellison et al. 2007) This is also the promise of the online network

services to their participants: volume in the connections they have (Burt, 2005). Most social networks sites offer a commenting or messaging tool (Lehtimäki et al., 2009) that enables fast interaction among the users.

There are several different types of online social networks. The sites can be used to connect in work-related matters, search for romantic relationships, communicate with people with shared interests or with people belonging to a certain population (Ellison et al. 2007). The way online communities such as LinkedIn help in achieving these goals is by showing the connections of one's own connections and thus revealing how close for example a desirable business partner is and how to get connected to them. (Adamic et al., 2005)

Online social networks can be either a support system for a traditional, existing network or develop an entirely new social network (Clemons, 2009). They can be based on providing professional services (LinkedIn), sharing information (Wikipedia), sharing user-generated content (YouTube) or offering a platform for social interaction with or without virtual reality (Second Life/Facebook). There are six primary forms of usage for the sites that can overlap each other: 1) pure fantasy and entertainment, 2) social interaction, 3) social interaction aimed at exchanging information 4) Exchanging information among professionals, 5) information and support and 6) user-controlled content and entertainment. (Clemons, 2009)

2.3.3 Online and content communities

Online communities are communities of users online who share similar interests and wish to interact with each other. They can be either based on information exchange or business transactions and thus acting as a platform for buyers and sellers to meet at. There are many ways of communicating in online communities: blogging, instant messaging, voting, newsletters, private messaging, email and discussion boards (Lehtimäki et al., 2009).

There are three main types of online communities (Lehtimäki et al., 2009):

1. **Member-initiated communities** – focus on mutual interests and maintaining relationships. Here members exchange information, share content and bond with each other as individuals.

2. **Organization-sponsored communities/Brand communities** – Here the focus in on the organization's brand building, business transactions and maintaining relationships. Members can share product (or other) information and content and even participate in product development.

3. **Third-party established communities** – These communities act as safe platforms for business transactions. They are marketplaces maintained by intermediaries such as eBay.

The content offered and its quality are the main decision factors for consumers joining online communities. Even if the community creator themselves are not the content contributors; they are responsible for supervising the content delivered by the members. Content should be fresh and updated continuously to keep the users interested. (Lehtimäki et al., 2009)

Content communities act in similar ways as online communities, but are based on users sharing content: for example videos and photos. Applications that allow users to edit the content of the websites are called wikis (Lehtimäki et al., 2009). Here the content is information-based. There has been discussion about the reliability of the information provided by wikis as anyone can edit it. However, it is also seen as very productive since it takes advantage of the collective wisdom of the users.

2.3.4 Forums and bulletin boards

Forums and bulletin boards act as discussion platforms for users. Anyone can send a thread and others can reply and comment. Here users can pose questions or voice out their opinions on different topics. Usually forums and bulletin boards choose a theme,

a shared interest among the users such as childcare issues or open source software. Here the discussions are transparent and truthful as members voice their own opinions freely.

2.3.5 Content aggregators

There are many kinds of content aggregators such as: RSS feeds, social bookmarking sites and other tagging services and widgets (Lehtimäki et al., 2009).

- **RSS feeds** – RSS feeds enable following changes to a website in real time. These newsfeeds allow subscribers to get timely updates on changes to a website without having to have to visit the website continuously.

- **Social bookmarking sites** – The information overflow today has created a need for a tool for organizing interesting web content. Social bookmarking allows for users to tag and bookmark information and makes it easily findable in the future and possible to share it with other users.

- **Widgets**- Widgets are mini applications that have one functionality. It can be for example the weather, newsfeed or world clock. They can be stored either locally on the users computer thus providing access only to the user or on HTML in for example a blog where it can be used by anyone visiting the site.

2.3.6 Virtual worlds

Social virtual worlds such as Habbo Hotel or Second Life are platforms that provide their users the possibility to interact with other users and create networks of relationships with old and new friends in cyberspace. Social virtual worlds do not have any specified goals i.e. they are not games as such. (Merikivi et al, 2009) In virtual worlds users use avatars, i.e. virtual bodies, to communicate with each other. Avatars are 3D-representations of the users. (Lehtimäki et al, 2009)

Virtual worlds often act as substitutes for the real world and can have for example

their own currency. They are similar to online games and their development can be traced back to the videogaming industry. In virtual worlds users are looking for desirable and interactive places, which encourage their creativity and inspiration. Also usability is see as an important factor in virtual world desirability. (Lehtimäki et al, 2009)

2.4 Web 2.0

The terms Web 2.0 was created in 2005 by O'Reilly and is yet to find one single definition with wide academic acceptance. Wikipedia offers the following definition for Web 2.0: *"The term "Web 2.0" is commonly associated with web applications which facilitate interactive information sharing, interoperability, user-centered design and collaboration on the World Wide Web. A Web 2.0 site allows its users to interact with other users or to change website content, in contrast to non-interactive websites where users are limited to the passive viewing of information that is provided to them."*

The definition by Constantinides et al. (2008) concentrates more on the network side of the Web 2.0 applications stating as follows: *"Web 2.0 is a collection of open-source, interactive and user- controlled online applications expanding the experiences, knowledge and market power of the users as participants in business and social processes. Web 2.0 applications support the creation of informal users' networks facilitating the flow of ideas and knowledge by allowing the efficient generation, dissemination, sharing and editing/refining of informational content."*

Web 2.0 can also be described as an umbrella that holds under it a set of different technologies as follows (Murugesan, 2007):

- **Blogs** – a blog is a web journal. It can be text, image, video or audio based and it can also contain links to other blogs or other related media -> The blogosphere is a community or social network consisting of all the blogs

- **Really Simple Syndication (RSS)** – RSS is a web feed format that informs users of updates to blogs or other web pages. This enables users to keep up with changes to the site without having to have to visit it

- **Wikis** – a wiki is a web-based system enabling the creation and editing content over a web browser by any user

- **Mashups** – a web mashup is a site combining content, information and services from several different sources

- **Tags** – a tag is a keyword added to an article on the web via a social bookmarking tool

Murugesan's list may seem somewhat incomplete missing for example social networks completely. Constantinides has also suggested a division of Web 2.0 applications into five main categories offering a more complete view:

- **Blogs**

- **Social networks** – applications offering users the possibility to create a network of connections enabling exchange of content and communication

- **(Content) communities** – websites enabling sharing of content e.g. photos or videos

- **Forums/bulletin boards** – websites built around specific topics allowing exchange of information and ideas by users

- **Content aggregators** – applications that enable customization of website and content by users

The simplest definition found was that of Lehtimäki et al (2009): "*Web 2.0 means technologies that enable users to easily communicate, and organize, create and share content.*" Lietsala (2008) also talks about the term web 2.0 and clearly distinguishes it from the term "social media". According to her, web 2.0 may not necessarily include any social activity or media aspect, but is used in reference to online services and technologies in a broader sense. According to Hendler et al. (2008) the two terms may

be distinct, but web 2.0 sites are often largely dependent on the social networking construct. Users both create and share content and are increasingly using their personal connections to do this.

Hintikka (2007) sees three main themes in web 2.0: 1) new revenue and business models on the Internet, 2) co-creation and sharing and 3) web-based applications. Also Constantinides refers to web 2.0 as an innovation of bringing together different online applications and not so much as a technological innovation. He continues on to say that it is exactly the user participation in content creation and editing that makes the applications innovative. He typifies the innovativeness in three main types (Constantinides, 2008):

1. Focus on service-based, simple and open-source solutions in the form of online applications

2. Continuous and incremental application development requiring the participation and interaction of users in new ways: not only "consuming", but also contributing, reviewing and editing content.

3. New service-based business models and new opportunities for reaching small individual customers with low-volume products.

The first of the three is described as a shift from software as a product to offering it as a service. The software is often open-source and platform independent. Often they are free and easily downloadable from the Internet. The applications are also simple especially from the users point of view and often offer a possibility for the user to customize them. Since the software very often is free and users can easily find substitute software to be downloaded from the Internet, the vendor lock-in is not financial, but rather based on network effects. For example if all friends are on Facebook, why would you turn to using MySpace.

The second point refers to real-time improvement that is continuous. Often feedback from users is used as one main factor in developing the software further. The web 2.0

has also somewhat changed the definition of a Beta version. As the software is under continuous development and is never really ready, it is always a beta version, a perpetual beta version. Users also bring value to the service. The more users there are, the greater the pool of collective intelligence grows as the users generate and edit content.

Web 2.0 has also radically changed the revenue and business models of the applications. Vendors can no longer rely on the traditional models but often need to offer the service for free and collect their revenues from e.g. advertising or offering a premium service on top of the basic free service. There is also a shift from the mass marketing to focusing more on individual and niche customers. Web 2.0 enables the finding of the niches and offers wide possibilities in targeting them. There is belief in that the previously undesirable (due to their low volume) niches can now grow to become the engines for aggregated demand for products and services outside the mainstream. One example of this is the Long-tail theory by Anderson.

The benefits of involving the customers seem to also materialize in the number of repeat visitors for a web site; for transaction-based sites 2% of original visitors repeated their visit at the web site at a later stage whereas for online community sites the same figure is 60% (Plant, 2004). According to a study by McKinsey companies are increasingly seeing Web 2.0 technologies as strategic and plan to increase their investments in them in the future (McKinsey, 2007).

2.5   The users of social media

People participate in social media at different levels. Some social media tools have already reached their critical mass and majority adopters whereas others are still on their way there. It has been said that of the mass participating in social media 90% represent the audience, 9% are editors and only 1% creators. The social media participation ladder (Figure 3) divides the users into 7 different levels of participation. The ladder starts with the inactives that are not taking part in any social media activities. They are the smallest group and the number is decreasing over time.
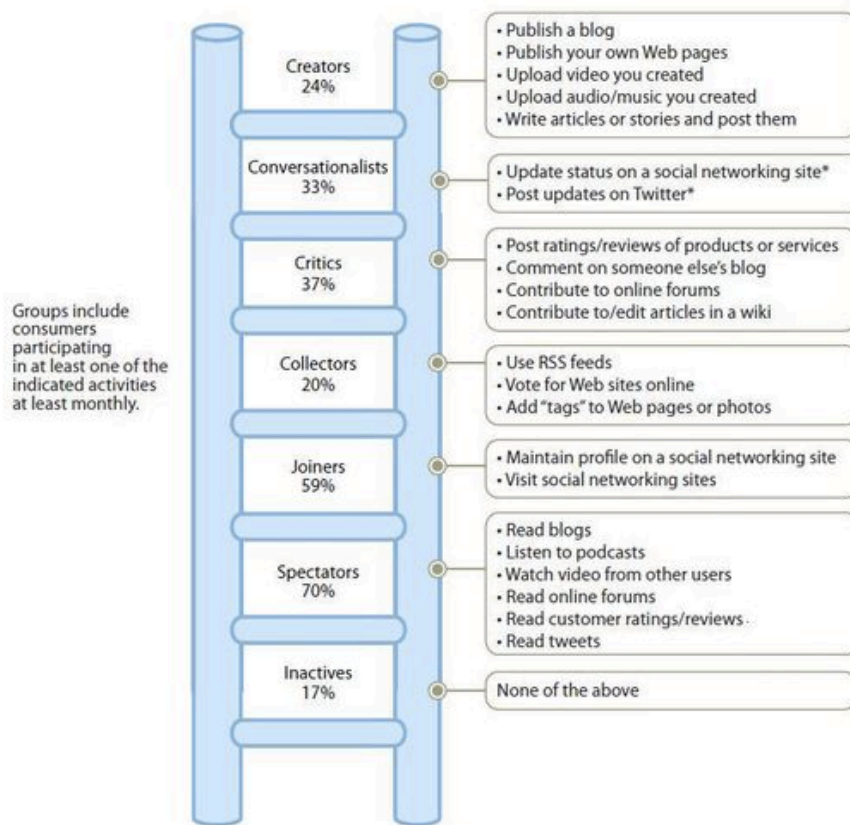
Figure 3 Social media participation ladder (Forrester.com, 2010)

The spectators are the largest of the groups. They read and see content generated by other users, but do not actively generate content themselves. Joiners, the second largest group, take part in social networking sites such as Facebook and collectors use RSS feeds to follow content they are interested. They may also tag interesting web pages, but do not otherwise actively take part in content contribution. Critics comment other users' blogs, but also publish reviews and ratings. The conversationalists is a common growing group of people who use status updates/tweets to share their thoughts, but may not necessarily otherwise be active. The highest ladder up are the creators that publish their own web page or blog and upload content such as videos to the Internet.

As can be seen from the percentages, the groups are not mutually exclusive, but a person can belong to several groups at the same time. Social media may have started among young people, but has quickly been spreading to older generations as well. It is

not uncommon to have a mother and daughter connected on Facebook or read your father's blog writings. The audience in the social media is as diverse as it is in the traditional marketplace, but in addition is divided into subgroups based on participation level and motivation for participation in social media.

Creation
Interpretation/ rewards

Conversation
Groups/presence

Content interaction
Experiences/power

Sharing
Identity/relationships

Following & joining
Relevance/joy of finding
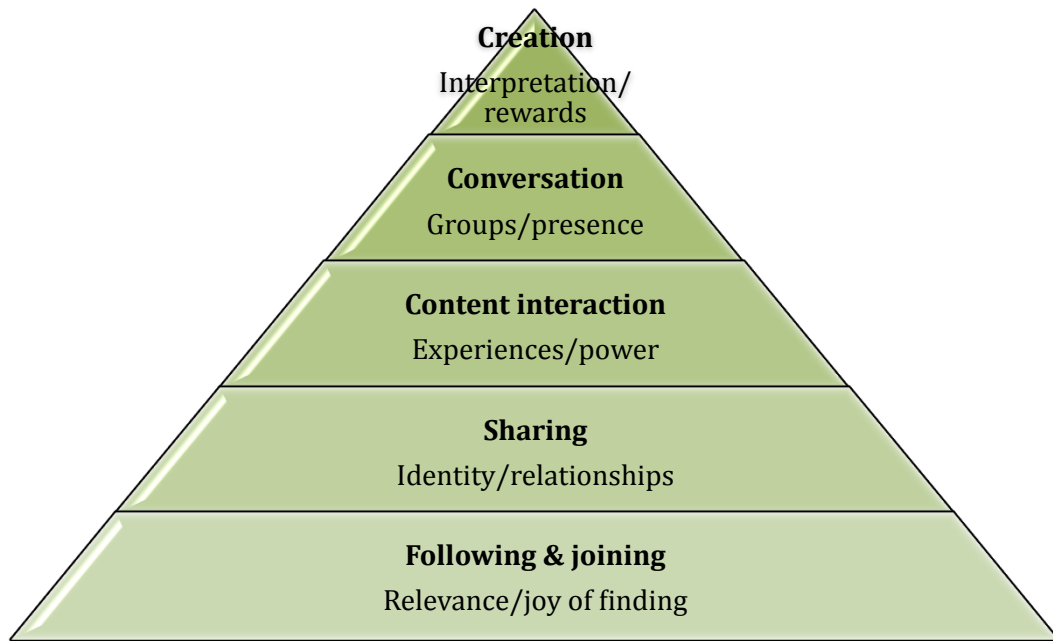
Figure 4 Social media participation levels (Vassinen, 2009)

Vassinen (2009) presents a triangle model of user participation in social media (Figure 4). In his model a user moves up on the triangle as their participation increases. The model starts with following and joining at which level the main benefits a user gets are relevance and the joy of finding. At this stage they may for example read a blog. At the second stage, sharing, the user may for example join Facebook to create and maintain relationships. The content interaction stage gives the user new experiences and a kind of empowerment as they can affect what other users see. A good example of an activity at this level is contributing videos to YouTube. At the conversation level, the user participates in for example discussion groups and forums. The last stage is creation. Here the user can use their own creativity and possibly even get a reward for doing that. Lego Mindstroms is an example of an activity at the highest level.

2.6 Utilization of social media in business

In 2007 already 96% of US teens participated in an online social network at least once a week. In January 2010 an average American spent over 7 hours per month on Facebook (see Figure 5). This adds up to over 14 minutes per day. And it is not only the youngsters who do it, in the same year over 50% of professional also participated in social networking online. (Constantinides, 2008) Understanding this and its implications to the marketplace and marketers is vital to survival in the new era.

RANK	Brand	Unique Audience (000)	Time Per Person (hh:mm:ss)	MOM UA % Change	MOM Time % Change
1	Google	152,708	1:23:54	4.10%	-16.90%
2	Yahoo!	134,561	2:09:14	4.30%	-26.80%
3	Facebook	116,329	7:01:41	5.80%	9.70%
4	MSN/WindowsLive/Bing	109,425	1:35:33	1.20%	-18.10%
5	YouTube	99,525	1:02:27	7.60%	-10.30%
6	AOL Media Network	82,306	1:01:14	-6.80%	-57.80%
7	Wikipedia	64,917	0:15:59	10.70%	-2.70%
8	Fox Interactive Media	62,112	1:23:28	1.00%	-9.10%
9	Amazon	60,772	0:22:34	-8.60%	-32.90%
10	Ask Search Network	57,776	0:12:35	10.70%	-11.40%

Top 10 Web Brands for January 2010 (U.S., Home and Work)

Source: The Nielsen Company

Figure 5 A study of different web brands by the Nielsen company (Parr, 2010)

The value that consumers receive from social media seems to be not that of the traditional customer value approach but a feeling of achievement through personal gratification. How to best capture that value begins with understanding its source and the user motives for using these applications. The interactivity of social media has both created new customer needs as well as changed their buying habits.

According to a survey by the Sterling Committee "customers want a seamless buying experience across all channels" (Constantinides, 2008). Thus they are not abandoning the traditional purchase channel rather integrating it with the new channel. The role of the marketer has transformed from being a broadcaster pushing the message out to an aggregator pulling together information from various sources and collaborating with

customers and the community (Lehtimäki et al, 2009).

The role of the customer has also changed. The customer has become the "produser" (Lietsala, 2008). In social media the customer is in a variety of roles. In addition to being the customer and consumer, he can be a contributor, co-creator, innovator and even a seller. The value added works both ways and customers especially expect attention and respect in return.

Customers have also changed their source of market and product/service information. They no longer rely on traditional mass media and corporate web sites but listen more to and learn from their peers in blogs, peer reviews, social networks, tagging and online forums (Constantinides, 2008). This is information that is out of direct reach of the marketer and thus uncontrollable. The focus of marketing has thus shifted from being one-to-many (mass marketing) to many-to-many where also customers can interact with each other without the control of the marketer (Lehtimäki et al., 2009). Companies can also use social media as a valuable source for weak signals.

Social media also poses some threats to the society. These can be categorized as public frustration, intellectual property rights abuse and lack of control and accountability (Constantinides, 2008). With anyone being able to create content, the boundaries between reality and fiction or advertising can become vague. For some it can be difficult to separate the nonsense from the quality content and with consumers' increasing trust towards other consumers strengthens this problem. Intellectual property rights, especially copyrights, are also easily forgotten on the web and this in turn has harmful effects on those who own them. There are no clear guidelines to these problems and even if there were, it seems at the moment they would be very difficult to enforce. However, despite these shortcomings, most researchers see the development of social media as a positive turn for the marketers. The wide range of possibilities and benefits offered outweighs the negative effects.

Table 1 illustrates the strengths and weaknesses of web 2.0 tools for company use.

Internet provides marketers a cost-effective channel for reaching a large but easily segmented audience (Lehtimäki et al, 2009). Other benefits include interaction, ease of use and

Table 1 Strengths and weaknesses of web 2.0 tools (Lehtimäki et al, 2009)

TOOL	Use	Strengths	Weaknesses
Blogs and podcasts	Informing of current events and new products	Easy and cheap tool to maintain	Requires time and constant updating
Social networks	Content sharing, creating and maintaining relationships	Easy to set up a profile, possible targeted advertising	How to persuade users to participate?
Communities	Maintaining customer relationships, brand building	Intense two-way communication	Requires lots of resources to maintain
Content aggregators	Informing of new products	Easy to use	Content needs to be interesting enough to be tagged
Virtual worlds	Maintaining customer relationships, brand building	Engaging customers effectively	Requires lots of resources to maintain, including users to participate

customer engagement. However, in the ever fastening world, where competition for the attention of the consumer is becoming more fierce, being able to attract and keep consumers in the services is a challenge. In addition to the challenges offered in the table any marketer engaging in social media activities should also keep in mind that it is a tough world where being open and honest is the first and most important rule. It only takes a few seconds and clicks of a mouse to spread a company's failure in social media.

Social media marketing and marketing 2.0 terms refer to marketing actions conducted utilizing the web 2.0 tools (Lehtimäki et al., 2009). Table 2 illustrates the main issues a marketer faces when planning social media marketing.

Table 2 Main issues when planning marketing with web 2.0 tools (Lehtimäki et al., 2009)

Knowing the environment	The main thing is to know which kinds of tools are appropriate for the company and how to use them properly.
Creativity and content	In social media it is all about content and creativity. Only content interesting enough lures users to participate and share the content forward in a viral way.
Committed personnel and support of the management	Since the tools require constant updating and new content, devoted personnel are required
Continuous content generation	New content needs to be generated continuously in order to keep customers interested
Measurement	Measuring the interaction level and visitor amounts is quite simple
Specified goals	There should be specified goals set up in order to measure benefits reached
Listening and discussion	Through interaction with customers a company can get useful feedback to enhance its operations and to maintain customer relationships

2.6.1 Consumer decision-making

Consumer decision-making has been altered with the rise of social media. Figure 6 illustrates the decision-making process of a consumer in an information-based marketplace.

The model contains four main influencers of consumer decision-making: the controllable stimuli, the uncontrollable stimuli, the web experience and the web 2.0 experience. With the decreasing trust towards mass marketing, the marketers face a complex web of influencers. At the base there is still the traditional marketing mix and the traditional uncontrollable stimuli such as customer demographics and economic and cultural factors. The new side of the model is the web experience side. In addition to the online marketing mix that contains controllable factors such as web site usability and interactivity the marketers are also forced to meet the uncontrollable factors of the web 2.0 world such as blogs, podcasts and forums.
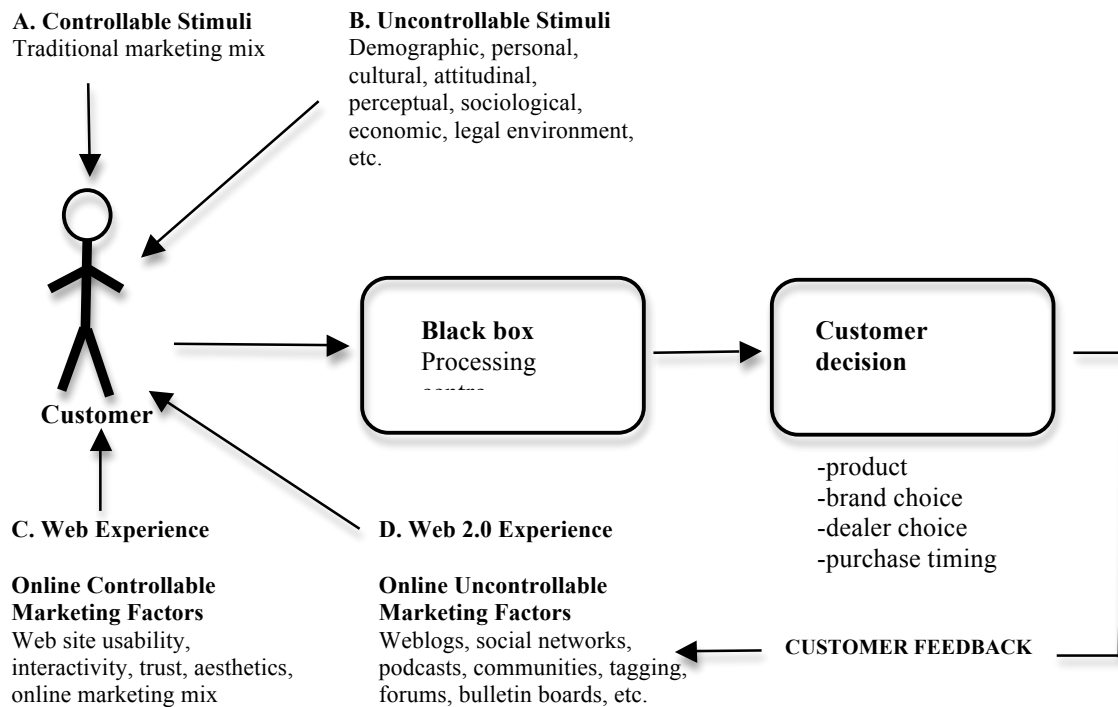
A. Controllable Stimuli
Traditional marketing mix

B. Uncontrollable Stimuli
Demographic, personal,
cultural, attitudinal,
perceptual, sociological,
economic, legal environment,
etc.

Customer

Black box
Processing

Customer decision

-product
-brand choice
-dealer choice
-purchase timing

C. Web Experience

D. Web 2.0 Experience

CUSTOMER FEEDBACK

**Online Controllable
Marketing Factors**
Web site usability,
interactivity, trust, aesthetics,
online marketing mix

**Online Uncontrollable
Marketing Factors**
Weblogs, social networks,
podcasts, communities, tagging,
forums, bulletin boards, etc.

Figure 6 Factors influencing the decision-making process in an information-based marketplace (Constantinides, 2008)

Controlling blog writings and discussions is impossible and trying to do so in secret can lead to customer confrontation, loss of trust from the customer's side and the loss of reputation of the company. However, having a positive presence in social media can direct also the opinions published towards a more positive tone. This is not a forced change, but an actual change in the minds of the customers. By being present openly and honestly and engaging customers in a positive manner, a company can do valuable marketing on its brand image.

The customer feedback loop has also increased in speed and word-of-mouth has a new meaning. In the traditional world, if the customer meets bad service, they tell the few friends and family they meet relatively soon after the incident. In the web world, the customer can react in a matter of seconds and the audience immediately available is often tens if not hundreds of people. In the future customer advocacy i.e. enhancing user experience, meeting customers' information needs and helping customers become successful will be a vital skill required for success (Constantinides, 2008).

2.6.2 Options for marketers

Constantinides (2008) has found five main options for organizations to capitalize on social media and web 2.0:

1. **Include social media in PR and target opinion leaders to spread the message to wider target markets** – The costs compared to the traditional media are minimal and it is an effective means of targeting a selected group. Targeting for example bloggers and podcasters brings a wide target audience at reach.

2. **Listen to the customers voice i.e. learning from what the consumers speak about the organization** – Consumers discuss companies and their products and services openly in blogs, forums and online communities. Most often the truth about what they actually think about them can be found in these discussions. Consumer discussions can also give new ideas to the company; Coca Cola discovered its consumers were uploading videos with Coca Cola bottles and Mentos mints used to make and explosive soda fountain and based on that created a campaign "Coca-Cola Challenge" where consumers could submit their own videos using household appliances in creative ways.

3. **Use them as tools for direct, personalized, one-to-one marketing** – Companies such as Nike and Disney have turned to offering their customers social network sites where they can exchange information and experiences and interact with their peers. In this way they enable communication and interaction between the company and its consumers as well as create a channel for direct customer feedback.

4. **Be active in participation in corporate blogs and podcasts** – Corporate bloggers can encourage their customers to talk about the company and its products and services and even give suggestions to the company. This increases the interaction related to the company and its products and provides consumers with information coming from their peers that is often seen more reliable than traditional advertising messages.

5. **Provide customers with personalized products** – Offering customers online

tools to modify, customize or design company products gets the consumers involved and excited. This strategy is in use in for example tissue papers (mykleenextissue.com) ketchup bottle labels (myheinz.com) and customizing sports articles (http://nikeid.nike.com).

2.6.3 Word-of-mouth (WOM) and viral marketing

Social media is an effective tool for viral marketing since both are based on user interactivity and exploiting networks. Viral marketing can be defined as marketer-originated word-of-mouth (WOM) communication over the Internet (Lehtimäki et al, 2009). This means messages spreading from person to person in user networks and in the end reaching a large audience. The difference between WOM and viral marketing is in the speed and extent of spreading messages: viral marketing travels faster and further than the traditional WOM ever could (Lehtimäki et al, 2009).

Viral marketing messages usually contain both text and images to ensure that it grabs the attention of the consumers. If spreading the message is not seen as beneficial or if the content of the message is not interesting enough, consumers will not forward it along to their friends. However, when successful, viral marketing is very efficient due to the trust component it entails as the message is spread in peer networks and not seen as untrustworthy advertising. (Lehtimäki et al, 2009)

Viral marketing requires close relationships and thus works best among friend networks. However, research has indicated that viral marketing is very effective in getting consumers' attention but does not have a straightforward effect on sales. It captures attention and creates awareness but does not have an effect in the later stages of consumer decision-making such as interest and final decision. (Lehtimäki et al, 2009)

2.7 Social media success stories

Push for Change

The Finnish Family Federation (Väestöliitto) is an organization from the social and health sector focusing on families. In April 2008 the federation created a campaign called "Push for change" in the social media. The campaign aims at increasing awareness of maternity health issues in the developing countries as well as to improve the maternity health services in the developing countries. Participators can make a donation or spread the word and help the cause get publicity. The focus group of the campaign was the media, political decision-makers and 20 to 40 year old women.

The campaign builds upon a campaign site (www.mypush.fi), a Facebook group, a Facebook application and a YouTube video. The campaign site and Facebook group provide information on the campaign and cause. Users can invite their friends and spread the word. They can also choose to receive a newsletter to be delivered to them via email. The Facebook application "Preggers" allows for users to virtually "make their friends pregnant". "The pregnancy" lasts for 9 weeks and during those 9 weeks the user gets information on pregnancy and motherhood and a link to a story of motherhood in the developing countries. The more friends a user makes pregnant, the higher a user can make their own status and move up the ladder for example from a nurse to a midwife.

The YouTube video is designed to catch attention and draw users to the campaign site as well as Facebook group. It is also an easy way to spread the message. The campaign launched in the social media in Finland was a pilot for the rest of the world. Finland was chosen due to its reputation as a forerunner in technology as well as maternity clinic and health issues.

The first launch campaign was considered as a success. The total amount of donations rose up to 5000 euros, which did not meet the original objective, but the campaign was also active for a shorter period of time than originally intended. The campaign reached 30 media hits in print magazines and TV. After the launch campaign a petition with

almost 10,000 names was handed over to the Finnish Minister for Foreign Trade and Development Paavo Väyrynen. In 2009 the Finnish government increased its support for the cause of motherhood related health problems in the developing countries by 5,5 million euros. The Facebook group member amount peaked at 2,500 active members and was in February 2010 a little over 2,300 members. In February 2010 the YouTube video had been viewed approximately 2000 times and the web site had been visited approximately 190,000 times.

Spring 2010 the federation launched a new campaign to help the women in Malawi. The second campaign is called "climb" (Kapua, www.kapua.fi) and takes advantage of the user-generated content and interactivity provided by the social network. In the campaign 17 people have been chosen from a pool of 130 applicants to raise money for 9 months in Finland. At the end of the campaign their mission is to travel to Malawi (at their own expense), participate in a triathlon and visit one of the clinics the money raised is directed. During all this they are expected to tell about it to the rest of the network. They write a blog and you can follow them on Facebook. The federation employees mediate the campaign, but the weight of producing material is by a large share off their shoulders. . The spreading of information is thus "outsourced" and the federation employees can direct their efforts to other issues.

(Sources: Pia Tornikoski, Torni Consulting Oy, www.mypush.fi, www.kapua.fi, Push for Change – Facebook group)

Star Wreck

Star Wreck was a movie project of a few highly dedicated sci-fi fans. The movie series started in 1992 with a homemade animation. By 2005, the original creator, Samuli Torssonen, had created a network of five-person core team and 300 volunteers around him. The final version of the movie was launched in October 2005 and it received unforeseeable publicity and success.

The success of the movie was largely based on its presence in the social media. The movie had its own community called the Star Wreck Online Community. By the end

of 2007 the community had gathered over 2,000 members. That same year the movie had been downloaded over 8 million times and over 17,000 DVD copies had been sold. The movie's success also spun off two start-up companies: Tuotantoyhtiö Energia and Star Wreck Studios. The movie has also been shown on national TV in Finland, Belgium and Italy.

The community started with Torssonen inviting his friends and they in turn forwarding the request on to their friends. At a later stage the invitations were also opened to public outside the original network. The community used social media tools such the IRC gallery, different discussion forums and e-mails in recruiting more people to their project. The budget of the movie was only 15,000 euros, but it was enough for the community to create a successful movie into international distribution.

The movie was a success and created revenues even though it was free and openly distributed over the Internet. The spin-off Star Wreck Studios is now looking at doing similar projects again, only slightly more systematically this time.

(Sources: Lietsala (2008), http://www.wreckamovie.com, http://www.starwreck.com)

LEGO Mindstorms

Lego has turned to its customers for help in a difficult business situation. Lego Mindstroms is a community and tool allowing for users to plan, create and develop products for Lego. Lego then sells those products and pays royalties to the users for their design. Even though Lego continues to have in-house product development, the users are creating products that Lego's own people would most likely not have innovated on their own. Lego has over 30,000 different products and takes well advantage of the long tail effect by dividing its sales to physical stores and the Internet.

One main reason behind the success of Lego Mindstorm is the fact that it is an open system. The users are allowed to take the tools and develop them further and this seems to be a big motivational factor. The users were able to raise Lego from its

financial and business distress and make their products exciting. Basically the users changed the Lego brand in a way that would have been very difficult and extremely expensive with traditional methods.

Lego has a user panel consisting of active hobbyists. The panel is in direct interaction with the company and its management and develops new products as well as gives feedback to the company. They are bound by confidentiality agreements due to the fierce competition in the toy industry. Lego also organizes consumer competitions, support user networks and offers dual-level membership to its community. These are all way to get the customers committed to the company and its products.

(Sources: Hintikka (2007), http://mindstorms.lego.com)

2.8 *Measurement metrics*

The ease of measurement has been named the unique selling point of digital marketing (Woods, 2009). Moving around in the Internet always leaves a trail. All the marketer has to do is to follow that trail. Traditional web analytics can be utilized to some extent in measuring social media, for example blogs (Stuart, 2009). However, new metrics are also required.

Stuart (2009) takes a closer look at different measurement metrics in blogs, wikis, social network sites and microblogs. Blogs offer several new metrics in addition to using the traditional web analytics. Engagement with the audience can be measured by analyzing the content and extent of blog comments. They are one of the most important features of blogs. Blog success can also be measured by blog reactions in the blogosphere, number of RSS readers or visibility in blogrolls. A blogroll is a list of a blogger's favorite/related blogs situated on a blog's sidebar.

In wikis content creation and editing as well as the number of content contributors are the main metrics used. Content creation can be measured in number of pages created as well as the amount of information contributed to those pages. On social network

sites the easiest metric is the number of users in the network. More detailed metrics depend heavily on the motivation and functioning of the site, e.g. is it a people-focused site such as Facebook or content-focused such as YouTube. In microblogging, it is again the number of followers that is the easiest metric to use. However, for example in Twitter, a marketer can easily gather information on what is being said about a brand, a company or a product or follow if the topics raised are being forwarded by followers.

Social media measurement is still a fresh subject and there are no universally accepted practices on the metrics. Since the use of social media is at a development phase, also the metrics measuring its success are unfinished. There are also software available for analyzing purposes such as Google Analytics (information on website traffic and marketing effectiveness), TweetStats (statistics on tweet amounts and replies), Twitalyzer (analyzing influence, relevance and information value of posts), Clicky (monitoring, analyzing and reacting to traffic in real-time) and StatCounter (statistics on website users and traffic). Usually also the actual platform used e.g. Facebook offers analytics tools and statistics.

When measuring the success of a social campaign it is essential to measure it against previously accepted goals and objectives (Connor, 2010). The number of followers, unique visitors, comments or referrals are not absolute measures providing direct information on the success of a campaign but always need to be mirrored against the expectations as well as the effort and resources used to achieve that point. Looking at for example conversion rates, level of engagement of customers and diversity of customer segment is valuable information, but if the goals and objectives are not clear or met, a campaign cannot be called a success (Connor, 2010).

When looking at customer profiles and segments, it is important to aim at identifying the key influencers (Connor, 2010). In a viral campaign that is based on interaction among people and many-to-many communication identifying those who spread your message the furthest and most effective is essential. Once the key influencers have been identified, a marketer also has the possibility to modify the campaign message

and content to appeal especially to the key influencers. The key influencers there after have the power to attract their network connections to the message.

Measuring success should also be done based on the level of participation of the user. Different level users act differently and thus should not be measured as a mass. The spectator activity can be measured visits to the site (total and unique) as well as time per site. Since they do not contribute in any way to the content, these metrics are not useful. The joiners belong to social networks, but do not otherwise actively engage themselves in social media. The collectors use RSS feeds and tag interesting sites. The two most interesting groups in terms of measurement are the critics and creators. They actively contribute content that can be further analyzed. They may also attract new users and create new opportunities for marketers.

2.9   Social media in the future

Considering monetizing social media, there are some concerns in the future. The trend seems to be that consumers are decreasingly willing to pay for the services they use. In addition to this they are growing ever more demanding concerning high quality content, usability and user interface design. To be able to get money from the Internet users and make profits from that money, real value needs to be offered. (Lehtimäki et al., 2009) Here lies also a risk. Since the success of social media depends on the users, losing their interest can be fatal to be social media business.

Web 2.0 is still a widely unexplored area and already talk about web 3.0 has begun. Be it then a mobile Internet, an ubiquitous media or have artificial intelligence, physical browsing or near field communication abilities (Lehtimäki et al., 2009), it looks like the power is shifting further away from the marketers and into the hands of the consumers. This is a clear trend seen already with web 2.0. Instead of being clever and funny, a marketer now needs to be responsible and open. Consumer awareness has been steadily rising during the past years and together with the social media tools, it creates tight boundaries to the activities of companies.

The key points that are evolving already with web 2.0 tools seem to be real-time communication, integration, location information and transparency (Lehtimäki et al., 2009). Communication among consumers as well as between consumers and marketers will surely increase. Integration is needed at least in considering the tens of logins to different sites we need today. There exist already some services with integrated platforms for social networks called social aggregators, but there is still a long road of development to be traveled there.

The future also holds integration between Internet and mobile devices. The answer is most probably not only mobile, but instead using mobile as one channel among the others. Location information will also hold a more key position in the future. (Lehtimäki et al., 2009) The integration of social media, mobile devices and location information is already under development and competition is tight. Jaiku, a Finnish social media tool, was designed to combine location information and microblogging, but was bought and closed down by Google. Many online location information services have already been designed, but have not yet been adopted by the larger audience.

3   Social network theory

Social networks and network theories are of interest to various research fields and have also gained popularity among larger audiences during the past years due to the rapid increase of web-based social network sites (SNSs) (Lewis et al., 2008). Social networks have, however, existed as long as humans have; they are not a new phenomenon. Clemons (2009) defines social networks as *"ongoing relations among people that matter to those engaged in the group"*. Social networks may exist for a specific reason (e.g. cancer support group) or for a more general reason (families, friends) and can be either relatively permanent or flexible and change over time (Clemons, 2009).

Westland (2009) has given the following definition to social networks: *"Social networks are structures consisting of members (represented as nodes on a network graph) that share one or more specific types of special interests, such as values, visions, ideas, financial exchange, friends, kinship, dislike, conflict, trade, web links, and so forth."*

The study of social networks has also become easier with people living digital lives and thus the data being easier to retrieve (Adamic et al., 2003). At the same time, however, the structure of many social networks has changed. Facebook for example started as a network of friends, but many find today that they've actually included in their network people that they would probably not count as a part of their social network in the physical world. This has also created new problems; people find it difficult to determine where to draw the line e.g. on Facebook friend requests. Some have even gone as far as reversed back, canceled all the connections on Facebook and started all over again.

Social networks also hold a key position in the eyes and minds of the businesses wishing to exploit the opportunities provided by Web 2.0 collaborative sites. Here the users voluntarily provide a large share of the value and thus become the critical

members of the organization but are beyond the reach of traditional tools of organizational control (Ganley et al., 2009).

3.1 The structure of social networks

Humans have a desire for connection, knowledge and information, which has helped in the creation of the online community. The online community can be defined as follows: "*a collective group of entities, individuals or organizations that come together either temporarily or permanently through an electronic medium to interact in a common problem or interest space.*"(Plant, 2004).

The value of a network is not in its volume, but in the structure it holds (Burt, 2005). A social network can be described as consisting of two elements: cliquish sub-networks and bridges (Granovetter, 1973). Information flow through the sub-networks can be limited whereas the bridges bring people from different sub-networks together and information flow thus increases (Choi et al., 2008). The location of trust in the two types of networks also varies; in dense sub-networks trust is in the entire network whereas in bridges it is on those who are on the participant's side (Kadushin, 2002).

3.1.1 Small world theory

In a small world network two randomly selected elements are connected to each other via the shortest path consisting of a certain number of intermediaries. For example the Six Degrees of Separation states that any two randomly selected individuals in the world are connected to each other via a chain of at most six acquaintances (Watts, 1999). The Small-World Phenomenon aims at analyzing and explaining this from the point of view of social networks. It has four underlying criteria: 1) the network must be large, 2) the network must be sparse i.e. not all people are closely connected to each other, 3) the network must be decentralized and 4) the network must be highly clustered with overlapping circles of friends (Watts, 1999). In general these criteria are satisfied in the world we live in.

Figure 7 below illustrates graphs representing the small-world phenomenon. In the graph each node represents an element (vertices) of the network e.g. a person. In the regular network each node is connected to its nearest neighbors and to its second-nearest neighbors making the graph symmetrical. In the random graph the nodes are connected to each other randomly but still with small characteristic path length. The small-world graph contains characteristics from both regular and random graphs: it is highly clustered but still has small path lengths.
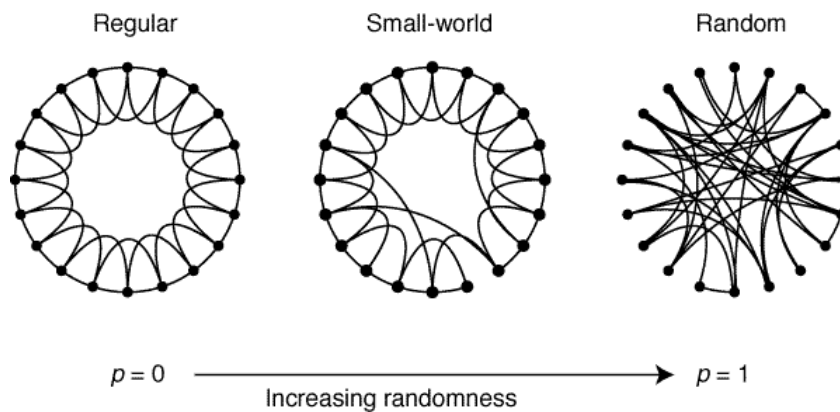

Figure 7 Small World graph (Watts et al., 1998)

The small-world network has been found to exist in many different networks in the real world and research in different fields of science has been conducted to verify this. For example Adamic et al. (2005) studied how participants of a small-world network can find short paths in the social network by using only local information of their contacts. They conducted their study using information about the email communication of personnel at the HP Labs. Figure 8 below presents the map created of these communications. The light grey lines illustrate the email communication and the black lines the organizational hierarchy. The map also clearly shows the existence of smaller sub-networks, which are connected to each other via bridges in between making the map a complex network of connections.
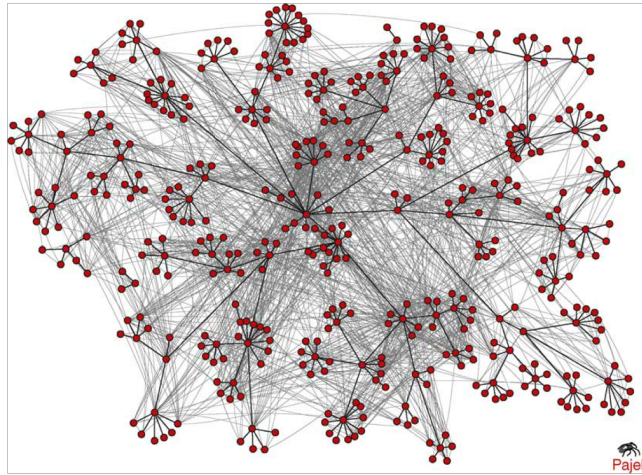
Figure 8 HP Labs email communication mapped onto the organizational hierarchy (Adamic et al., 2005)

Choi et al., 2008 found in their research that under-adoption of a new product or service is more probable in a social network consisting of random bridges compared to a cliquish network. However, after having reached the critical mass the bridges are required to speed up the adoption rate. From their results they draw two optional strategies for launching network products and services: 1) exploiting bridges and 2) focusing on highly cliquish networks. They recommend exploiting bridges for mass marketing of products and services where the customers are not required to make significant changes in their consumption habits. This strategy offers the possibility for rapid diffusion, but risks it not being full.

If one wishes to establish an early customer base and reduce the risk of under-adoption, focusing on the highly cliquish networks is recommended. To attain the benefits of both a rapid and full diffusion the authors recommend using a mixed strategy, concentrating on cliquish networks with few bridges, thus the small-world network. This is a strategy used in viral marketing and is also very visible in the popularity growth of marketing at social network sites such as Facebook and MySpace.

3.1.2 Network externalities

If users get more value in adopting a product or a service when there is a larger amount of other adopters, a network effect has occurred (Corrocher et al., 2009). This means that for example adopting Messenger as a service to be used to contact one's friends gives more benefit to the user (adopter) when the user network is larger rather than smaller. If the network is small, the user has a more limited number of possible connections whereas the user gains benefit from being able to connect to as many of his or her friends as possible. In addition to network size at the time of adoption, also the number of potential future adopters will affect the user's decision on whether to join or not (Corrocher et al., 2009). If they have a reason to believe that may of their friends will start using Messenger soon, they have a bigger potential benefit to look forward to from the service.

Network effects can be either local or global. Network effects are called local when the other adopters affecting the benefit gained by the user are from a subset of the population (Corrocher et al., 2009), for example the circle of friends in the Messenger example used above. Network effects arising from social networking sites are thus both global and local. On a general level the potential adopter's decision making is affected by both the total number of adopters as well as the number of adopters relevant to them personally. It depends on the type of service whether it is the global or local effect that is the most relevant. For example an adopter is looking for a maximum possible number of new contacts on a dating service whereas on a supporting social networking site such as Facebook, one could argue that the decisive factor is the number of adopters from one's own social circles.

The network effects can also be direct or indirect. User externalities from the demand side in a technical network lead to direct network effects (Schoder, 2000). A widely used example of this is the telephone system where the user receives benefit from the growing network of telephone users. User externalities from the supply side are behind the indirect network effects, which can be for example price cuts deriving from returns of scale in mass production and availability of complementary products and services (Schoder, 2000).

3.1.3 Critical mass

The minimum number of users required to make the adoption rate self-sustaining is called the critical mass. However, there are also people who adopt before the critical mass is reached as otherwise there would be no adopters. Thus every adopter also has a threshold, a minimum number of users connected to a service before they are willing to adopt and it varies between people (Mahler et al., 1999). Other, the early adopters are at the forefront whereas some only adopt after the majority of people already has.

In case there are several competing standards aiming for standardization (as with VCR and Beta) each standard must reach critical mass for them to diffuse widely, otherwise the standard will fail (Mahler et al. 1999). In online social networks this is very visible. The user does not see any benefit in joining a network that has no or only a few connections. In interactive innovations such as online social networks the number of potential adopters increases the utility for both future as well past adopters. Thus for the early adopters the adoption rate is slower as the utility received comes from interactivity but as the critical mass is reached, the adoption rate speeds up (Mahler et al. 1999).

J.C. Westland (2009) used the percolation theory in his study of critical mass and willingness to pay for a social network membership. In his study he introduces a model of a social network construction where using any node of the network as the origin, one can draw individuals as generational rings around it. The links between the nodes can be solid (accepted) or dotted (potential but not actual) acquaintances. The members of the networks have a tendency to create local clusters where members often share interests and these clusters link to each other forming the complete network.

Figure 9 shows the network of friends of Tiia Vuolle on Facebook. The shape is round and the network consists of several clusters connecting to each other via few individual nodes. Inside the clusters the pathways from one individual to another are

short. One of the clusters is larger than the rest and it is called the "giant cluster". Westland explains the function of a giant cluster as the "*locality of the network with the greatest connections and communication*". The giant cluster is also likely to be dominant in the sense that it reveals the topical content and standards of the rest of the network as a whole. The larger the network grows, also the larger the clusters sharing interests grow.

Figure 9 Graph of Tiia Vuolle's friends from Facebook showing the shape of the network and clustering (Source: the Friend Graph application by Matthew Earl, http://matthewearl.com)

The giant cluster defines the characteristics of the network as a whole and thus the critical mass can only be reached once a giant cluster has been formed. This also means that the network only defines its characteristics after the critical mass has been reached and giant cluster formed. Once the giant cluster has appeared a measure called *germanity* can be defined. Germanity gives the probability for any given member of the network to also be connected to the giant cluster.

Mahler (1999) discusses a few different strategies for reaching critical mass. A

subsidized price may work well, as it did in the case of Minitel adoption in France. However, the social media tools such as Facebook and Twitter for example are already free to the users. There is no competing with price in attracting users. Thus here the competitive advantages and attractiveness of service must come from somewhere else. The service must be interesting enough and seen as providing some type of value before adoption can occur.

Often in the adoption of a new service or technology there is uncertainty concerning its functionalities. By reducing these uncertainties and increasing the perceived ease of use should have a positive affect on the adoption rate. Customers are often not willing to use their valuable time to learning the use of new service or technology, especially when not essential to them, but rather go without and direct their time in other activities.

3.2 Trust in social networks

One of the main elements of social networks, trust, is built on shared experiences and the perception of shared values or needs (Clemons, 2009). People tend to trust their peers more than they trust companies and the media. This is also one of the key foundations of social networks. They attract users with communality and (perceived) openness. Being able to see who is connected to whom and what is being discussed creates a sense of belonging and acceptance that motivates the user to join and continue participating.

The behavior of people may vary between functioning in an online or a traditional social network in that the ties made online are not as strong and the relationships may be ended more abruptly (Clemons, 2009). It is often easier for people to be open and share when there is no need to face the opponent physically. People's personal boundaries seem to be less tight when dealing with each other in a digital environment.

According to Kadushin (2002) the motivation for participants to join a network is based on two basic human drives: the drive for safety (dependency, trust and support) and the drive for effectiveness (mastery, competition and envy). The motive of seeking safety can be associated with dense networks with tight connections as this increases trust (insiders versus outsiders). The drive for effectiveness then again increases the need to connect to several sub-networks to reap better benefits from the connections in competition. Both types are needed and both are present, but focus on the two varies from network to network and person to person.

In the future one of the most important success factors for companies will be its trustworthiness. Building trust among consumers requires transparency and communication with multiple stakeholders via different channels. (Lehtimäki et al, 2009) The viral effect in social networks acts rapidly and is usually unstoppable once it has been started. This is something that every business entering the social media world has to take into account.

3.3 Social capital

Social capital, manifested for example as status ranking or reputation, is the value for the participant of a social network (Ganley et al., 2009). It can be said to be the foundation of the motivation to join a social network. If the perceived acquired social capital for joining is positive, one is more likely to join than if it is zero or negative. If two social networks are being judged against each other, the creation of social capital is certainly a deciding factor for the user.

Social capital explains the relationship between doing better and being better connected than others (Burt, 2005). Especially in today's world being connected is essential. With no connections, a person cannot function. An increasing number of connections is often seen as increasing possibilities and higher social status. Having 100 connections on LinkedIn is easily perceived better than having 20.

In addition to being a desired outcome for participants, social capital can be used to manage the network (Ganley et al., 2009). When there are more users connected to each other, the adoption rate is positively affected and the governance of the site is easier. The adopters have more buy-in to the site and the network also looks more attractive those who have not yet adopted.

The difference between the bridges and sub-networks in a social network structure is visible from the participant's point of view in gaining social capital. Bridges gain social capital via brokerage which is providing others connections they need whereas in sub-networks social capital is gained via a mechanism called closure where the strong relationship inside one sub-network are further strengthened. (Burt, 2005)

Ganley et al. (2009) studied the relationship between network structure and social capital development. According to their results the structure of a network can function as an incentive for joining the network for potential participants. The participant's concentration on the network structure also seems to change during the time they are connected to the network. People who have recently joined a network seem to prefer brokerage i.e. connecting to several different sub-networks whereas through time the participants' concentration seems to shift towards tight networks of individuals.

3.4   Network products - adoption and network effects

Network products and services are based on the network externalities received by users. These types of products and services may be difficult to start and develop due to early-stage lack of customer benefits (Choi et al., 2008). Often also the initial investments can be large and thus the risks higher, if the product or service does not reach critical mass and fails.

The magnitude of the impact of direct and indirect network effects on adoption and diffusion of products and services depends on the type of product or service in question as well as the expected behavior of potential, later users (Schoder, 2000).

Consider someone pondering on whether to join an online social network where the user's benefit is directly derived from the number of users in the service. If they have reason to believe that the service is currently or will soon be used by a great number of his or her existing or desirable, potential contacts, the probability that they adopt is higher than for someone whose contacts do not and will most probably not use the service. The adoption rate is slower at the early stages with fewer adopters and increases with the number of adopters as the utility perceived from the product or service increases (Mahler et al.).

The effect of network effects on product and service adoption loses its important in mature systems such as the telephone system previously used as an example (Mahler et al., 1999). Consider someone hesitating over adopting a telephone (fixed or mobile line) in Finland. The existing phone adoption rate in Finland is so high already that the existence of potential new users cannot play as an important role as for when the adoption of telephones was still at an early stage.

Metcalfe's law states that "the value of a network goes up as the square of the number of users" (Shapiro et al, 1999). This means that a tenfold increase in the network size, results in a hundredfold increase in its total value (the value of all participants added). The value is derived in the increase in connections. Having two people in a social network does not provide much value yet, but having 10 or hundred people not only is an increase in the amount of users but radically changes the number of connections possible for each of those individuals.

3.5 *Monetizing social networks*

Traditional advertising is losing ground and new ways to reach and convince consumers are needed. According to a market study by Nielsen the spending on advertising on social media is increasing rapidly: in August 2008 it was 49 million dollars when in August 2009 the corresponding figure was already 108 million dollars. According to the same study also the time spent by consumers online in social media sites almost tripled, rising from 6% (of overall Internet time) in August 2008 to 17% in

August 2009. (Taloussanomat, September, 2009)

Today's consumers have better access to information and are more able to evaluate and compare product and service offerings by consulting other consumers. Their decisions are more based on their strong individual preferences and the ratings of other consumers of products and services play an important role in decision-making (Clemons, 2009). Trust in peers is higher than trust in marketers and comparing competing products and services is more common.

The traditional push strategy of advertising is creating distrust in today's consumers and thus losing its effect on them. This seems to derive from the appearance of "Tragedy of the Commons" in marketing and trust of consumers. (Clemons, 2009) The "Tragedy of the Commons" was first introduced in 1968 by Garrett Hardin. According to the theory humans make seemingly rational, but selfish choices to exploit scarce resources and gain short-term benefit. These choices, however, lead to undesirable consequences for the whole group in the long run. The "Tragedy of the Commons" is visible in for example the overconsumption of water and unwise harvesting of trees. According to Hardin this was the biggest problem facing the world. (Shultz et al., 1999). In marketing consumers' trust suffers when marketers try to outwin each other by over-promising. As one marketer makes untruthful claims the other are forced to over-promise on their products and thus lead to diminishing the commons of consumer trust. (Clemons, 2009)

In addition to the decline in credibility, advertising is suffering from a decline in reach. Consumers are spending less time with traditional medias such as TV and newspapers and even when they do watch TV, the ads have lost their importance through the existence of TiVo, recording digital set tops and online TV. (Clemons, 2009) New ways and especially new channels to reach the customers are needed.

What is important to note is that it is not merely the development of technology and the increased media fragmentation that is behind the failure of advertising but also the

consumers' unwillingness to accept the message pushed on them (Clemons, 2009). Customers are no longer buying what they are told to buy, but making their own decisions. With the ease of getting information and making comparisons as well as with the increased emphasis on value and timesaving, the customers are not convinced by a simple ad rather than by trial and referral.

Social networking sites should thus not be seen as a new platform to conduct advertising activities on, but instead entirely new business models and value propositions with clear revenue models are required to avoid a failure such as the dotcom boost in the beginning of the century. Currently significant amounts of money are invested in these sites without a clear view of the potential use and benefit gained from them. (Clemons, 2009) New social media tools are created every day and usually offered free to the customers. Seems that many times efforts are directed at building the tool and attracting the users without considerations of the revenues needed to run the business.

Clemons (2009) has identified five mechanisms for monetizing social networks. They can be used for ethnographic observation for gaining insight on consumer wants and needs and based on that developing innovations in products and services. Membership/usage fees can also be collected from the members or revenues raised by making online sales through the online social networks. One option is to replace traditional advertising with online advertising in the network sites. The most innovative of Clemons' ideas is to use the social networks to create synergies for other online resources meaning for example combining MSN and Facebook in a way that search results return the most relevant items based on searches conducted by friends for example.

Each of the above mechanisms has its drawbacks. The ethnographic observation conducted in an online social network may be either unreliable or knowledge we already have such as that people wish to view themselves as young, healthy and beautiful (Clemons, 2009). However, as many western people view online interaction as real as any other interaction (Holme et al., 2004), the study of social networks can be conducted in online communities. Up until now there is a lack of information on

whether collecting fees from users will actually amount to significant revenues. Online sales again are questionable in the sense that social networks are not traditionally seen as retailing opportunities and may even make the participants uncomfortable.

Online social networks do offer a platform for advertising but there remains a question on the lack of credibility of pure advertising from the consumers' point of view. For the customers it is as unpleasant to view push-type advertising on TV as it is on the Internet and they place more weight on recommendations of friends rather than paid placement or reviews. The strongest out of the five mechanisms seems to be creating synergies as long as consumers' trust on the references offered at the sites can be ensured. (Clemons, 2009)

Social virtual worlds monetize the social value provided to users with access fees, commercials and premium services such as selling virtual furniture (Merikivi et al, 2009). This is a fairly simple and open way to monetize social networks. Some tools such as LumoFlow, a social project management tool online, offer a free basic account and a premium account with a monthly fee and more features, storage space, etc. Lietsala (2008) offers four basic revenue models for social media: 1) selling content, 2) developing and selling underlying technologies, 3) adopting social media tools and approaches for professional use and 4) sharing revenues in various mash-up applications.

Monetizing the trust of the consumers is the biggest risk involved in making money via social networking sites. The power of social network sites is largely based on the participants' trust. Commercializing that by for example receiving payments from companies for positive recommendations of their products on the sites or attempts to steer the traffic at the sites can compromise and eventually destroy this trust (Clemons, 2009).

The revenue models of social networks are still underdeveloped and both the companies creating them as well as marketers seem to be in front of a difficult task.

There are two main reasons why the implementation of a revenue model can fail in a social network. One can either fail in the eyes of the customers and lose their trust or fail to raise enough revenue or attract enough users and thus end up in a difficult financial situation unable to even cover the costs. Both situations are highly likely to end in closure of the social network.

3.6 Guaranteeing the success of a social network

Westland (2009) categorizes the success factors into four drivers:

1. **Pre-phase change strategy drivers -** Increasing the breadth of the network invitations alone is not enough, but also their quality must be optimized. Increasing the probability that an invitation will be accepted together with ensuring the maximal audience for the invitations increases the probability of receiving more acceptances and growing the network larger. For example targeted advertising (targeted invitations) offer great possibilities for increasing the number of accepted invitations.

2. **Pre-phase change adaptive execution of strategy** – As noted above the network receives its characteristics and topics of interest from the giant cluster i.e. after the critical mass has been reached. Therefore it is essential not to define the network topics too tightly before the giant cluster has formed to ensure the attractiveness of the network.

3. **Network effect** – Exploiting network effects in practice means reaching a point where germanity i.e. the probability that any given member is also connected to the giant cluster is greater than zero. When this point is reached the growth of the social network becomes self-sustaining.

4. **Network value** – Network value grows with the number of people belonging to it. A network with only one member has no value as no exchange is able to happen.

4 User acceptance theories

For information technology to have value, it must first be accepted adopted and used (Venkatesh et al., 2003). No innovation in technology is worth anything unless one can find people who adopt and use it. In what follows five different user acceptance theories will be presented.

4.1.1 Theory of Reasoned Action (TRA)

The theory of reasoned action was introduced by Fishbein et al. (1975). The theory is constructed based on three core constructs: behavioral intention, attitude toward behavior and subjective norm. According to the theory a person's behavioral intention depends on his or her attitude toward the behavior and the subjective norm. The behavioral intention then again directly affects and predicts the person's behavior. The person's attitude toward the behavior can be described as his or her beliefs of the behavior. These can be both positive or negative. The term subjective norm refers to the person's belief of what other people expect from him or her. The two can vary in their effect towards the behavioral intention: one may weigh more than the other. For example a person may care little about what others think and place more weight on their own attitudes. Figure 10 below illustrates the factors and their relationships in the theory of reasoned action.
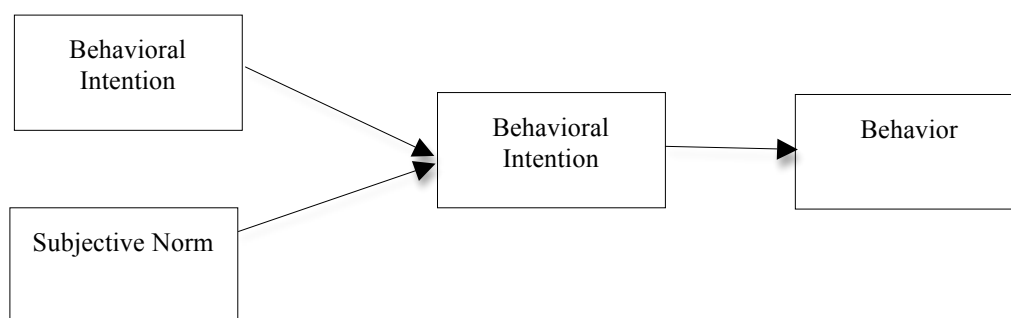

Figure 10 The Theory of Reasoned Action (Fishbein et al., 1975)

4.1.2 The Technology Acceptance Model (TAM)

The technology acceptance model theory by Fred Davis (1989) states that there are two main factors behind user acceptance of technology: perceived usefulness and

perceived ease-of-use. These two factors lead to behavioral intention to use a system and that to the actual system use as shown in Figure 11. Davis defines perceived usefulness as "the degree to which a person believes that using a particular system would enhance his or her job performance". This can mean for example timesavings, enhanced effectiveness or increased productivity. Perceived ease of use is defined as "the degree to which a person believes that using a particular system would be free of effort". Here the emphasis is on how easy it is use the system; for example does one make many errors, does one need help in using the system or does one easily understand how the system works.
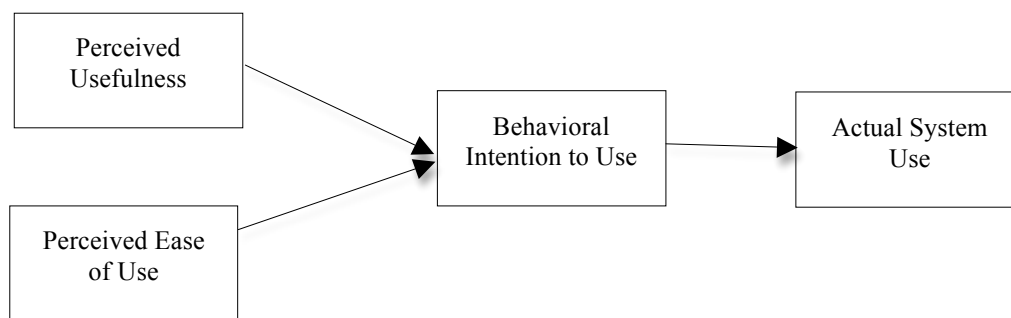

Figure 11 Technology Acceptance Model (TAM) (Davis, 1989)

4.1.3 Innovation Diffusion Theory (IDT)

The diffusion of innovations theory by Rogers (2005) is a very popular and cited theory about the adoption of new technology. According to the theory the adoption occurs in five steps: knowledge, persuasion, decision, implementation and confirmation. The process starts with a person having knowledge of the innovation, thus becoming aware of it. After awareness the person forms his or her attitude toward the innovation leading to a stage where the person weighs the innovations advantages and disadvantages leading to a decision on whether to reject or accept it. In the implementation phase the person puts the innovation into use and starts evaluation. In the last stage the person makes a decision on whether to continue using the innovation or not.

Rogers defines the rate of adoption as the relative speed of people adopting an

innovation. The rate of adoption has a point called the critical mass (see Figure 12) where enough people have adopted the innovation to make the continued adoption self-sustaining. There are several strategies for reaching the critical mass. Rogers suggests for example to have a highly respected individual within a social network adopt the innovation first to make the others follow or to inject the innovation in a group of early adopters and ensure positive reactions from them.

*From E.M. Rogers, *Diffusion of Innovations*, 4th edition (New York: The Free Press, 1995)
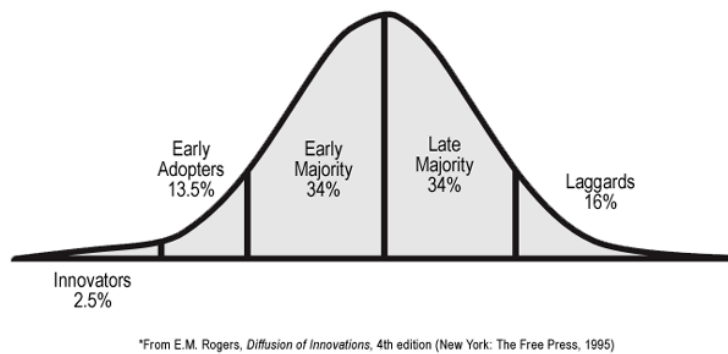
Figure 12 Diffusion of innovations (Rogers, 2005)

The diffusion of innovations theory consists of five adopter categories based on their relative speed of adopting the innovation: innovators, early adopters, early majority, late majority and laggards. The first group to adopt and innovation are the innovators. They are usually younger, risk-taking and social. The second group, the early adopters, is opinion leaders, also younger and very social. The early majority is slower in adopting, but is to some extent opinion leaders in their social networks. The late majority adopts only after the average members of society have adopted and can be very skeptic about the innovation. The latest group to adopt are the laggards who are usually older and can be very traditional and even resist change.

5 Telecommunication industry in Finland

During the past decades Finland has grown from a paper and metal industry concentrated country to a highly appreciated forerunner in technology and has a strong high-tech sector. With one of the highest mobile phone penetration figures in the world Finland has been strengthening its telecommunications industry with the early liberalization of the market (Industry review, 2005).

Mobile phone usage has also steadily, but rapidly grown in Finland and already in 1998, mobile phone subscription exceeded 50%. Finland was the first country in the world to exceed this mark. That same year the number of mobile phone subscriptions exceeded the number of fixed line connections. (Industry review, 2005) Today Finland belongs to the leading nations in mobile phone, personal computer, Internet and broadband penetration (Industry review, 2009).

Finland has also often been used as a test ground for new innovative mobile Internet applications due to its reputation as a forerunner in mobile technology (Industry review, 2005). It is very common to use third-generation technology (3G) and smart-phones in Finland. The largest telecommunications companies in inland are TeliaSonera, Elisa and DNA. (Industry review, 2009)

The sophistication of the users can also be seen as a threat to the operators as consumers are increasingly using VoIP (Voice over Internet Protocol) and are demanding mobile-phone technologies that support it (Industry review, 2009). This puts pressure on the operators. The market is also highly competitive and prices are pushed down. During the recent years there has been a shift from price discrimination in calls between different operators and flat rates. Most operators now offer packaged prices where the consumer pays for e.g. 300 minutes of calls / month or 50 SMS messages / month. If they stay under the 300 minutes, they are billed according to the package price, if they exceed, calls over 300 minutes will be priced separately by the minute. It is also been made possible to switch operators without having to have to

change the phone number.

The global mobile revenue has been estimated at over one trillion US dollars in 2008 (Hohol, 2009). The turnover of the Finnish telecommunication companies in 2008 has been estimated at 4,262 million euros (Tilastokeskus, 2008). In 2007 there were approximately 6,1 million mobile phone subscriptions which means 115 per every 100 inhabitants. In 2007 altogether 13,5 billion minutes were used for mobile calls and on average every subscriber sent 524 SMS messages. (Tilastokeskus, 2007)

5.1 Sonera

TeliaSonera is a telecommunications operator offering services in altogether 20 countries: in the Nordic and Baltic countries, Spain and the emerging markets in Eurasia, including Russia and Turkey. In Finland mobile phone subscriptions under two names are offered: Sonera and TeleFinland. The company is a result of a merger between the Swedish Telia and Finnish Sonera in 2002. It is currently listed at both NASDAQ OMX Stockholm and Helsinki stock exchanges. Their operations are divided into four sectors: Mobility Services, Broadband Services, Eurasia and Business Services. Figure 13 illustrates the division of net sales and operating income between the different sectors.
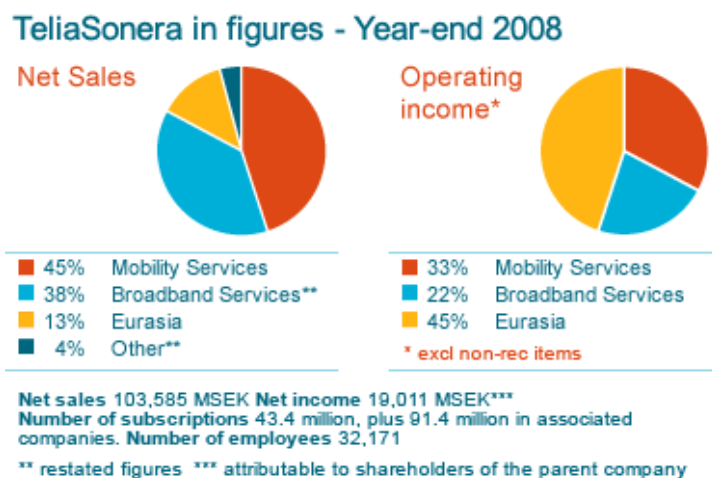

Figure 13 TeliaSonera in figures, 2008 (www.teliasonera.com)

Mobility Services is a leader in net sales, but loses to Eurasia in operating income division. Broadband Services generate high net sales, but the smallest portion of operating income.

TeliaSonera's Mobility Services offer wireless communication services such as mobile voice and data, mobile content, mobile over broadband and mobile/PC convergence. TeliaSonera is the market leader in mobile business in the Nordic and Baltic countries. Broadband Services include mass-market services for home and office communication and entertainment. The company is also a market leader in broadband business in the Nordic and Baltic countries. In Eurasia TeliaSonera concentrates on offering mobile services. The Business Services sales division is directed at businesses looking for complete service packages.

TeliaSonera declares its values as adding value, showing respect and making it happen. They want to be an innovative, customer-focused company driving development and change. They value a lively business climate, where everyone can contribute. Their focus areas are building a world-class service company, securing high quality in the networks and creating a best-in-class cost efficiency.

5.2 Elisa

Elisa is the leading producer of communication services in the Nordic countries and is one of the 500 largest publicly listed companies in Europe. The company operates also in the Baltic countries and Russia. Elisa's turnover in 2009 was 1,43 billion euros and it has 3, 200 personnel. Their operations are divided simply into consumers and business clients. At the end of 2008 Elisa had approximately 2,5 million mobile phone subscriptions in Finland.

Elisa can be considered a forerunner in the telecommunications industry, as it was Elisa's subsidiary Radiolinja that connected the world's first GSM phone call and was the first to open a GSM service in 1991. Elisa owns the operators Saunalahti and

Kolumbus, but also sells its own mobile phone subscriptions under its own name. Saunalahti competes with affordable pricing and directs most of its customer service as a self-service online. In 2009 the sales of Kolumbus mobile phone subscriptions were closed down, but the existing customers are still serviced.

Elisa has four basic values: customer focus, responsibility, regeneration (environment) and profitability. They have four core principles in corporate responsibility: they act responsibly, they promote interaction and long-term relationships, they follow the international "Triple Bottom Line" division in their responsibility (financial, environmental and social responsibility) and they are environmentally responsible.

5.3   DNA Finland

DNA Finland is a Finnish telecommunications company offering over 1,9 million mobile phone subscriptions. DNA is the fastest growing mobile operator in the market. The company's turnover was 652 million euros in 2009 and it had 800 personnel. DNA was established just before the turn of the century and in the beginning it was owned by 40 Finnish phone companies.

DNA's operations have been divided into three main divisions: consumer business, business-to-business and new operations. The company has a matrix organization. In consumer business the largest growth is expected in mobile phone subscriptions. DNA's marketing has been very distinct from the other operators. Many still remember their campaign "Life is" (Elämä on) and the slogan lives on.

DNA has three core values: speed, simplicity and courage. They aim at being number one in the consumer and small business sector within five years. They aim at having the most satisfied customers, best price-quality ratio and sustainable growth. They see their strengths being in a strong brand, fast and customer focused customer service, reliable services and efficient and wide distribution.

6 Empirical study

The three largest telecommunications operators in Finland were chosen as case companies for this research: Sonera, Elisa and DNA Finland. In addition to their main brands this research also included the TeleFinland, Saunalahti and Kolumbus brands. The participation of these brands in social media will be examined based on a research framework and focus points to be presented later in this chapter.

As there is a wide range of social media tools available online, the focus of this thesis was narrowed down. From the social media tools available, a few of the most popular tools used in Finland (Alexa, Top Sites in Finland) were chosen as targets for the research. These tools include:

- Facebook – social network
- Twitter – microblogging
- YouTube – content sharing, videos

In addition to the tools mentioned above the companies were also analyzed according to whether they offer collaborative productions i.e. conduct crowdsourcing and whether they use corporate blogging. The participation of the chosen brands in these particular tools was examined using observation and interviews. An extensive search on company websites, search engines as well as the tools chosen was conducted. To verify the results of the observation and gain more insight on the operations of the companies, all three companies were approached in terms of an interview concerning the subject. An interview was admitted by and conducted with Elisa (Jere Teutari) and DNA Finland (Mikko Knuuttila). Where applicable, reference will be made to the interviews, the remaining results are based on observation.

The focus of the research was on company-initiated interaction in social media i.e. groups, fan pages, blogs and YouTube subscriptions created by the consumers were

left out of the results. Consumer content creation such as comments, wall posts or uploaded pictures or videos to a Facebook fan page, however, were analyzed, as they are one measure of the interactivity between the brand and its customers.

6.1 Methodology

In this research a qualitative method was applied. The qualitative method offers tools for deeper analysis and understanding of the activities of the three companies. It also provides a better basis for comparison between the three companies' activities. Many of the measures in this research are numerical measures such as the number of followers/fans, the updating frequency and the number of videos uploaded. However, as the target of the research is not on absolute measurements, but rather on understanding the activities combined as a whole, a qualitative approach is more suitable. A single measure such as the number of followers does not alone provide information on the participation level and interactivity of the activities of a brand, but rather needs to be looked at in relation to the other measures and the measures of the other brands. Qualitative approach also leaves space for possible observations outside the research framework, which may provide valuable research-related information.

Observation was used for gathering the data for the research. An extensive search in Facebook, Twitter and YouTube was conducted in order to find and learn about the activities of the case companies. Also the most popular search engines and company websites were searched to find out information on possible collaborative productions and corporate blogs. The data gathering was conducted on three different dates for each case company to see possible developments in actions as well as to ensure that the data gathering was not conducted at a possible downtime for the company. The time period between the first and last observation dates was two weeks.

6.2 Research framework

The research framework is based on earlier research presented in the theory part of this thesis. The applicable parts of knowledge on social media, social network theory and

user acceptance theories are at the basis of the framework. The framework represents social media as a whole and does not only concentrate on the tools chosen for this research. Thus the framework can be utilized for future research to either validate the results of this research or to examine another target industry.

This research is based on three main research questions:

Research question 1: *What is the level of the adoption of social media in the Finnish telecommunications industry?*

Research question 2: *What is the level of interactivity within the activities in social media in the Finnish telecommunications industry?*

Research question 3: *How could the presence of the Finnish telecommunications companies in social media be developed further in order to gain business benefits?*

The research questions translate into the three main lines of research used in this thesis: 1) adoption, 2) interactivity and 3) development. Every one of these lines of research will be examined for each case company and each tool chosen. The building blocks behind each of these main lines will now be examined in more detail.

6.2.1 Adoption

The definitions of social media illustrate the importance of a few main attributes. Involvement in social media means many-to-many communication and thus companies cannot rely on methods used in the traditional media such as print magazines and TV. Pushing traditional messages down into the new channel cannot be seen as a social media strategy. In social media it is essential to engage the customers and make them a part of the company and the brand, provide them with a sense of community.

For the customers to have an interest in a company involvement in a social media, it

must provide them with value. The value provision can vary from social capital to free products, prizes and money, and it also differs from person to person. For consumers in Finland social media is mainly a channel to keep in touch with friends and relatives, entertain oneself and to make new connections. Connecting with a brand is not the main purpose and it can even be seen as distracting or something to be avoided. To be able to reach the large masses a company needs to ensure that it will reach critical mass. The work starts by convincing the early adopters and early majority and by creating network effects. Doing this and especially crossing over to the majority requires knowledge of the key attributes in user acceptance.

There are four attributes in user acceptance that are key to the success of company involvement in social media: behavioral intention, subjective norm, perceived usefulness and perceived ease of use. The fifth key element, affecting all the four others, to be included from outside the user acceptance theories is the consumer's trust towards the company or brand. Trust in the communication is one of the key elements of social media in general and its role is even more visible when dealing with a corporation instead of one's friends, colleagues or family.

Having an influence on a customer's behavioral intention and subjective norm requires two approaches. First of all the presence in social media must be constructed from a customer perspective to ensure positive word-of-mouth and behavioral intentions towards it. Creating a positive viral effect amongst consumers is one of the most important ways to attract new consumers to the company/brand. The viral effect is based on the fifth element, trust, and does not function without it. Consumers trust each other and in messages received from other consumers. Encouraging sociality and creating a sense of community amongst the consumers can also at its best create a viral effect. This in turn has a positive effect on the subjective norm and is likely to turn existing connections to active recruiters. Seeing one's own connections joining a group or becoming a fan of a brand makes it more desirable to do the same.

The perceived usefulness and ease of use are at the basis of technology acceptance. Time is one of the most valuable resources there are and consumers want to be met

with something that is fun and beneficial, but simple. They need to see that the company is interested in them, appreciates them and is willing to contribute to the two-way relationship. If they don't see something worth their time, they are quick in moving on. Open and honest communication is key in social media. Here again the influence of trust is emphasized. Especially when dealing with people's personal information, it is vital to ensure a positive understanding of the facilitating conditions and create faith in the company activities. Bad news travel fast and consumer's trust once lost is very difficult to regain.

Adoption levels

The social media participation ladder has altogether 7 steps. Most of the steps apply directly to company involvement (see Figure 14) as well.
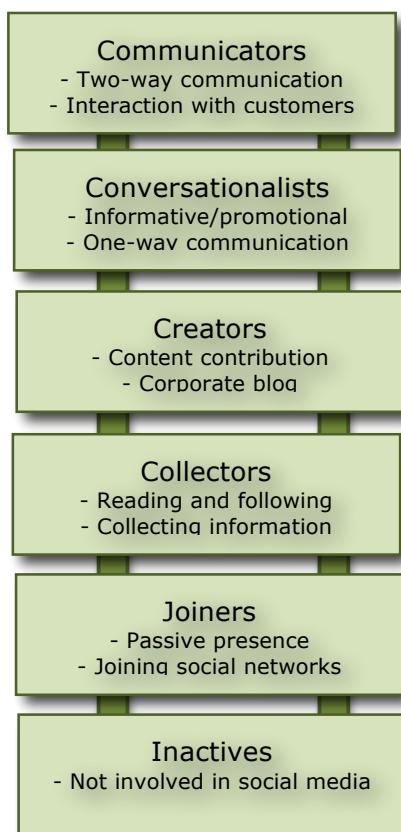
Companies can decide against being involved at all and represent the group of inactives. Many companies in Finland still belong to this group as social media is seen as something for individuals only and even dangerous for companies. Passive users of social networks, called joiners have a passive presence. It could be described as a look-out position where a company wants to be involved, but neither has the resources, or understanding on how to do it or are purposely only passively involved to see further development before engaging more. Companies as consumers can also act as spectators and extract information from social media tool instead of spreading it collectors. There are plenty of tools available for this purpose and it is increasing in popularity.

Figure 14 Company social media participation ladder
(modified from social media participation ladder)

Companies deciding to actively engage and interact with their customer are called creators. They contribute content, for example videos on YouTube or they for example publish a corporate blog. They are actively communicating instead of simply following the ongoing communication. Conversationalist companies communicate still mainly one-way and their communication style is often informative and/or promotional. It does not necessarily aim at engaging customer. At the highest level are the communicators who comment on blog posts and publish reviews. Their role cannot be seen as that of a critic in the same sense as consumers can, but their communication is two-way and they actively engage consumers to action. They are aiming at interactivity with their customers.

6.2.2 Interactivity

Social media brings the online uncontrollable marketing factors into customer decision-making. Here interactivity plays a key role as by opening a communication channel between the company and its customers and by demonstrating open and honest communication a company can actually even turn those uncontrollable factors to its benefit. The brand and product that the customers learn to know and trust in a social media environment is strong in the marketplace. In Finland marketing is often seen as something that should have a direct effect on sales, but social media offers us the other side of marketing: brand awareness and trust. The trust often directed at peers can be directed at a company, if the trust is earned in an open and honest way.

Taking an active role and opening a communication channel for interaction with the customers, be it in a corporate blog, virtual world or social network, takes the company closer to the customer. A company with a face is seen as more trustworthy than an anonymous company pushing sales messages. The Finnish police provides us with a good example of the need for open and honest communication in social media. In Finland the police has recently joined social media, one of their tools being Facebook. In the beginning the police profiles were fictional. They were quickly turned down by the public. Once a decision was made to come out with real police officers, even names and pictures, the public opinion on the Finnish police in Facebook improved and lively discussion between the two started.

The importance of the quality of the network, allowing for creativity of the customers and understanding network value as a result of network size is high in social media. Thus possibilities of success depend highly on network size, depth of interaction and openness of actions. The consumers need to be provided with value. Sales messages are not value to consumers, nor is uninteresting, false or out-of-date content. Two-way communication, true interest in the consumers and their thoughts and the ability to also take on criticism are building blocks for interactivity.

In going deep into interaction it is not adequate to only improve social activities, but to also identify the key influencers and bridges from the mass of participants. Once they have been identified, valuable information on their preferences can be gathered and communication can also be directed towards these two groups to increase the speed of spreading the message. Key influencers and bridges can be identified by their own activities. They are people who are highly connected and active communicators; they forward the message more often and to a wider audience than on average. They are also followed by others more often than the average user is.

Interaction works in two directions thus often the consumers can also offer something valuable to the company in exchange. Market information can be drawn and collective intelligence used in for example product, service and business development. Consumers trust and loyalty often leads to long-term relationships and increase in sales. With more satisfied users, the network value increases attracting more users. Social influence and viral effect also function as efficient user recruitment tools. Information flows both ways and the emphasis is on win-win situations. Social media functions as a platform in this two-way communication between the consumers and the company.

6.2.3 Development

The future development proposals are an area that consists of both adoption and interactivity. As social media usage for business is still new in Finland, there are no

existing benchmarks to measure against. The adoption and activity levels also depend on industry and company and several situational factors. The development of social media usage is also rapid and the future is in many ways unknown. For the purposes of this thesis the development proposals will be made by a comparison of the current activities and the research framework and focus points. The current situation is also mirrored against competitors and possibilities offered by the tools used.

Research framework

The research framework designed is illustrated in Figure 15. Social media as the platform for communication is in the middle of the framework. The left side represents the company and the elements it needs to consider. The right-hand side illustrates how the user side involvement can benefit the company. Adoption and interactivity are looked at separately from each other. The development aspect entails the complete picture with both research lines and both parties involved. In this research the concentration is on the left-hand side of the framework i.e. the company's activities.
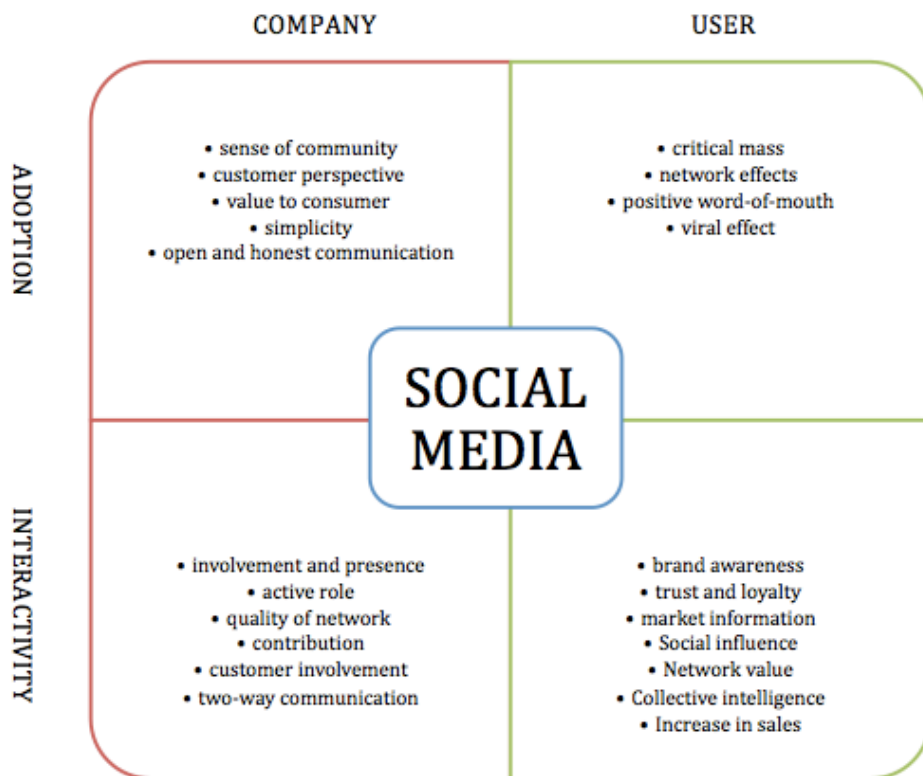

Figure 15 Research framework for the adoption of social media in reaching and interacting with customers

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6.3 Research focus points

The research focus points are the metrics for the research. They guide the observation process and ensure that all three case companies are evaluated based on the same criteria.

Table 3 Research focus points

RESEARCH FOCUS POINTS	Adoption	Interactivity
Facebook	- corporate presence - connections/fans - wall posts - discussions - pictures uploaded - updating frequency - content quality - content diversity	– public profile - customer posts -other customer contribution -replies to customers - engaging activities - tone of messages
Twitter	- corporate account - followers - following - tweets - updating frequency - content quality - content diversity	- public profile -engaging activities - retweets by company - tone of messages
YouTube	- corporate account - subscriptions - videos uploaded - video views - content quality - content diversity	- ratings and comments on videos -free to rate/ comment - replies to customers -engaging activities - tone and style of the videos
Collaborative productions / crowdsourcing	- existence - participators – scale of productions - updating frequency - rewards from company	– open to all - related two-way communication - customer contribution - company participation - empowering and appreciation of customers
Blogging	- corporate blog(s) - blog posts - updating frequency - content quality - content diversity	- replies to comments - tone and style of communication - furthering communication and interaction

The focus points are designed based on the research framework presented earlier and the tools chosen for the research. They are divided into two columns by the two main lines of research, adoption and interactivity and five rows as according to the five tools chosen. The development aspect again is a sum of the adoption and interactivity measures and is therefore not visible in the focus point table (see Table 3). The focus points are not directly applicable in other social media studies as they depend heavily on the tools chosen for the study.

6.3.1 Adoption

The adoption metrics are presented in the first column from the left. In every tool chosen the starting point is the presence of the company. Only after it has been confirmed can the other metrics be examined. The second metric is measuring the number of participators. It can be connections or fans in Facebook, followers in Twitter and blog or subscriptions in YouTube. In Twitter also the number of users the corporate account is following is important as this illustrates the level of adoption of the tool.

Examining the amount of contribution by both the company and the participators provides information on the activity level. Company contributions such as wall posts, discussions, videos uploaded, blog posts and providing information illustrate whether the company is just a passive participator or an active contributor. This also translates into a direct measure of the company's adoption level. The updating frequency is important as if the content is updated only rarely, the risk of customers growing tired and moving elsewhere increases. On the other hand, too frequent can also be considered irritating. Again here there is no absolute measure to measure against, but the appropriate frequency is dependent on the quality of the content, other situational factors and the tools chosen. In this research updating frequency will be compared between the three case companies.

All the tools will also be evaluated based on their content quality and diversity. The

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users are key in social media and if the company is unable to attract them, there will be no success. Even though measures such quality and diversity are to some extent subjective, in this research they will be used in comparison between the three case companies. Quality and diversity can be examined by looking at the other metrics, studying customer comments and activities.

6.3.2 Interactivity

Pages, accounts, blogs and collaborative sites can be public and open to all or private where contact is only admitted by request. In YouTube an account holder can also deny the possibility to comment videos uploaded. Considering the importance of open and honest communication making the social media presence closed to a specified group only or open to all is an important indicator of interactivity. However, here one must note the difference between making users register to get access, but allowing it to all and discriminating between different customer groups.

Customer involvement and contribution is an important measure of interactivity. In Facebook customers can write wall posts, comment, upload pictures and contribute other content. In YouTube they can rate or comment videos and most often also blog posts offer a commenting possibility. In collaborative productions the customers should be active contributors as that is the basic idea of a collaborative production. One should not forget, however, the company's participation. Especially empowering and showing appreciation to customers is an important measure of interactivity and required for success.

Interactivity is also measured by the extent of engaging activities provided such as competitions and events. The better a company is able to activate its customers in social media, the more the value derived from those actions increases. The amount of comments, replies, retweets and other two-way communication also enhance the interaction level. A collaborative production should not simply mean collecting consumer ideas, but to actively work together with the consumers and participate. The tone and style of the communication, be it in form of a blog, videos, wall posts or

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tweets is essential in interaction. In customer-focused communications the tone cannot be too aggressive or defensive, but has to be sincere and honest.

6.3.3 Development

The development aspect consists again of both adoption and interactivity measures. The three case companies will be benchmarked against each other and against the possibilities the tools offer. The activities of the case companies will be looked at in all the tools combined and variety between different tool usage will be evaluated.

7 Results

The results are first presented separately for each company and then further analyzed based on the research objectives and questions presented earlier.

7.1 Sonera

Sonera's corporate web site has no direct links or other visibility to its presence in social media. To be able to find Sonera in social media one must search tool by tool. The TeleFinland site promotes its Facebook page under customer benefits pages. This site also has a direct link to the Facebook page. However, one must first understand to look under customer benefits. There are no easy to notice follow us logos or separate sections for social media related issues on either website.

There are four fan pages for Sonera in Facebook: Sonera, Sonera Next Generation Surfport and TeleFinland. All the Sonera fan pages are public and anyone can join. The Sonera fan page has altogether 87 fans (30th March, 2010), but it does not have any contribution from the company side, so it will be ignored in this research. The Sonera Next Generation fan page has 276 fans (30th March, 2010) and is related to a campaign under the same name. Sonera Next generation is a cooperation project between Sonera and Finnish athletes. The campaign site (www.sonera.fi/kampanjat/nextgeneration) provides information on different athletes and their blogs. The Facebook fan page has 9 pictures of different athletes uploaded by the administrators and 5 uploaded by fans. There are no discussions started by neither administrators nor fans. However, the updating frequency of wall posts and notes was relatively high, approximately every third day.

The content of the fan page is not very diverse, as it consists mainly of links to the campaign site with blog posts and news. The fan page also includes 11 embedded YouTube videos of interviews with different athletes. The tone and style of the communication is informative and does not include any engaging activities. The content of the blog posts is diverse, but does not encourage fans to action. There are

only 4 wall posts by fans, a few individual comments and 5 uploaded pictures (30th March, 2010). The administrators of the site have not commented/replied the fan posts/comments, even when a fan posts a question.

Out of the fan pages under Sonera brand, the most active and diverse is the Surfport fan page. It has 273 fans and 56 pictures uploaded (30th March, 2010). The wall is updated frequently. The wall posts have aroused interest and fans have also commented, presented questions and challenged some of them. Most of the communication comes, however, from the company side. The administrators have also replied a fan question. The updating frequency is relatively high, approximately 2-3 updates per week and the tone of the communication is very friendly and informative. The content is diverse and includes many elements for engaging the fans. The results are not visible on the fan page as many of these elements are Wall posts consist of links, news, product and service proposals, competitions and for example offerings of free invitations to the Spotify music service. In addition to wall posts, the fan page also offers a poll tool for gathering the opinions of the fans on different subjects.
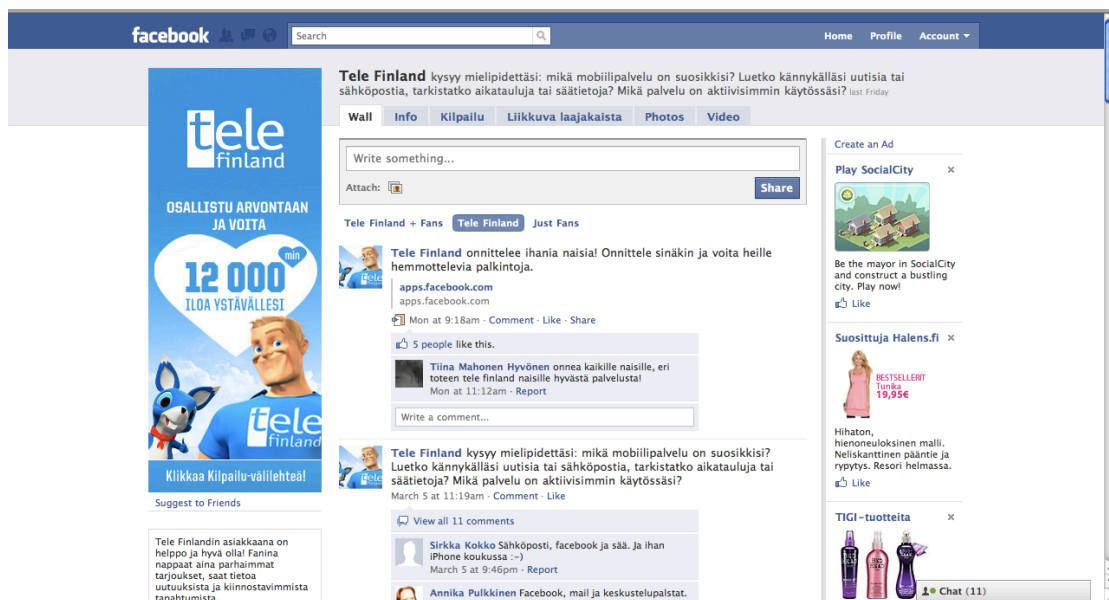

Figure 16 Tele Finland's fan page on Facebook

The TeleFinland fan page has the largest fan base, 909 fans (30th March, 2010 – Note! Up from 617 in 14 days). It has an active wall with wall posts by the administrators

and comments by fans and the updating frequency is also relatively high 2-3 times per week. There are 4 videos posted, 10 pictures uploaded and direct links on their tabs for ordering a broadband service and entering into a competition (30th March, 2010). The Info page provides customer service contact details and opening hours. The content is diverse, from greetings to news to competitions. Questions by fans are answered and the tone of the communication is friendly and open. Most of the communications are directed at engaging the fans into further activity and interaction. There are 3 wall posts by fans, but fans have actively commented the administrators' wall posts. Almost every wall post has been commented on and often by several fans.

Sonera also has four groups in Facebook: Sonera, Sonera Piste Oy, Sonera Laajakaista TV and Sonera Aivo. The first group is a closed group and one needs to request to join and be accepted by an administrator and therefore not much can be said about its content as access was denied. The three latter groups are public groups. Sonera Piste Oy group has 45 members and is a business group created for Sonera Piste Oy employees. Sonera Laajakaista TV groups has 20 members, but cannot be confirmed as a official Sonera page and also has no content.

Sonera Aivo group has 125 members (30th March, 2010) and according to its description is a group for commenting, discussing and sharing information about Sonera Aivo. Sonera Aivo is a mashup site providing information on Sonera's social media presence (aivo.sonera.fi/aivo). Other features of Sonera Aivo will be presented later in the results and the concentration here is only on the Facebook group. The group is relatively passive, no photo uploads, discussions or other content except for seven wall posts, latest from October 13, 2009. There are two wall posts by administrators that are informative in nature, but are attempting to engage fans into further activity. A third post by an administrator is a comment on a fan wall post. The updating frequency and content diversity are both low in this group.

TeleFinland also has a Facebook profile under the name TeleFinland man (TeleFinland mies). One needs to request to be accepted as his friend. After a 12 day wait for acceptance, access was admitted. TeleFinland man has 322 friends (30th

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March, 2010). In general the site is updated frequently, but between February 12 and March 25 the site had no activity other than new friend connections. However, before February 12, the wall was updated approximately every other day. There are 27 photos uploaded and TeleFinland man is also a fairly active user of entertainment applications. He belongs to 11 groups and is a fan of 5 sites, one of them being TeleFinland's fan page. (30th March, 2010) His posts are mainly informative and promotional and many of them aim at engaging connections to further activity.

Sonera has also activated customers with its "SMS me" (Tekstaa mulle) application on Facebook. The application allows for the friends of the user to send a limited amount of free SMS messages to the user's phone via Facebook. The application has 1188 fans and 1851 monthly active users (30th March, 2010 – Note! Up from 851 fans and 1,632 monthly active users in 14 days). The fan page has 12 wall posts by consumers, many of them questions, but none of them answered by the administrators. The administrators have not posted anything nor started discussions. There are two discussion threads started by fans. The actual application is an engaging activity itself, getting customers and their connections involved with Sonera.

Sonera has no activities in Twitter, under either brand names, Sonera or TeleFinland nor under Sonera Aivo. In YouTube a wide range of videos can be found with the same search words, but none of them uploaded by an official Sonera employee or Sonera as a company. Thus there is no corporate presence in either tool. There is also no Sonera corporate blog to be found.

Sonera Aivo combines a collaborative production and blogging. The terms and conditions of the site state the purpose being improving Sonera's products and services with the help of consumers. They also state that the site does not function as an official customer service site, but rather is a discussion platform. Sonera also states not guaranteeing reacting and answering messages and comments left on the site. The main focus is on the ideas of the consumers and best ideas will be put into practice. For those ideas remuneration will be decided upon and paid by Sonera. To be able to participate on the sites activities, one needs to register by proving name and contact
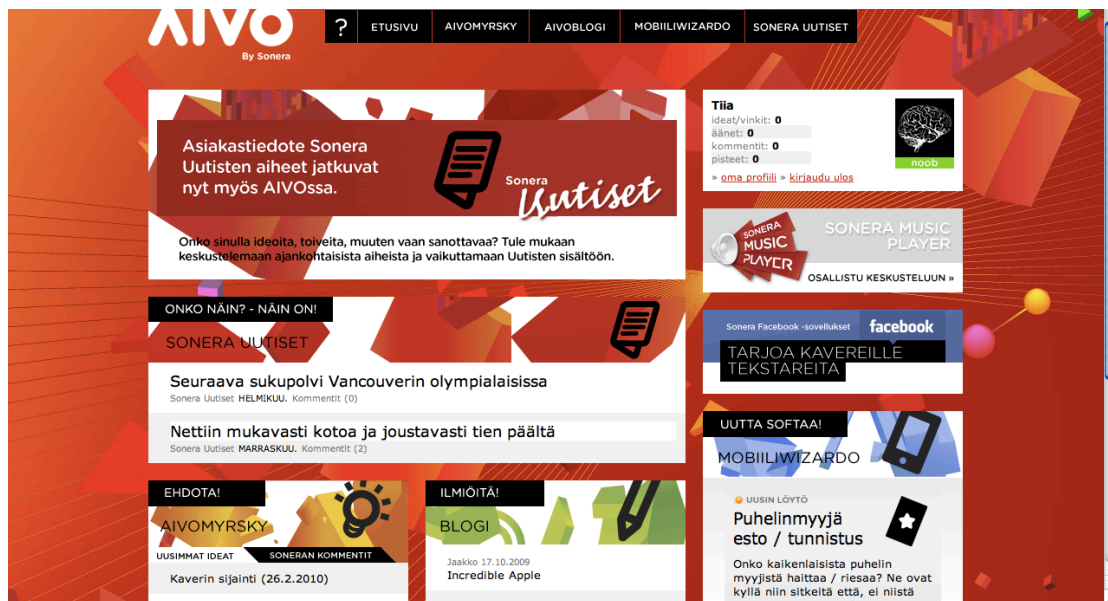
email information.

Figure 17 The Sonera AIVO website

There are four main sections on the site: Brainstorming (Aivomyrsky), Brain blog (Aivoblogi), Mobile Wizard (Mobiiliwizardo) and Sonera News (Sonera Uutiset). The brainstorming section is for users to voice out ideas and comment and rate the ideas of others. Also Sonera has commented some of the ideas and suggestions provided by the users. The posts are divided under 9 categories and the frequency of the idea posts is approximately one post per month. The site is still active as the latest post is from 26th February, 2010. Most of the ideas presented are small issues, related to for example pricing, customer service and small changes in service offerings. The company participation on the site is limited to short comments of the idea posts.

The brain blog consists of blog posts from 9 Sonera employees. The users can comment the blog posts. There are also 9 categories under which the blog posts divide, all directly or indirectly related to the telecommunications industry and Sonera. Since there are 9 bloggers also the updating frequency could be expected to be higher, however is not the case. Some bloggers write approximately once a month when others have only written a few posts during the past two years.

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Most of the blog posts have been commented by at least a few users and the comments are mainly questions related to the subject or positive remarks on the blog post. Also the bloggers have been answering comments directed at their blog posts. The content of the brain blog is diverse, but updated very randomly. The subjects of the posts arouse interest in users and open a channel for communication. The tone and style of the communication (both in posts and comments) is friendly and open. The posts often also provide links to related material and sites. The latest blog post is from 17th October, 2009.

The Mobile Wizard allows users to share their knowledge on mobile software and services. Again users are allowed to comment and Sonera employees have also been responding and commenting the ideas. The frequency of posts is as in brainstorming approximately one post per month. Most of the latest posts have been commented on by at least one user and a few also by Sonera employees. There are 10 subject areas under which the posts belong to. The latest post is 16th April 2009, which means that the site has been inactive for a year at the time of this research. The fourth section, Sonera News only had three posts and was updated very randomly. The site does not tell how many registered users they have so it is difficult to measure how active the users are in contributing content.

7.2 Elisa

Elisa's corporate site does not visibly promote Elisa's involvement in social media on their front page. Once you know that Elisa Studio is Elisa's site for interaction with customers, you can find the link on the website easily, but if you do not have that knowledge you are forced to look around. The Elisa Studio site then again has direct links to presence in social media: Facebook, Twitter, Flickr, YouTube and RSS-feed. Jere Teutari from Elisa says that even though Elisa sees social media as just one of the many communications channels, in the future they will be redesigning their front page to promote presence in social media more visibly.

Elisa Studio has a fan page in Facebook. The site has 913 fans (30th March, 2010) and

is very active. Wall posts are updated approximately 1-3 times per day almost every day, even on weekends. There are no discussions started, but several events are offered to the fans and photos of the events have been uploaded on the page. The info page provides opening hours and contact information for customer service as well as a link to the Elisa Studio website. Anyone can become a fan. Acccording to Teutari Elisa is also planning presence in Facebook for Elisa Viihde, but this is still under development as Elisa aims at first ensuring they have a functioning concept and something to offer before opening a new fan page.

The tone of the messages is open and friendly. The messages are mainly informative and promote different Elisa events and competitions. The activities on the site are highly engaging and the fans have also activated themselves. Many of the wall posts by the administrators have been commented on or asked questions about and there seems to be a dialogue between the fans and the administrators. There are also a few wall posts by the fans, but mainly they are focusing on reacting to activities by the administrators, not as much being proactive and starting discussions. The content is very diverse and the communication is open and seems to be well received. Negative comments on the site are only a few separate messages that have not resulted in any further commenting. Teutari says that Elisa's policy is not to delete any possible negative comments. Only comments with discriminating or otherwise inappropriate content will be moderated, but a message will not get deleted due to negative remarks on Elisa.

Elisa Studio can also be found on Twitter. It is not very active, altogether 6 tweets in three months and only 6 followers (30th March, 2010). Elisa Studio is not following anyone on Twitter and does not provide much information on itself, not even the website address. It is a public profile, anyone can start following them, but so far they have not been able to attract followers. The tone of the communication is informative and consists of similar messages as in Facebook, promoting Elisa events and Elisa Studio. There are no retweets by Elisa Studio.

Elisa also has a second corporate account in Twitter under the name Elisa Viihde.

Elisa Viihde has 328 followers and is on 5 lists, but is not actively following any Twitter account (30th March, 2010). It is, however, a more active account, being updated 2-3 times per week. It is also a public profile, anyone can start following the account. The tweets are not engaging in the sense of interacting with the customers, but rather informative and promotional. Elisa Viihde on Twitter offers informative and promotional tweets on the functions and changes in the Elisa Viihde service as well as promotes products, movies and other related to the service. The tone and style of communication is straightforward and open. There are no retweets by Elisa Viihde.

Figure 18 Elisa Viihde on Twitter

Elisa Studio is also present in YouTube with a corporate account. However, the account in YouTube is not very actively used. There are 2 video uploads and 3 subscribers and 4 ratings. The videos have been viewed approximately 2,100 times and the channel 285 times (30th March, 2010). It seems that there is interest towards the videos under the Elisa name, but having only two videos is not attractive enough to subscribe. The first video is informative, presenting the Elisa Studio idea and the second more entertainment; a video of fireworks in Helsinki at the opening of Elisa Studio. Commenting the videos is allowed, but currently there are no comments by the

viewers. The videos do not engage viewers into further activity. There is not much diversity as there are only 2 videos and no two-way communication has yet taken place. According to Teutari YouTube presents a challenge to companies in copyrights and therefore the Elisa Studio account has not uploaded more videos.

The Elisa Studio site does not offer any collaboration productions for engaging customers and benefitting from the collective intelligence. The site provides information on the Elisa Studio store located in Helsinki. The site provides a schedule of coming events and the customer can also book a time to talk to Elisa employee at the store. There is also a visitor questionnaire to be filled out and customers can send in photos of themselves. Teutari comments that as Elisa Studio is only a 3 months old concept there is still much development work ahead and all its potential is not yet in use.

Figure 19 The Elisa Studio website

Elisa offers a collaboration production for Saunalahti customers. The base site is called palsta (http://palsta.saunalahti.fi/) and attached to it customer can find a wiki called Saunawiki (http://palsta.saunalahti.fi/wiki/Etusivu). Palsta has 20364 registered members and 44 113 messages under 3426 subjects (30th March, 2010). Its purpose is

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to act as a communication platform for customers. According to Teutari Palsta is the most active user contribution and development site in Finland at the moment. There the customers can communicate with each other as well as with an administrator from Saunalahti. The subjects vary from Saunalahti products and services to those of their competitors. The discussion on the site is lively and messages are updated very frequently. The communication is open and negative comments about Saunalahti have not been deleted. Some moderation is visible, but only due to discriminating messages. Palsta offers interaction and communication with the customers and can be valuable source of information, but is not an actual collaborative production, rather a communication platform.

Saunawiki then again invites customers to work together with Saunalahti administrators to update and add instructions on GSM and Internet subscriptions. A wiki is a collaborative site where anyone has the rights to make modifications, edit and contribute content. During the first visit to the site on 16th March, 2010 the latest modification date was February 2008. However, during the last visit on 30th March, 2010 the situation has changed. Within the time period from 21st March to 30th March the site has been modified several times per day, but often by the same user.

Also Elisa has its own Palsta site (http://palsta.elisa.fi/index.php), also acting as a communication platform. This site has altogether 1305 subjects, 10383 messages and 1830 registered members (30th March, 2010). The discussion is mainly about the technical side of Elisa Viihde, but also about the different functions it offers, its development and other related issues. The discussion is lively also here and both consumers and site administrators post messages, comment and reply to other messages. Palsta also offer a discussion thread for development ideas, and there are over 100 messages in that thread. This thread does not offer any information on whether Elisa offers the customers any rewards for their contribution.

In the interview Teutari talks about the foundations of Elisa's activities in social media. Involvement in social media is encouraged, but also regulated in the sense that it is predefined who have the rights to administer corporate presence. Currently Elisa

is developing a code of conduct for its the presence in social media. Elisa's social media strategy is currently trial and error, conducted by marketing together with the business functions. They have not set any concrete objectives but are rather using social media as one channel among others. A process for measuring and following online discussions concerning Elisa is also under development.

Elisa does not have a corporate blog and the reason behind that according to Teutari is that publicly listed companies are required to follow strict rules and these would limit blogging. Teutari sees Facebook has an excellent marketing platform, but at the same time feels that people do not use social media to connect with brands. Elisa's aim is to make social media a better experience for their customers and interact with them. Elisa has received many initiatives from their customers, but in the end Teutari says that the engaging activities have not been able to activate that many customers and the direct benefits have been few. The next big thing for Elisa in social media is to teach users the Elisa way of working and take that also as a part of the company's resource planning and business development. Elisa uses social media also internally for communications and is planning on implementing social media solutions in their business-to-business environment.

7.3 DNA

There is no presence in social media to be found under the corporate brand DNA. However, their latest marketing campaign called "The Virtanen Band" has taken its place in social media. The Virtanen Band has their own campaign site at https://www.thevirtanenband.fi/ and they have their own fan page in Facebook with 1643 fans (30th March, 2010). The wall posts have been updated fairly actively (approximately once per week) during the campaign's peak, summer 2009, but the updating frequency has since decreased and the wall is currently updated approximately every third month. The fan page offers links to the band's profile on MySpace, the video on YouTube, a link to a free ring tone and a link to DNA's website with promotions. The Info page provides a short description of the band and their website address to MySpace.
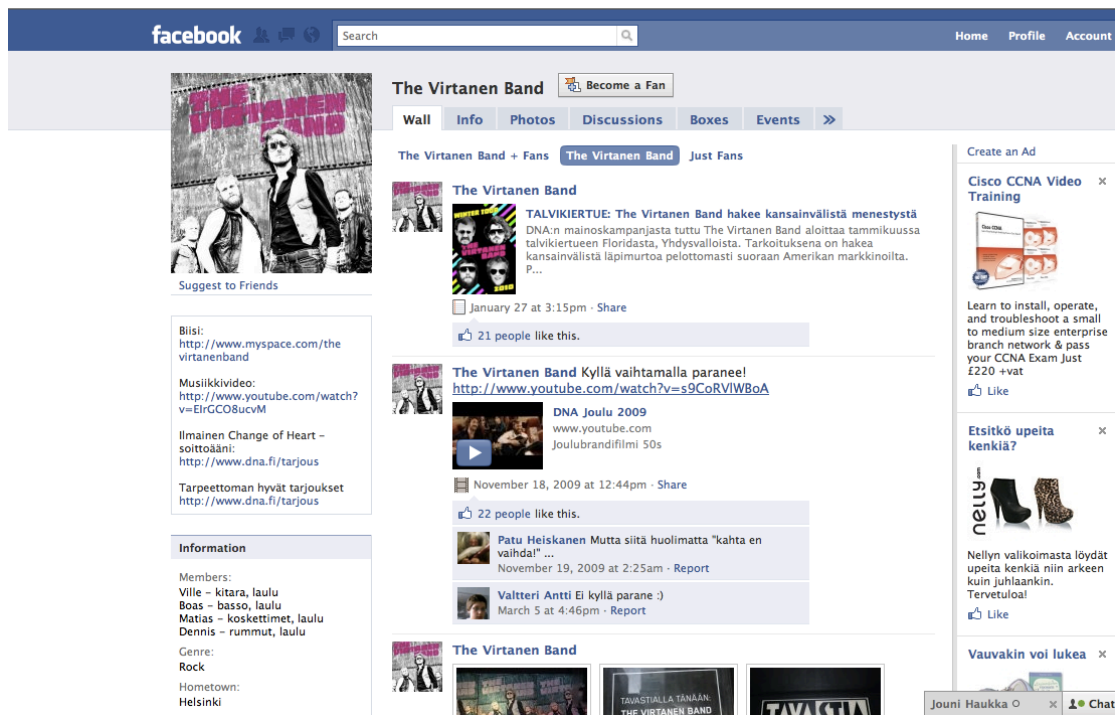
Figure 20 The Virtanen Band fan page on Facebook

The administrators have uploaded 51 pictures and there are 9 past events. No discussions have been started. The tone of the wall posts is informative and promotional, providing information on the success of the band and links to related competitions and videos. The content is diverse and the activities on the fan page are engaging. Fans have actively commented on the posts and also posted their own wall posts and questions. There are no replies from the administrators to the comments and questions of the fans. Knuuttila confirms that this campaign was a trial for DNA in social media and no deeper interaction with the fans can be expected at this point. He continues on to say that the benefits have so far been minimal, but the company has learned many lessons to be used in future social media strategies.

Knuuttila sees the company involvement in Facebook risky due to the platform's continuous changes to its structure. To be able to attain benefits from Facebook presence, a company must be able to differentiate and provide customers with real value. According to Knuuttila DNA has an interest in corporate presence in social media as well, but is currently only involved via The Virtanen Band since any presence requires careful planning and resources. The Virtanen Band is not present in

Twitter, but Knuuttila confirms that if the number of users increases to a high enough level DNA will also consider presence, both corporate and campaign, in Twitter. He continues on to say that most probably the strategy would still be the same i.e. start learning with a campaign presence and continue from there to corporate presence.

The Virtanen Band has an account in YouTube. The account has 51 subscribers and 3 uploaded videos. The account has been viewed 2218 times and the videos altogether 34555 times. There are 215 ratings of videos. (30th March, 2010) The content is not very diverse, two of the videos are the music video "Change of Heart" by the band and the third is the DNA commercial in which the song is played. The viewers are free to rate and comment the videos and every video has also been commented on. The account administrators have not commented on the comments.

Mikko Knuuttila from DNA's marketing confirms that currently the only presence in social media is via The Virtanen Band campaign. The company does not have corporate blogs, nor do they have a collaborative production with their customers. Some experiments with crowdsourcing has been done previously, but at the moment none of them are active. DNA uses social media tools in recruiting as well as internal communications. DNA has set up a virtual team that involves employees from different parts of the company. The team's task is to develop DNA's social media presence further. Knuuttila says the company has continuous planning on their next step in social media, but is unable to say exactly where it will be, due to company confidentiality.

7.4 Analysis of the results

Variations between the companies' involvement in social media are clearly visible. All three companies have presence in social media, but their adoption and interaction levels vary from each other. Both companies interviewed talked about the unknown future of social media in business and both also had plans to deepen their involvement in the coming years. There are many risks seen in using social media for business purposes, but at the same time the potential it offers attracts businesses. The results

will now be analyzed in terms of the adoption levels, the interaction activities and possible future development proposals for the three case companies.

All three case companies have adopted social media in their business to some extent. Looking at the variety of using the tools chosen for this research, none of the companies has adopted all of them. Elisa has adopted the most tools, having a presence in Facebook, Twitter and YouTube, and a small-scale collaborative production, the Saunalahti Wiki. Sonera has adopted Facebook and has a collaborative production with corporate blogging. DNA is currently present is Facebook and YouTube. The level of adoption cannot only be measured by simple presence alone, but the level of activity within that presence must also be taken into account.

7.4.1 Sonera

Sonera has a wide presence in Facebook. The most active and interactive of all the fan pages and groups seems to be the TeleFinland fan page. There the administrators are communicating and interacting with the fans instead of simple one-way communication. A passive presence in social media does not realize benefits, at its worst it can even harm a company. Sonera should reconsider its social media involvement as at the moment it is built by individual pieces that do not form a total view. At the moment their presence does not follow any logic and thus is lacking in simplicity. Creating a concept or a few under which the social media presence in every tool could connected would make it simpler for customer to understand and follow. The concentration of resources is also important. It is more beneficial to have one Facebook fan page, fully active and communicating with the fans than have several that are only partly functional.

In addition to its fan page activities Sonera has also found a way to interact with customers in Facebook via an application. The SMS application provides value to customers and is an easy way to get your own customers promoting your brand for you. The application also seems to be well received by customers as number of users is increasing. However, the application fan page lacks interaction between the

company and the fans. Here is a contact point to the customers. If a company opens this channel, they should be prepared to also use it. This is what customers expect and if not done properly, the result can easily be disappointed customers thus worse than before implementation.

Sonera falls into many of the roles in the company social media participation ladder, one of them being a creator. Sonera acts as a content contributor in its AIVO blog. They also have some content in Facebook, but to a limited amount. The AIVO site collects customer ideas for possible further use in for example product development. The site clearly represents an idea of a community, but at the moment it cannot be said to function fully in that sense. The communication is still fairly random and the collaboration between members and between the company and members is fairly limited to simple commenting instead of truly taking advantage of collective intelligence.

Sonera is more than a passive joiner; they are offering their customer open and honest communication and interaction to some extent. Sonera can thus be said to be something between a conversationalist and a communicator. They have been able to get the customer involvement and should now concentrate their efforts on truly interacting with them. The AIVO site among the other tools provides a platform for his interaction, but it requires investments in time and people. The customers quickly lose interest if they do not see the company contribution. Sonera should take a more active role in the communication and find new ways to engage their customers.

7.4.2 Elisa

Elisa is fairly active in the tools it has adopted. YouTube and the second Twitter account are exceptions, but for example the Facebook fan page is very active. Instead of a simple passive presence, Elisa is actively building two-way communication and interacting with their customers. Their message includes also the informative and promotional side, but it is incorporated into a dialogue between the company and its customers. They are also contributing content to some extent and according to the

interview also following social media closely and collecting valuable information. They are thus at the highest level of the ladder, taking the active role of communicators.

Elisa has clearly been able to build a sense of community in the tools it uses, with the exception of YouTube. The presence is built around the customer's needs and interests and activities aim at providing added value to the customers. Customers have also reacted very positively to the activities of Elisa. The communication is open and honest and the presence has been kept simple with only one fan page in Facebook, two Twitter accounts and one YouTube account. Building presence around the Elisa Studio concept makes it easier to follow and links all the tools together.

Elisa is building a dialogue with its customer in Facebook, but has not yet incorporated true collaboration into the Elisa Studio concept. Elisa Studio relies heavily on the physical presence in the Studio Store. Building a strong sense of community in its web community reaches more customers and spreads the message further and faster. Elisa Studio concept could also easily benefit from the collective intelligence of its customers by adding collaborative production features. It could function as a discussion platform, but also offer the possibility for the users to give their input and use their creativity in developing the company's business further. By increasing customer involvement in this way, also the quality of the network would improve thus attracting new users.

7.4.3 DNA

Out of the three case companies DNA was the least active in social media. The company has a presence via a campaign, but no actual corporate presence. The presence is also limited to two tools and the activity level in both has decreased with the end of the active campaign. Even though the band and the campaign itself are liked among customers, there is no sense of community nor is it easy to say what is the actual value provided to the customers via social media. The presence could also be wider including more tools than Facebook and YouTube. DNA is more active than a

simple joiner with passive presence, but in the future the company should also take a more active and interactive role than that its current role as a conversationalist.

DNA's presence in Facebook and Twitter via the Virtanen Band is informative and promotional. As according to the interview also at this stage the company has no aim of being interactive, but rather its current presence is a trial campaign. One-way communication is thus preferred. DNA is more active in content contribution than its competitors are in that the Virtanen Band fan page has more pictures than any of the other pages, groups and accounts in this research. However, uploading of photos does not yet make DNA a creator, especially since they are not publishing a corporate blog or contributing actively in other ways.

DNA's strength in its presence in social media is simplicity. The presence is made simple and logical by building it around the Virtanen Band. It includes, however, more traditional marketing messages than truly customer-oriented, community activities. The communication is open and honest, but the value to the customers is not clearly presented. It seems that DNA's communication compared to Sonera and Elisa lacks in understanding and taking the target group into account. The quality of the network is still rather low as two-way communication, company contribution and customer involvement are underdeveloped. In future activities increasing the interactivity level is essential in order to create a sense of appreciation to the customers and to engage them.

7.5 *Research validity and reliability*

Research validity refers to the research methods measuring what they were designed to measure (Hirsjärvi, 2009). In this research the research framework and focus points were designed based on a number of theories on social media and its usage in business and a number of widely known theories on user acceptance of technology. The main attributes of these theories were combined together to support each other and to ensure that all the main aspects of social media adoption and interactivity were considered.

It can be said that the validity of the research is at an acceptable level as the research framework builds upon specific attributes of earlier research and theories of social media in business today. The attributes chosen have been proven to be applicable measures to study social media and the user acceptance theories have also been widely used to study customer acceptance of new products and services in different industries.

Reliability refers to the results being repeatable in case the research was to be conducted again (Hirsjärvi, 2009). Due to the rapid development of both the social media environment and tools as well as the case company involvement in social media repeating the research in the future may not necessarily provide similar results as were obtained in this research. However, was the research to be conducted again in using the same data as was used in this research (i.e. the situation of the adoption and activities during this research) the results would be repeatable. Thus it can be said that also reliability of this research is at an acceptable level.

7.6 *Limitations to the research*

This research like any other research is not without limitations. To narrow down the research to a reasonable size, decisions have been made concerning issues to be included and issues to be left outside this research. The first of such decisions was the choice of the industry. Telecommunications industry was chosen due to its history as a forerunner and its obvious linkage to communities, having a strong background in the usage of network effects. Results in some other industry are not directly comparable and most probably would also vary greatly from those of this research.

The second large decision was the choice of the tools as objectives of this study. During the course of this research, other social media tools used by the case companies have appeared. However, this research aimed at looking at some of the most used tools in Finland and not the whole of social media possibilities. Narrowing had to be done to ensure focus and comparability between the three companies.

The third limitation to be looked at here is that the research was conducted concentrating mainly on the company side of activities. Conducting a study among the users and participants of the social media tools and especially the communities provided by the case companies would have provided valuable information on the user side. This information could have especially been of help in formulating development proposals for the future activities of these companies. However, due to the scale of this research it was not possible to include another research element and thus a decision on focusing on the company activities was made.

7.7 *Implications for future research*

This research provides a broad view of the activities of the three case companies in social media aimed at reaching and interacting with their customers. However, as indicated already before, the field of social media is rapidly evolving and companies are increasingly taking part in it. This research could be continued in the future with a follow-up research of if and how the activities of these companies have evolved.

The limitations above also provide ground for future research. More or different tools could be chosen as objectives and the research could be conducted in different industries to see the variations. Future research could also include the customer side to balance off what the company activities appear to do and how they are actually received among the customers. It would also be interesting to learn more about the reasons behind company decisions on tools and activities.

During the course of this research with both companies interviewed, Elisa and DNA, it became clear that social media tools are used more widely for internal purposes than they are externally to reach and interact with the customers. In the future research could also concentrate on issues behind this phenomenon. The research could look into the reasons behind the wider internal use than external, the difference of tools between internal and external and the possibilities of partly combining internal and

external or at least benefit from one another.

8 Conclusions

The efforts of the three case companies invested as well as their approach in social media seem to differ somewhat from each other. Even though for example Elisa is at a high level on the participation ladder, the active use of several tools together as a combined whole channel for marketing efforts is still lacking for all three companies. Some development in the companies' activities as well as customer interest could be seen during the observation period and thus it is possible that as the companies have only recently begun their activities, the situation can be very different for example a year from this research.

All three companies are present in Facebook, which is the most known of these tools based on the statistics of Internet traffic. This research does not, however, go into the reasons behind the companies decisions on the tools chosen and activities conducted. It would seem that Facebook is seen as either a safe tool or a good platform for company activities as it is widely adopted by companies also outside this research. Facebook is also seen as an attractice tool due to the mass of users it has attracted and is able to offer to companies.

Creating a profile or a fan page in Facebook is fairly simple. However, to be able to offer added value to the customers and make them interact out of their free will is a challenge. Once customer interest has been ensured, a company faces the challenge of making the interaction continuous as well as beneficial to both parties. As, in today's world, the consumers' concentration span is very short and on the possibilities to choose from very wide, a company must be able keep the interest up or it faces losing its customers and their interest in the company's message.

For a mass marketer such as a telecommunications company reaching a large base of customers is essential. When considering Twitter, it does not yet necessarily offer a large enough user base in Finland for it to be an attractive channel for these

companies. At the moment it seems to be more appropriate for use as a secondary channel on the side of other social media channels. The message can be the same making the maintenance of the site fairly simple. This strategy can both strengthen the message to customers following other channels as well as reach customers outside the reach of other tools.

YouTube faces challenges in intellectual property rights management and does not offer the best of platforms for discussions. However, a marketer must note that it is one of the most popular medias in social media with a strong viral effect. In YouTube it is possible to see a video of the plane landing in Hudson before the story can be heard from the evening news. YouTube is a platform for content contribution and distribution. However, even with the offering it has for companies as a marketing channel, it has not yet reached success in corporate use.

Corporate blogging is used for internal purposes at Elisa and DNA, but so far has not been opened to the outside public. DNA has had corporate bloggers before, but after an incident in 2005, when the views of a blogger and the company did not meet, DNA first reacted by deleting the blog post and later by deleting the whole blog. After that public corporate blogging has not been in use at DNA. Elisa is yet to try corporate blogging. According to Jere Teutari one main reason behind this are the rules set for public limited companies. Sonera has a corporate blog, but fails to update it frequently enough, even with 9 bloggers. Blogging thus seems to not be able to attract telecommunications companies either.

There are known success stories of companies using crowdsourcing to their benefit, but with the customers in mind, such as Lego Mindstroms. In this research, from the three case companies, Sonera is a forerunner with its AIVO service. AIVO is, however, not showing signs of success yet. It seems it had an active start but has since faded away losing the interest of both the customers and the company. Elisa has an active discussion forum and its Wiki site is fairly popular, but the company still concludes they have been unable to reach real benefits. Collaboration between a company and its customers can be very complicated, but when able to turn into real

interaction can mean a company's new competitive edge. The Finnish telecommunications industry still has lessons to learn in this as well.

Even though by observing the activities of Elisa in Facebook it would seem that they have truly engaged their customers, the company says they have not been able to gain visible benefits from their presence in social media. Comparing marketing activities in for Finland and the United States, interest and faith in the benefits of brand building becomes a dividing factor. In the US brand building is considered essential and vast resources are directed towards it. In Finland financial and other resources from the marketing budget are expected to reach direct gains in sales, customer contacts or other quantifiable figures. Social media then again offers possibilities especially in brand building and does not function as straightforwardly as traditional marketing. The benefits from interacting with your customers may not realize instantly, but build towards customer and sales increase in the future. Social media not meeting the traditional expectations of Finnish marketers may be a factor behind the fairly passive role and attitude of Finnish companies in social media.

This thesis examined the Finnish telecommunications industry's activities in social media. The results of this research cannot be generalized to other industries in Finland, nor can they be generalized to the same industry in other countries, as there are certainly wide differences in both. Marketing activities in general differ between companies, industries and countries and with social media still being in development these differences become even clearer. In the future as social media gains more corporate popularity, the differences diminish as companies more widely accept and implement social media marketing.

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