TAMPERE POLYTECHNIC

BUSINESS SCHOOL

FINAL THESIS REPORT

THE UTILIZATION OF BLOGS, WIKIS AND RSS FEEDS IN THE ORGANIZATIONAL COMMUNICATION OF PUBLICLY LISTED INDUSTRIAL COMPANIES IN THE TAMPERE ECONOMIC AREA

Case companies: Nokian Tyres Plc and Glaston Corporation

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ABSTRACT

During the last couple of years one of the most profound reformations that have been actively transforming the day-to-day business, communication and societies in general is the rapid increase in the number of open and collaborative communication mechanisms and methods.

Simultaneously organizational boundaries are loosing at least some of their significance and people are encouraged by organizations and managers to collaborate and participate intensively, interactively and openly. Organizations have realized the potential innovation power and resourcefulness that lies within their employees and other stakeholders also.

It has now also recently surfaced that by developing and adding new communication mechanisms organizations are able to make the communication and operations more efficient and simultaneously save economical resources and increase the effective working-hours.

This study focuses on two industrial publicly listed companies that are located in the Tampere economic area: Nokian Tyres Plc and Glaston Corporation. The aim is to introduce the different aspects that those companies have needed to take into account when planning the preparatory and concurrent measures for the utilization of Web 2.0 based communication methods, particularly focusing on blogs, wikis and RSS feeds.

In the thesis, the concept of Web 2.0 is circumstantially introduced in order to be able to manufacture a comprehensive information package that can be further used as a part of the consultancy services of viestintägran ky, which is the communication company, the client and my current employer.

A qualitative research method was used to conduct and study the use of blogs, wikis and RSS feeds in Nokian Tyres and Glaston Corporation. Theme interviews were conducted to the persons who are experts in their field and responsible for the Web 2.0 applications in their organizations. The final analysis was made on the basis of the abundant answers

Based on the research the utilization of blogs, wikis and RSS feeds is still in the prelude phase but both companies announced that development plans have been made in order to keep time with the business environment of the 21st century. Companies are actively striving towards boosting their communication, making the current methods more effective and introducing new mechanisms and simultaneously reaching a wider scope of stakeholders in the near future.

Keywords: Blog Wiki RSS feed Organizational Communication Web 2.0

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1. Introduction

Communication is essential in the business world. The transfer of ideas, orders, instructions and messaging has always been the lubricating force in the wheels of any organization. Managers are traditionally used to spend a vast majority of their time communicating internally or externally in one form or another. The communication has occurred in the form of business meetings, face-to-face discussions, memos, letters, e-mails, reports, etc.

In today's business world, however, a growing number of employees find that a vital part of their work is communication. Especially nowadays when service workers outnumber the production workers and research. As well as production processes strongly emphasize greater collaboration and teamwork among workers in different cross-functional groups, which is essential for innovations.

Moreover, a structural change, may even be named as a paradigm swift, in communication technologies has been a major contributor to the transformation of both work and organizational structure. Because of these various reasons, different communication practices and technologies have become more important in all organizations, but they are perhaps most important in knowledge and technology intensive organizations.

The early days of Internet in the late 1980's and early 1990's made it possible for companies to publish information about their companies in the world wide web. Now, in the 21st century we are living already living in the world of Web 2.0, the next generation of Internet. If Web 1.0 was about "publishing and browsing", this read-only Internet of yesterday is becoming a venue where knowledge, human resources and computing power of billions of people a becoming a vast collective force.

All this chance is occurring via different platforms of participation: personal blogs, company wikipedias, chat rooms, personal broadcasting, podcasts, RSS-feeds. Within companies there exist extensive collective forces which can be enormous contributors to the benefit for companies, monetary or non-monetary, when harnessed with care and given the opportunity to bloom

According to A.G. Lafley, CEO, Procter & Gamble (as cited in Tapscott & Williams, 2006, p.1), "No company today, no matter how large or global, can innovate fast enough or big enough by itself. Collaboration – externally with consumers and customers, suppliers and business partners, and internally across business and organizational boundaries – is critical."

A.G. Lafley illustrates a crucial point; mass collaboration is the next step where companies must open up their boundaries to them selves to the world in order to achieve higher potentials. There exists vast amounts of potential outside the company borders but also within the companies there exists dormant potential within the workforce – that has not yet to be harnessed in more effective use.

For this thesis Nokian Tyres Plc and Glaston Corporation were chosen as case companies due to their interest towards this topic. Both companies have taken the initial steps towards Web 2.0 inspired communication methods in industries that are not knowledge-intensive by nature.

1.1 Background of the research

I did my work placement in year 2007 in the field of marketing communication. While I was working there I paid attention to the fact that the term Web 2.0 was gaining foothold in the everyday conversations and in the media also. I was intrigued by this concept that was new to me.

After my work placement I was able to land a job in a communications company called viestintägran as a communications consultant. Also my final thesis became of common interest and me and the owner, Kaisa Kaipia-Gran, started scanning different possible topics in April 2007. It did not take long before we were both convinced about the interestingness, novelty and prospects of Web 2.0 in organizational communication.

Viestintägran is interested in Web 2.0 for the benefit of its clientele. Viestintägran is a dynamic communications and PR-agency and tentatively planning to add Web 2.0 based communication consultancy packages to the service offering. The purpose of this research is to explore what are the possibilities that Web 2.0 can offer to companies and to see how well the companies have already utilized those possibilities in their internal and external communication.

It is already a known fact that some companies use different kind of blogs and company specialized wikipedias. The main function is in their communication and training for both old and new to the company employees and to communicate with the outside world.

The fact that both case study companies, Nokian Tyres Plc and Glaston Corporation, are both publicly traded means that they already have the responsibility to communicate more openly and actively with its shareholders and stakeholders. Here the thesis can possibly demonstrate whether those companies still have some areas where they have not totally been able to discover all the communicational potential of Web 2.0.

1.2. Purpose of the research

The purpose of the research is threepartite. Firstly, the research is to discover what is Web 2.0 in practise and why has it become a hype-like phenomenon both in business and private live of individuals. The focus in this research is on the corporate level.

Secondly, as mentioned earlier, Viestintägran is interested in Web 2.0 for the benefit of its clients. As it is stated in the mission statement of the company (Viestintägran website, 2007) “The ultimate goal is to help our clients to succeed with the means of communication and PR”. Web 2.0 represents a new, up to date, way of performing communication and as a company Viestintägran is pursuiting to acquire more information and eventually knowledge to aid the clientele with the challenges and opportunities of modern day communication.

Thirdly, The purpose of the research is to decipher whether there possibly is a potential market niche for the Web 2.0 based communication consultancy services and therefore for the expansion of the viestintägran's service offering. For instance, organising presentations like 'Web 2.0 in internal communication' for companies.

This potential market niche will be analyzed by concluding a set of theme interviews with the e-Communication Managers of the case companies or with the certain person made responsible for the development of Web 2.0 based processes.

In order to draw conclusions it is vital to know what kind of Web 2.0 based services companies apply and for what reasons. What is the justification for their implementation? What have been the results like and do they recommend Web 2.0 based applications also for other companies?

Important aspect is also that if a company has not yet totally utilized Web 2.0 in its communication toolbox but can see the possible advantages that wider could potentially offer. They have the ability to put in to words the potential they see in Web 2.0 related to corporate communications.

The group of companies that possibly do not use Web 2.0 based Internet solutions are similarly important to take into account. The reasons may lie in the unawareness of all the achievable advantages or that the companies think that the Web 2.0 services are lacking something of crucial value.

The research and analysis are to be made customer based, in other words reflecting the needs and demands of the potential target group. If the results are seen promising this thesis will accommodate to make further marketing and service plans considering the potential Web 2.0 consultancy.

1.3 Research problems

The intention of the research and this final thesis is to answer the key question of **how and in which amplitude is the utilization of blogs, wikis and RSS feeds concluded in the external and internal communications of the publicly listed industrial case companies.**

The research and analysis will also answer the following sub questions:

1. How is the internal and external communication managed in the case study companies

2. What are the underlying reasons for the utilization of blogs and wikis and RSS feeds in organizational communication?

3. What are the general key aspects considering Web 2.0 consultancy services?

This thesis will also function as a comprehensive information package for companies and people who are interested in the utilization of Web 2.0 in organizational communication.

1.4 Research Methodology

Qualitative research methods were used in conducting the research. According to Denzin & Lincoln (2000, p.19) qualitative research is a research method that measures the information based only on opinions and values as opposed to the statistical data represented by quantitative research. Qualitative research is a collection of primary data gathered by observations, interviews and document reviewing.

Qualitative research methods were chosen for this final thesis due to the small number of respondents and the theme interview method used in the interview process.

Web 2.0 is relatively new-to-the-world concept; it came to the awareness in 2005. There is not so extensive amount of literature in terms of the subject. The concept of Web 2.0 is evolving and even the ‘established interpretations’ can change. The most reliable sources of information about the Web 2.0 (Ahonen, 2007) are in the internet and often written by the experts in their blogs and in Wikipedia postings.

Theme interview method is half-structured interview by its nature. According to Hirsjärvi & Hurme (1980, p.49-50) four different, characterising elements can be separated from a theme interview. Firstly, a theme interview is broadly-based by allowing the informants to announce all the relevant aspects of the phenomenon or matter at hand.

Secondly, the answers of the informants should be as specific as possible. Thirdly, a theme interview always aims towards profundity, that is, aiming to find out what are the affective, cognitive and evaluative implications that informants allocate to the phenomenon or matter at hand. Fourth typical feature of theme interview is the informants’ personal background check in order to be able to proportion the answers to research’s actual context.

A theme interview can be thought as a half-structured interview due to the fact that the subject matter and theme are limited, but the strict form and order of the questions does not exist. (Hirsjärvi & Hurme, 1980, p.49-50)

In this research a theme interview method was chosen because that offers a possibility for more in-depth answers by not limiting the answer to check boxes or on a few text lines. With theme interview it is probable to detect new follow-up questions during the interview according to informants' answers. The use of a blank question form would have been excessively one-sided and not comprehensive enough. Theme interview also enables the research to obtain a closer outlook on informants' own point of view – not from the one of the interviewer's.

1.5 Structure and limitations of the research

This research and thesis is divided into four parts. The first part focuses into the background and purposes of this thesis.

The second part of this study is made up of the theory concerning organizational communication as a whole and followed by the Web 2.0 theory. This approach is natural because organizational communication is a large-scale entity and these new Web 2.0 based communication applications, blogs and wikis, are new ways of concluding communication in organizations. Blogs and wikis belong to the communicational entity.

In the third part of this thesis the case companies, Nokian Tyres Plc and Glaston Corporation, are introduced. Information about the companies' business focus, personnel, markets, products and services, customers, products, sales and history are briefly discussed in order to give a picture about the operating environments of the case companies.

The fourth part of this thesis has results, analysis, conclusions and suggestions for further development on the basis of the conducted theme interview.

As this final thesis focuses on Web 2.0 and its utilization in real life business communications there were several limitations that affected the execution of this study. As discussed earlier, due to the fact that Web 2.0 is really recent as a concept the amount of written theory on the matter is vastly limited and there still is no crystal clear definition for the Web 2.0. As Tapscott & Williams (2006, p.19) state that some people call it the living Web, the Hypernet, the active Web, the read/write Web but no matter what it is called – the sentinent is the the same in every case. Tapscott & Williams (2006) write, "We are all participating in the rise of a global, ubiquitous platform for computation and collaboration that is reshaping nearly every aspect of human affairs" (p.19).

The concise amount of credible reference material is a limitation. The fact that Web 2.0 is a new concept and evolving throughout is the reason for the reality that there exists no lapidary definition for the "Web 2.0 institution". At the same time that can be thought to be a limitation or a handicap but it is also highly inspiring. The possibility to study and do research work about something that has not yet even reached its full potential and public awareness is interesting and challenging.

Since business blogging has not yet intensively begun to feature as a research topic in academic journals and books, the material reviewed will largely consist of articles and writings retrieved from popular business blogs and business websites. The blog postings are from persons that already have established a trustworthy reputation in the field of Web 2.0 and communication.

The exact term, “Web 2.0”, descends to end of the year 2004 when Mr. Tim O’Reilly had an idea generation meeting together with Mr. Dale Dougherty, web pioneer and O’Reilly VP, about forthcoming seminar and book topics. They started to compile a mind map about the exciting new applications and web sites that were coming into public awareness on a regular basis. Mr. O’Reilly and Dougherty thought that the overall situation started to seem highly interesting even revolutionary. In their opinion it seemed like the whole Internet was been updated to a new version. Having that in mind they decided to name this state of change as “Web 2.0” and Web 2.0 conference was born. (O’Reilly, 2006)

It must therefore be recognized that there is reliable reference material written by Mr. Tim O’Reilly. Other writers also deal with the subject “Web 2.0” but they are continuing the thoughts and ideas of O’Reilly. Other writers that are cited in this thesis concerning Web 2.0 have at least somewhat originated their ideas from Mr. O’Reilly – the originator of the notion “Web 2.0”.

“Wikinomics – How Mass Communication changes Everything” by Tapscott & Williams (2006, p.3.) is a product of collaboration. They have conducted several extensive multiclient researches in order to understand how the Web 2.0 alters the company. The purpose of the research has been to reveal the facts how companies innovate, market, compete and build relationships – both long term and short term.

Tapscott & Williams (2006, p.3) state that altogether they have raised $ 9 million during the time span of year 2000 - year 2005. In the researches they have studied (in 2000-2001) mobile and pervasive Web and its impact on different business models, (in 2003) Web-enabled transparency as a force to cultivate powerful networked businesses and trust. Lastly, in 2004-2005 they focused on how this new technology and collaborative models can change business formats and competitive dynamics.

All the researches were funded and sponsored by large and global corporations, which obviously is a message from the companies that the matter is momentous and prominent. The substance and depth of Tapscott’s & Williams’ study makes it a credible and impressive reference material and therefore is cited and referenced in this thesis.

2. Organizational communication

> "Communication is a capacity, a resource. To a working community it is as important as employees, machinery, equipment or money. Thus, communication requires to be planned, executed and supervised as carefully as any resource of an organization."
>
> Leif Åberg (1997, p.9)

Managers have traditionally spent the majority better part of their days communicating. Business meetings, personal face-to-face discussions, e-mails, memos, letters, bulleting boards, press releases, interim reports etc. have been considered to be the traditional form of communication.

According to Itävalko (1995, p. 59-74) staff meetings, press conferences, internal TV, internal radio, telephone news, CEO's review, press releases, e-mail, bulletin boards, leaflets and personnel magazines are the traditional internal communication channels in organizations.

However, the employees of today's businesses are faced with the situation that communication has become even more important and that the toolbox of communications has received new tools inter alia, wikis, blogs and RSS-feeds.

The opinion of Åberg (1997, p. 31) is that a functioning communication system is a prerequisite for a purposeful work in an organization. Not a single organization can function without communication because then the members of the organization are not aware of for example, the goals, division of labor and feedback, which are all essential.

According to Åberg (1997, p.31) organizational communication is a tool for the organization to use. It is a vehicle that connects the different parts of the organization together and eventually the whole organization to its environment. Åberg (1997, p.31) accordingly highlights the role of technical equipment in organizational communication. For example, computers, online networks and office technology are widely used.

But how does organizational communication differ from the communication between two individuals or from the communication of small groups? Åberg (1997, p. 31) indicates that organizational communication is practiced in organized surroundings that reflect to the communicational arrangements. According to Åberg (1997, p.31) organizational communication is also purposeful and goal-oriented. Besided the individual goals the organizational communication supports the fullfillment of organizational goals.

The opinion of Åberg (1997, p.31) is that organizational communication is an entity that consists of communication channels, communicational arrangements and communication roles and instructions. The structure of the organization also influences the communication because organizations are sustained by communication

2.1 Communication process

What is communication process actually like? Åberg (1997, p.27) states:

> "Communication is about conveying messages between the sender and receiver. Communication is an event, a process of exchange. Messages are exchanged between the sender and receiver."…"A message is a combination of signals that form an meaningful entity. A signal is any kind of set of stimulus that initiate cognitive events within the receiver, for example thinking, assumptioning or remembering. Signals consist of symbols that are for example, sounds, spoken language, letters, computer language and traffic signs".

Åberg (1997, p. 27) also draws attention to the fact that a message is informative when it decreases the amount of uncertainty consering the situation. A message holds information. The level of messages' informativity varies depending on the content of the message, previous knowledge of the receiver and the communication situation.

Itävalko supports a similar view about communication process (1995, p.11), "Simply put, communication process is about sending and receiving information". "The communication transaction is a complex interaction between the sender and the receiver. Many unexpected and unknown aspects are attached to the transaction inter alia, the backgrounds of both participants, prior experiences, communication situations, changes in the environment and amplitude and obscurity of the messages".

Message and medium

Itävalko (1995, p.12) has indicated that the key factor of the communication transaction, or process, is the message. In order the message to reach the recipient a channel or medium is needed. Itävalko (1995, p.12) correctly highlights that the decision upon the right communication channel is essential when aiming for efficient, understandable and timely communication.

On this basis it may be inferred that a wrong decision could vitiate the whole message if for example, a message does not reach the respondents in sufficient time. Given this evidende it must me commented that now in the era of information technology the timely communication is not such a big challenge for organizations. Inter alia e-mails, instant messages, wikis, blogs and text messages have diminished the just-in-time challenge.

Noise

Itävalko (1995, p.12) reports that a complicating factors that often influences the quallity of the reception and the feedback are noise and other communication barriers. According to Itävalko (1995, p.12) these disturbing factors can never be totally eliminated because a communication process can not be isolated into laboratory conditions.

Itävalko (1995, p.12) highlights the fact that eventhough the disturbing factors can not be totally eliminated with the help of careful communication planning the adverse factors can be set to minimum.

Fill (2005, p.41) has expressed a similar view, “noice occurs when a receiver is prevented from receiving the message. This may be because of either cognitive or physical factors. For example, a cognitive factor may be that the encoding of the message was inappropriate, so making it difficult for the receiver to decode the message”.

An example of phycical distraction factor by Fill (2005, p.41) is that a receiver may have been prevented from decoding the message accurately because the receiver was distracted by a ranging telephone or a cough in middle of a tele conference. Fill (2005, p.41) also brings forward a matter when competing messages possibly could screen out the targeted message.

The evidence seems to be strong that there will always be some noise present in all communications. But it is the role of a management to try to keep the noise volumes to as minimum as possible in all forms of organizational communication.

2.2 Different communications strategies

Itävalko (1995, p.12) states that “organizational communication is a resource, an instrument and an opportunity to manage various situations”. Itävalko (1995, p.13) has drawn attention to the fact that that coarsely outlined organizations can be limited in four different categories based on their communication strategies: active communicator, reactive communicator, passive communicator and mixture comminicator.

Active

Itävalko (1995, p.13) continues that an active communicator has “outlined goals and a supportive program for their communication. The fundamental idea is that the organization always aims to be the first one to announce every piece of information considering their actions and thus influence organizations external image”.

Reactive

According to Itävalko (1995, p.13) an reactive organization does not plan their communication at all, but openly discusses their business and all the relative matters when somebody enquires.

Passive

Itävalko (1995, p.13) notes that an passive organization is actively avoiding to meet and share information with anyone else than the closest stakeholders. If some instance shows interest the organization withdraws itself all together and refuses from all collaboration.

Mixture

Itävalko correctly indicates that (1995, p.13) in addition to these three basic types there naturally exists also a number of intermediate forms. A same organization can also adhere to different forms in different situations. Itävalko (1995, p.14) also stresses the fact that organization’s communication needs and styles may differ depending on the phase or cycle the organization is living or what is occuring in the business environment.

According to Itävalko (1996, p. 14) the need for communication accelerates for example when there is a change in the organization or when the whole branch of business changes. The new organization or community needs conspicuousness creation and an old organization needs for example support and possibly alteration for their organizational image.

The changes that are occurring outside the organizational borders, for example caused by the European Union, often influences organizations' communication by addressing the need for more active procedures (Itävalko, 1995, p.14).

2.3 Communication goals

Itävalko (1995, p.14) divides communication functions into two different groups: short-term goals and long-term goals. Those different goals are not exclusive but influencing concurrently. It is accentuated by Itävalko (1995, p.14) that it is vital to acknowledge the appropriate procedures for both short term and long term goals. It can take many years to create a profile for an organization, product or service but only a few months to bring new product to market.

The short-term goals need to support the long term goals. Itävalko (1995, p.14) perceptively states that the short-term goals are mere components on the way towards greater goals and objectives.

According to Åberg (1989, p.63) there are five basic reasons why organizations communicate:

- Support of the core activities
- Profiling of the organization
- Informing
- Socialization
- Interaction

Supporting

The opinion of Åberg (1989, p.63) is that communications is needed in the production process of products and services and while transferring them to customers. The support of activities is the most important form of organizational communication. If this 'operative communication' does not function even adept public relations or internal communications can not replace it.

Itävalko (1985, p.14) supports Åberg's view and states that the support of activities contains the operative working instructions and external and internal marketing. The fundamental idea is that the work community functions properly and the material and immaterial outputs are marketed and transferred to customers.

Profiling

Åberg (1989, p.63) observes that an organizational profiling is required in order to create a persistent organizational, management or a service profile.

Itävalko (1985, p. 14) supports Åberg's argument and states that profiling is about creating product and service profiles, organizational and management profiles. Itävalko (1985, p.14) also insightfully states that, "profiling is about long-term communications, which aims for a sought-after organizational image".

Informing

The view of Åberg (1989, p.64) is that informing is required in order to communicate the organizational affairs. Itävalko (1985, p.14) adds that informing is about the traditional communication: internal and external communication and scanning. Issues about the organizations are informed to internal and external stakeholders.

Socialization

Åberg (1989, p. 64) reports that communication is needed in the induction processes: induction to work and induction to the organization as a whole. Itävalko (1985, p.14) supports a similar view and adds that socialization is the key to commit the employees to the organization.

Interaction

According to Åberg (1989, p.64) and Itävalko (1985, p.15) the need for interaction arises from the fact that human beings are naturally social. Communication is needed in satisfying the social needs. Interaction occurs among the people within the organization and external stakeholders.

2.4 Åberg's communicational pizza - the dimensions

Turning to Åberg (1989, p.64), one finds that when examining organizational communication two dimensions can be used: the direction of the communication and the emphasis of the content (Figure 1).

Internal vs. External

According to Åberg (1989, p.64) the direction of the communication illustrates whether the communicational emphasis is on internal or external communication. Internal emphasis designates for example employees and external end-customers.

The emphasis of the content illustrates how the content of the communicational messages can be considered as a continuum. On the other side of the continuum there are the messages in relation to a specific assignment, products or services and on the other side there are the messages in relation to the work community as a whole.

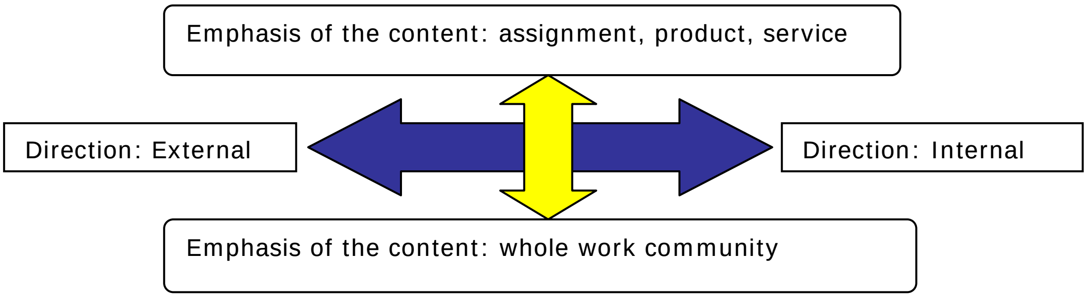
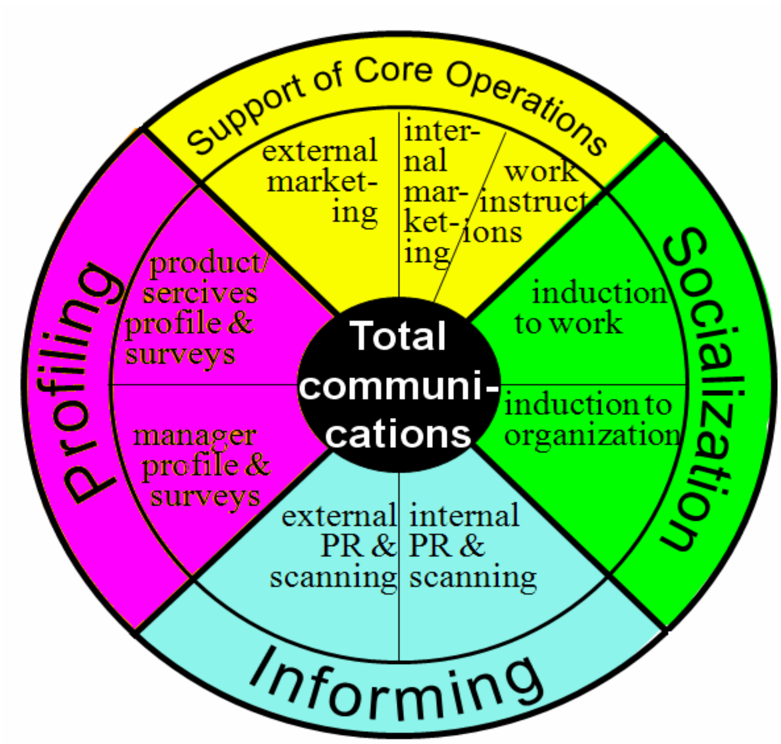


Figure 1. Dimensions of organizational communication.
(Åberg 1989, p.65)

When these two dimensions are combined (Åberg, 1989, p.66) the end-result is an aggregated model of organizational communication.

That aggregated model of organizational communications is also described as Åberg's pizza (Figure 2). In Åberg's pizza the the core is called as total communications. As describer earlier, according to Åberg (1989, p.63) there were basic reasons why organizations communicate. The pizza model is also a well exemplifying illustration of those communicational motivations.

External



Internal

Figure 2. Aberg's communicational pizza. (Åberg, 1989. p.67)

In the communicational entity, that is Åberg's communication pizza, the left hand side illustrates external communication and right hand side illustrates internal communications. The functions in the upper section decribe the organizations assignments, products and services. The communication in the lower section of the pizza depicts the whole organization's functions. The reference to the dimensions of organizational communication illustrated earlier in the text is clear.

Itävalko (1985, p.15) discovered that a time dimension can be found from Åberg's pizza model. The induction to work and induction to organization is more current communication and for example profile creation for the organization is done with a longer time-scale.

2.5 Targets and tasks of organizational communication

Who are then the members of the target group who needs to be contacted when connecting the organization to its environment? Itävalko (1995, p.138-142) states that owners, investors, investor analysts, personnel, customers, business partners, financiers and representatives of the media are the most common parties to communicate with.

Itävalko takes investors as an illustrative example (1995, p.138) and acknowledges that Investor Relations illustrate all those instances that currently own the shares of the organization and the potential owners of those shares. Investor Relations (Itävalko, 1995, p.139) are bidirectional and constant in nature. The target group appreciates a continuous flow of information and regular interaction with the management. According to Itävalko (1995, p.139) the development, management and maintenance of Investor Relations aim to satisfy the information need for current and potential investors.

According to Jukka Hakala's dissertation 'Investor Relations – Investor analysts' comprehensions about the communication of the public limited companies (1993, p.18-19), (as cited in Itävalko, 1995, p.139) the contents of Investor Relations can be divided into following categories:

- financial statements
- final accounts analysis
- products
- matkets
- competitors
- branch of industry
- investments
- future
- strategies
- abilities of the management
- ownership

According to Itävalko (1995, p.139) on a common level the contents of Investor Relations can be divided into four different categories: the profit of the organization, the circumstances that influenced the profit, solvency and future prospects.

Itävalko (1995, p.139) observes that the most important sources of information for investor analysts' are the annual reports, interim reports, stock exchange reports, personal contacts with the management and company visits. Itävalko (1995, p.140) cites Hakala's dissertation and comments that analysts' are most interested in the facts that concern the future aspects of the organization.

According to Itävalko (1995, p.140) the information that should be made thoroughly available to analysts is as follows:

- turnover and number of personnel
- organizational operations
- different functional units, their operations and turnovers
- exporting and importing
- product development

Itävalko (1995, p.140) also stresses a crucial issue that quick and sure communication methods should be developed for delivering all the important information to the investors.

On this basis it may be inferred that the Web 2.0 based communication tools can operate as a solution for the development task that Itävalko brought to light more than ten years ago. For example wikis and RSS feeds did not exist when Itävalko was considering the future development of Investor Relation communication and now we can provedly ascertain that the direction has been correct.

Now there exists applications that can assist the communication processes rapidly and a authentically. I would also like to add the ease-attribute to the commmunication. For example, when an analyst once subscibes to the RSS feed service it quarantees an automatic, reliable and real-time communication with an organization. The same services also makes the fullfillment of the communication commitment easier and more fluent for the organizations. It is a win-win situation for all the parties involved.

Customers, business partners, financiers and representatives of the media (Itävalko, 1995, p.141) are all interested in the financial situation of the organization. Itävalko (1995, p.141) comments that, for example financial troubles can influence the supply of the goods and services and increases the risk concerning advance payments.

According to Itävalko (1995, p. 141) the long-term reliability is the main factor when companies and other various instances are concidering whether to establish business partnerships. Kaipia-Gran K. (2007) thinks that the relationships with media are also important because the better they are and the more an organization communicates with the media the greater are the chances of being permitted with media coverage.

As stated by Åberg (1997, p.31), "Through communication can organization's goals and the motivation of the members be engaged to a single working entiny". It must therefore be recognised that according to Åberg organizational communication can be considered as a cohesive force that is vital for any organization.

Åberg (1997, p.31) also stresses the fact that communication can be also somewhat debilitating to a organization when all the communicational arrangements are not fulfilled. In that case everyone would be communicating with each other about all the possible issues that that would result in chaos.

2.6 Integral and dissipative communication

Åberg (1997, p. 32) acknowledges that it is understandable that organizations aim to add more structured facilities, means and predictability into their communications. That can be achieved, according to Åberg (1997, p.32), by creating confirmed communicational channels and standardizing the content of the communication. According to professor Pekka Aula, (as cited in Åberg, 1997, p.32), "the communication is structurized and it is called integral communication".

Åberg (1997, p.32) points out the fact that when structuring is too intense it will stiffen the organization. Organizations need also communication that challenges existing structures. According to professor Pekka Aula, (as cited in Åberg, 1997, p.32) that is called dissipative communication. Åberg (1997, p.32) continues that, for example different problemsolving methods or the utilization of random networks at the idea generation or brainstorming forums represent dissipative communication.

Integral

According to Åberg (2004) who cites Aula (1999) the dissipative communication takes an organization towards chaos and integral communication towards structure. Integral communication is accurate, explicit, purposeful, planned, monological, controlled and reactive in nature. Integral communication works efficienty, for example after crisis situations.

Dissipative

Dissipative communication (Åberg, 2004) on the other hand is metaphorical, proactive, impulsive, polyphonic, dialogical and spontane in nature. Dissipative communication is efficient in crisis situations and when searching for new ideas and innovations.

So, is communiction about chaos or systematic functions? Based on the evidence I would state that communications has a double function. The other one is this intentional, supervised, monotonic role with one direction and the other one is this imagery, active, impulsive, occasional, many-voiced and conversational function.

Why has the communication become even more important in the recent years? A widely admitted fact is that the people working at the service sector outnumber the production workers. Furthermore, research and production processes accentuate wider co-operation and teamwork in various functional groups.

The improvements and new developments in the communication technologies also remarkably promote the transient of organizational structures.

For these apparent reasons, communication procedures and different technologies have reached more established position in all organizations and business sectors, but they are perhaps most important in knowledge-intensive organizations and sectors.

In addition to its highly fragmented nature, organizational communication, perhaps more than any other aspect of organizational theory and practice, has been subject to dramatic changes. In history, communication in small-sized organizations was largely informal (Tucker et al., 1996, p.51-69). As organizations become bigger, formal top-down communication became the main resource for managers.

Organizational communication in today's organizations has not only become much more complex and varied but ever more important to overall organizational functioning and success. Big challenges for organizations are the mobility of the personnel and the extensiveness of the companies' functions. International and global companies have to invest in the communication in order to keep all the employees and other stakeholders also well informed and committed.

While research used to focus on understanding how organizational communication varied by organizational type and structure, the emphasis has increasingly turned to understanding how new communication technologies and capabilities can help bring about new and more effective organizational forms and processes (Tucker et al., 1996, p.51-69).

According to Baker (2002, p.2) the changes that are confronting organizations and the associated changes in organizational forms have made organizational communication increasingly important to overall organizational functioning.

The work of Baker (2002, p.2) reveals that work is at current more complex and requires deeper co-ordination and interaction among workers. The working tempo is more rapid and the workers are geographically more distributed. In addition, simultaneous, distributed work processes are more common. Teams and group work is much more common way of organizing work.

In addition, as Baker (2002, p.2) rightly points out, that knowledge and innovations are becoming more critical to an organization's competitive advantage. Communication technologies and networks are increasingly valuable to the formation and implementation of organization's structure and strategies.

According to von Krogh et al. (*Enabling Knowledge Creation*, 2000) (as cited in Baker, 2002, p.2), "Communication is not only an essential aspect of these recent organizational changes, but effective communication can be seen as the foundation of modern organizations". It must therefore be recognized that no organization could operate without communication. Communication is a natural prerequisite for any operation and also an enormous resource for organizations to utilize.

Itävalko (1995, p.10) has expressed a similar view that without communication not a single community, organization or company could operate. Communication is a vast resource and it demands skills and knowledge to utilize it eddiciently.

Itävalko also perceptively states that people has to acknowledge that communication is much more than just the "official communication" that is often mentioned in conversations (1995, p.12) and continues, "communication can be official or non-official, direct or indirect, understandable or confuced, real-time or delayed, trustworthy or untruthful".

2.7 Communicational challenges of the new millennium

In 1997, ten years ago, Åberg (1997, p.107) anticipated the issues that he thought that will be the essential challenges in internal communication in the 21st century. Åberg named four different issues: information mobility, data warehousing, managers as moderators and idea generation possibilities.

Mobility

Åberg (1997, p.107) points out that the data has to move; Information mobility is essential in 21st century's communication. In many organizations the information does not move sufficiently enough. People know that something has happened but they are not informed about it. That results in 'news vacuums' and increased grapewine communications. The problem with grapewine is that there are no on/off switches. (Åberg, 1997, p.107)

According to Åberg (1997, p.107) quick, active and trustworthy internal communication is the best way to control grapewine. That may cause the grapewine to calm down. Every piece of information

does not need to be mobilized. The golden rule is to mobilize that information that has common and parallel interest value, for example organizational changes, appointment news and major acquisitions. (Åberg, 1997, p.107)

Warehousing

Åberg (1997, p. 107) rightly points out that the data warehousing is also a communicational challenge. Some information is by nature something that it is better to be stable and located in a certain place. Åberg (1997, p.107) also simutaneousy stresses the fact that people should always still have access to the information when the information need occurs. The principle rule here is that the information with personalized informations needs that are difficult to predict should be stored in active databases. Åberg (1997, p.108) gives personnel benefits, contact informations, catalogs and customer databases as examples of informations that should be stored in easily accessible open databases.

Managers

A foreman is a link between his or hers own unit and department and the organization. Åberg (1997, p.108) characterizes the communicational role of foremen as a "tailoring the common organizational issues to concern the own unit and department and also to communicate the issues concerning the unit and department to the organizational management".

Idea generation

The fourth challenge according to Åberg (1997, p.108) were the idea generation possibilities that have verifiably created solutions for many organizational problems. Åberg describes them to be actual physical locations where the personnel can take creative break and brainstorm wild and broad-minded ideas (1997, p.108).

The evidence seems to be strong that the challenges Åberg predicted to affect internal organizational communication ten years ago were extremely close to the truth. In the organizational world we are living at present all these challenges have materialized atleast in some scale. Also have to bring forth the fact that Web 2.0 based solutions have been there to aid companies to solve these communicational challenges.

Now there are applications to move information quickly and reliably, there are applications to store information in ways that is easily accessible for the interested parties, there are solutions to help managers to communicate efficiently in organizations and there are online solutions for idea generation purposes.

For example, not anymore there is a actual need for an organization to have a physical locations in order to harness the 'collective intelligence' because it can be done in online surroundings. In physical locations there need to be other people actually present in order to create brainstorming sessions.

In online surroundings the person with an idea only needs to write the idea down and wait for others to comment it. If no one else is present at the same time that writing is saved in the system and others can view and comment it later on. Online, real-time conversations are also possible. Here the development has taken long steps of development, maybe even longer than Åberg (1997, p.107-108) ten years ago predicted.

Now that this thesis has introduced the concept of organizational communication it is relevant to start examining the concept Web 2.0 and its most common applications, blogs, wikis and RSS-feeds in communicational use.

3. Web 2.0

If in the past it was strict hierarchy and closed secretive walls that identified last century the thing is changing and partly changed already. According to Tapscott & Williams (2006, p.30) there still is one thing that has stayed constant and it is that, still today, a fact that is deeply embedded into winning organisations, the ability to pay attention to and gather together human knowledge and to translate that knowledge into novel applications that add value to the value chain.

Collaboration

We are living in an age of mass collaboration. Wikipedia, MySpace, YouTube, Facebook and many more have proved that things can change dramatically in 24 hours – in a good way. But that does is not the case just for individuals, businesses are also in the same situation. As Tapscott & Williams insightfully describe, "in an age where mass collaboration can reshape an industry overnight, the old and hierarchical ways of organizing work and innovation do not afford the level of agility, creativity and connectivity that companies require to remain competitive in today's environment" (2006, p.31).

From these facts we can draw conclusions that there is a role to fit for each and every human being in the today's economic world. But big fundamental changes have happened before in human history. Through these changes new societies and institutions have seen the day light.

Reference to Tapscott & Williams reveals that in many cases these kind of eminent changes are driven by disruptive technologies and the printing press, the automobile and the telephone are given as examples which have penetrated societies fundamentally changing the culture (2006, p.31). A fact is that those fundamental changes in the history needed a much longer time to develop in order to reach the summit, full potential.

Now we are talking about massive changes that really can occur in a much more rapid phase. Internet offers such a different scope and range for innovations. Tapscott & Williams (2006, p.31) support this view with a claim that "people, knowledge, objects, devices and intelligent agents are converging in many to many networks where new innovations and social trends spread with viral intensity."

We are living and companies are working in a collaboration economy. The "publish and browse" Internet is not anymore what it used to be. Now it is possible to harness computing power of peers joined together for a common cause. People are creating, sharing and socializing in the new Web. The new Web is about participating – not just passively receiving information.

Blogs, wikis, RSS feeds, chat rooms, personal broadcasts and many other peer-to-peer communication methods that require self-organization exist to provide services, information, news and entertainment.

Also correctly stated by Tapscott & Williams (2006, p.32) that collaboration economy is a new kind of economy where companies coexist with millions of autonomous peers who connect and co-create value in loosely formed networks.

3.1 The 4 principles of wikinomics

The first generation Web was concerned mostly about transfer of content and communication from companies to consumers. The Web of today, Web 2.0, is about transferring content, networking, communication and above all collaboration between the consumers.

It is the view of Tapscott & Williams (2006, p.20) that the essential in the Web 2.0 is “openness, peering, sharing and acting clobally”.

Openness

Recently intelligent and street-smart companies have been rethinking openness, and that has caused changes in the ways how important functions such as human resources, innovation and communication are perceived. According to Tapscott & Williams (2006, p.21) ***openness*** is at present associated with “candor, transparency, freedom, flexibility, expansiveness, engagement and access”. Based on that definition a traditional firm hardly would have been described to be ‘open’. Companies were ‘closed’ in their attitudes towards networking, sharing of knowledge and competence and supporting self-organization.

Traditionally companies have thought that the best way to stay competitive is to keep the fences up and limiting the amount of information that is flowing outside the company borders. With human resources the traditional way of thinking was to aim to attract the most capable minds and use monetary resources to train and motivate them. All the actions were aiming for retaining the employees, since human capital was perceived as the core of competence and competitiveness. As Tapscott & Williams (2006) indicate that nowadays the general comprehension is shifted. “Companies that make their boundaries porous to external ideas and human capital outperform companies that rely solely on their internal resources and cababilities” (p.21).

Evidently the rapid technology and scientific advantages and developments are the main indications why this openness is achieving a higher status in the managers’ hierarchies of needs. In order to stay at the top of the industry, smart companies must increasingly give access to the global skill and talent that blossom outside their company premises but also to keep in mind the possibility for more effective utilization of internal networks.

As global complexity increases so does the list of challenges that are unsolvable by individual organizations acting alone. Examples of these are known world wide, defeating diseases by pharmaceutical companies’ collaboration, finding new energy sources by energy companies, building new super fast nano-computer systems by high-tech companies, sequencing and comprehension of human genome by scientists and research companies to name a few.

It is self-evident that these highly complex and problematic areas demand cross-organizational and inter-organizational methods and solutions. As Tapscott & Williams (2006, p.289) point out that all this modern day complexity has been an impulse for the increasing requirements for openness and cross-boundary collaborations.

It seems to be obvious that the fast pace of change and growing demands of the customer base are such that firms can no longer depend entirely on internal resources to meet external needs. But as Tapscott and Williams (2006, p.19) illustrate another important aspect also that companies can not depend only on tightly formed relationships with a small number of business partners in order to satisfy customer desires for rapidity, innovation and control. Tapscott & Williams (2006, p.19) punctuate the fact that companies must engage and co-create dynamically with partners, educators, government, customers and even with competitors.

To achieve the innovation and success potential, this kind of mass-collaboration should become an essential for every manager's handbook. Learning to trust and engage is becoming an essential skill, in the same manner as for example R&D. As discussed earlier, smart firms embrace transparency and are actively open to the outside world. What are the benefits gained with these actions?

In a research of Tapscott & Williams (2006, p.22) they found out that transparency is critical to business partnerships, it lowers the transaction costs between firms and speeds up the transformation of business networks. Furthermore, employees have higher trust among each other, loyalty improves and innovation percentages are increased. The bottom-line is influenced with lower costs and therefore with higher profits.

Peering

Tapscott & Williams (2006, p.23) claim that though unlikely that hierarchies will disappear in the foreseeable future, a new form of horizontal organization structure is dawning. Tapscott & Williams (2006, p.23) continue that the new horizontal culture is rivalling the traditional hierarchical firm in the ability to create information-based products, physical things with some exceptions and services. Tapscott & Williams have named this new form of organization as ***peering*** (2006, p.23).

Linux and Linus Torvalds is naturally a world known example of peering. The story of how Linus and a group of programming enthusiasts had designed the top of the class computer operating system over the world wide web.

Tapscott & Williams (2006, p.8) also refer to this exemplification when trying to open the concept of peering. In the example Tapscott & Williams stress the fact that how Torvalds made a wondrous gesture by revealing the code to the public by posting it to online bulleting-board. Thus allowing thousands of anonymous programmers to explore it and make further contributions and developments of their own.

Torvalds decided to licence the operating system under a general public licence (GBL) and by doing that making it possible for anyone to use it without any charges. That happened with one condition, that other programmers had to make their changes and improvements open to others. The free and trustworthy Linux became a great success and reference to Tapscott & Williams (2006, p.24) reveals that many companies use Linux for hosting web servers and databases and it has reached a preferable position as a principal software.

In other words Torvalds challenged a history old tradition by giving away proprietary data and "open sourcing" the intellectual property. As stated by Tapscott & Williams (2006) "that liberates people to participate in innovation and wealth creation within every sector of the economy (p.11).

What is then the driving force that makes people to devote their time and effort to peer production? The peer production can be considered here in large scale, as in the Linux example, or in a smaller scale as for example company X's web based innovation idea pool where all the employees are encouraged to participate.

Tapscott & Williams (2006, p.25) try to open the motivational aspect of peer production. Tapscott & Williams draw attention to the fact that though egalitarianism is the most common reason and common rule most peer networks have a structure and hierarchy lying under, where some people obtain more authority and influence than others.

As Tapscott and Williams (2006, p.25) point out that peering would not be so successful if it did not have the ability to leverage self-organization. Self-organization is a style of production that is more efficient than a traditional hierarchical management for certain type of tasks the initial effects being most visible in the production of software, media, entertainment and culture.

But there is no reason to stop there, which is also the message coming from Tapscott & Williams (2006), "perhaps we could apply peer production to physical objects like cars, airplanes and motorcycles"..."these are not idle fantasies, but real opportunities that the new world of wikinomics makes possible" (p.25).

It is still to be discovered what is the full potential of peering and peer production. Fact is that the results the world has seen so far have been absolutely promising and supportive. Real results have been accomplished already and the science world seems to be quite concerted about the fact that the full potential has not yet been reached.

Sharing

Like Uncle Scrooge 'the richect duck in the world' loves to all the most coveted riches and his lucky coin close to his chest that has been the traditional way of thinking also in firms throughout the history. Tapscott & Williams also point out this fact when explaining the trird principle of wikinomics, ***sharing***. As Tapscott & Williams (2006, p.25) perceptively state that many industries still think according to conventional wisdom that companies should control and protect their proprietary resources and innovations with the help of patents, copyrights and registered trademarks.

Today, however, a new economics of intellectual property is current and that fact is also mentioned by Tapscott & Williams (2006, p.26). Tapscott & Williams have made clear the that smart companies are treating intellectual property like a mutual fund – they manage a balanced portfolio of intellectual property assets out of which some are protected and some are not.

According to Tim Bray, director of Web technologies, Sun Microsystems (as cited in Tapscott & Williams, 2006, p.27), "Just as it is true that rising tide lifts all the boats"..."we genuinely believe that radical sharing is a win-win for everyone. Expanding markets create new opportunities."

Mr. Tim Bray makes an excellent point here, all the boats could be considered as most of the industries, whether car industry of consumer goods industries. One point must also be stressed in this occasion, which is also done by Tapscott & Williams (2006, p.27), "of cource companies should always protect their crown jewels"... "companies can not collaborate effectively if all of their IP (intellectual property) is hidden."..."Collaborating to the commons is not altruism; it is often the best way to build vibrant business ecosystems that harness a shared foundation of technology and knowledge to accelerate growth and innovation."

Intellectual properties are not the only things that can be shared in order to reach higher potentials. The list can be continued with for example, computing power and Internet bandwidth. Probably every one who has heard about Skype, the free Internet phone, acknowledges that the function is based on the fact that the people who have downloaded Skype to their computer are similarly sharing some portion of their computing power.

Skype software allows Skype peers to speak with each other without any charges via Internet. As a result there is a phone system that is causing a lot of concern for telecommunication businesses that obviously do charge money for their services. In order to use and enjoy free telephone conversations via Skype one does not need to do any capital investments – only share.

Acting globally

Think globally, act locally has been the mantra repeated many times by business executives and lecturers all around civilized world. Now, however there has been a shift towards a different kind of thinking – acting globally as well. That fact has also been recognized by Tapscott and Williams (2006, p.29) when they introduced the fourth principle of the wikinomics, ***acting globally.***

Collaboration, the ways companies facilitate innovation and production has been changing caused by this new globalization era, which is also acknowledged by Tapscott & Williams (2006, p.28). Doubtlessly, if a company is thriving to be global that company has to widen the scope and perspective much wider and more able to detect signals. According to Tapscott & Williams staying globally competitive engages a company to monitoring business developments internationally and to wiretap a much larger global talent posse.

What is the utmost concurring benefit that can be derived from these global alliances, exhaustive quantities of available human capital and from the ability to produce things and services with the assistance of peers? The evidence from Tapscott & Williams (2006, p.29) indicates that these international and global alliances, available human capital and peer production communities offer a possibility to access to new-to-the-company markets, ideas and technological advancements.

Those companies and people who succeed internationally and globally must know and understand the world that is surrounding them. Including markets, technological infrastructures and the peoples. Tapscott & Williams (2006, p.29). That naturally makes perfect sense. The knowledge must be search deeper than the surface in order to truly understand the whole potential –and demands of the situation.

Because in a growingly global and competitive economy where everything naturally in larger scale any mistake made is rapidly and almost with certainty punished. This fact is also stressed by Tapscott & Williams (2006), “it pays to have global capabilities, including truly global workforces, unified global processes, and a global IT platform to enhance collaboration among all of the partners of the business as well as the company’s web of external partners” (p.29).

By its definition, a genuine global company does not have any physical or regional boundaries. Is being global only a possibility and a privilege for companies and not for us, human beings? According to Steve Mills, Software Operations Manager, IBM, it is a reality for humans also as a individuals (as cited in Tapscott & Williams, 2006, p.30), “When computers run fast enough, and the bandwidth is there, everything that is remote feels local – in fact the whole world feels local to me. I don’t need to be present in the room to participate.”

Change of culture

Those four principles of wikinomics described here - *openness, peering, sharing and acting global* – were introduced because they concretely describe how companies compete in today’s world of business and what is their playing field alike. Those changes in the organizational cultures have been both actively paving the way for the utilization of Web 2.0 based communication applications and at the same time caused by the Web 2.0 phenomenon itself. The difference between today and last century must also be stressed because the world has encountered many profound changes in spheres of ideas and technology.

3.2 Web 1.0 vs. Web 2.0

As discussed earlier in this thesis the first generation Web, Web 1.0, was concerned mostly about transfer of content and communication from companies to consumers. The Web of today, Web 2.0, is about transferring content, networking, communication and above all collaboration.

“In the analysis and promotion of web-technology, the phrase Web 2.0 refers to a perceived second generation of web-based communities and hosted services — such as social-networking sites, wikis and folksonomies — which aim to facilitate collaboration and sharing between users.” (O’Reilly, 2005)

Despite the very fact that as a term, version 2.0, implies Web 2.0 to be a new and revised version of the World Wide Web, it does not advert to an update to the very technical specifications of the Web, but instead it refers to the changes in the ways various software developers and end-users employ the web as a platform.

According to Tim O'Reilly (2006), "Web 2.0 is the business revolution in the computer industry caused by the move to the Internet as platform, and an attempt to understand the rules for success on that new platform. Chief among those rules is this: Build applications that harness network effects to get better the more people use them".

The following figure 3 is O’Reilly’s formulation of Web 2.0 by example. O’Reilly (2005) has assembled a list of various Web based services and functions that identify the change and transient that has been occurring in the Web.

Web 1.0		Web 2.0
content management systems	→	wikis
DoubleClick	→	Google AdSense
Akamai	→	BitTorrent
mp3.com	→	Napster
Britannica Online	→	Wikipedia
personal websites	→	blogging
domain name speculation	→	search engine optimization
page views	→	cost per click
publishing	→	participation
directories (taxonomy)	→	tagging ("folksonomy")
stickiness	→	syndication

Figure 3. O’Reilly’s Web 1.0 vs. Web 2.0. (O’Reilly 2005)

The accompanying table (Figure 3) could even be continued but already as it is, it gives quite a clear image of how once a static Web is transforming to become dynamic, participative and collective in nature.

The services and concepts listed under the term “Web 2.0” have many common features. One central element is the community created by the end-users and the co-produced content and service. At its’ best Web 2.0 is able to offer numerous ways of produce and post personal outputs for common enjoyment and benefit.

Furthermore, Web 2.0 offers a possibility to together with other users to create and host commonly beneficial services. Open source, open content philosophy, is strongly visible in Web 2.0 based services and concepts. Blogs, electronic diaries, have already become commonplace and wikis are used in more and more various ways in universities, business life and other communities such as sporting clubs for example.

One application that is missing from the list but increasing in popularity day by day is RSS-feed (Really Simple Syndication). RSS facilitates the process of receiving information without constant surfing and browsing of the Web and simultaneously increasing the pro-activity of the new Web.

Kari A. Hintikka (2007, p.6) follows a similar ideology and states that Web 2.0 is a concept which collects a group of new, creditable functions in Internet service planning, programming, marketing, production and strategy.

Google’s example, from rags to richdom, is highly inspiring and motivational. There exists a vast amount of potential under the term “Web 2.0” and people are thriving for better and better ways of harnessing the potential. Like discussed earlier, there is no clear and obvious definition for Web 2.0.

Web 2.0 has also been called as social revolution because the phenomena, technology and various applications represent new ways to use and exploit Internet and Internet behaviour. This New Web evidently encourages people to participate, discuss, network, produce and share content.

Accompanying figure 4 (Angermeier, 2005) by Mr Markus Angermeier demonstrates how the hierarchy is formed around the Web 2.0 concept. With the biggest orange font ‘**Web 2.0’** is emphasised. Following that comes the key elements included in ‘Web 2.0’: **usability**, **economy**, **participation**, **design**, **standardization**, **remixability** and **convergence**. Next the focus turns to for example, **blogs**, **wikis**, **RSS**, **video**, **simplicity**, **joy of use**, **recommendation**, **social software** and **openApis**.

What are the fundamental aspects behind these notions? Angermeier’s illustration (figure 3) reveals following impressions: **collaboration**, **sharing**, **simplicity**, **accessibility**, **user centered activity**, **trust**, **podcasting**, **videocasting**, **page rank** and many more.

As the last level, written with the smallest font, there are the applications powered by Web 2.0 based ideology. **Google**, **Google Maps**, **Amazon.com**, **Wikipedia** and **Technorati** to mention few of the most famous ones to the common public.

All in all, the Web 2.0 map or tag cloud, by Angermeier is excessive but rather confusing, collection of common Web 2.0 buzzwords. Today, one can not discuss Web 2.0 without relating to the original O'Reilly's Web 2.0 Meme Map. (Figure 5)

Figure 4. Web 2.0 illustration. (Markus Angermeier,2005)

As O'Reilly (2005, p.1) suitably states about his Meme Map that, "it is very much a work in progress, but shows the many ideas that radiate out from the Web 2.0 core".

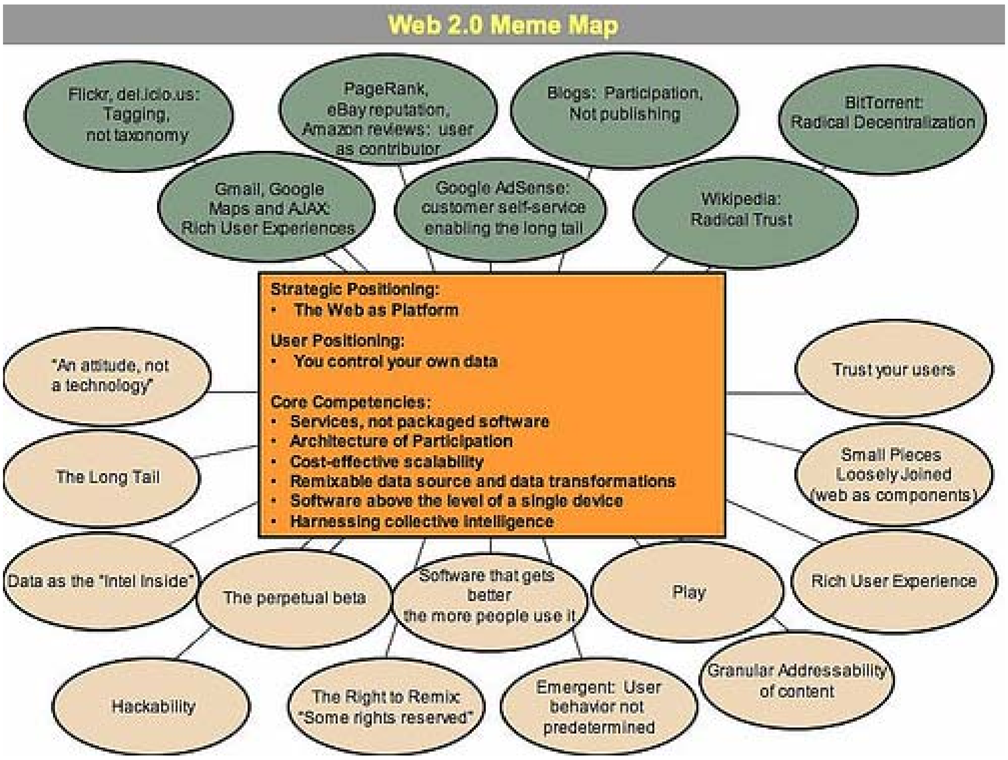


Figure 5. Web 2.0 Meme Map. Tim O'Reilly (2005)

As also expressed by O'Reilly (2005) that his Meme Map is a brainstorming mind map having started at the first Web 2.0 conference, in October 2004. The process started with a listing of principles and the first of those principles written and discussed was "The Web as a platform" and continued from there.

O'Reilly's map represents the connections between the information related to the Web 2.0. O'Reilly's picture manages to show the relations in a clear and simple way which enables the reader to easily identify the interlinked connections and embedded meanings.

Angermeier's (2005) figure is perhaps trying to be too informative. The mix of a tag cloud and concept map is a bit confusing but the relations can be discovered with some effort. Angermeier's figure is more informative to a reader who previously has some information concerning Web 2.0. O'Reilly's Meme Map is more informative to a reader whose knowledge of the matter is not yet that detailed.

In my opinion, there has to be a balance between information load and clarity. Mr Luca Cremonini (Figure 6) started to build up his map according to the figure constructed by Angermeier (2005). Cremonini's work is easier to read and the illustration is also more dynamic than Angermeier's.

Cremonini's map (2007) is posted to his blog and was improved with direct links to Wikipedia sources just by clicking any title. So the interested people have easy access to acquire more information about the terms and concepts that are not yet perfectly evident. Participation and collaboration is attached to the issue because Cremonini (2007) openly asks people reading his blog to participate in improving the image by adding more tags and links related to Web 2.0 based companies and web applications and deeper analysis of complex concepts, like Economy.

The readers, participants, can add their ideas of improvents just by adding a comment to Mr. Cremonini and he makes the according adjustments and corrections based on his own consideration and readers' justifications. That is Web 2.0 efficiently in progress.

Figure 6. Linked Web 2.0 map. (Luca Cremonini, 2007)

3.3 Web 2.0 – The most common platforms for participation

According to Kari A. Hintikka (2007, p.10) the most important and pivotal Web 2.0 applications are:

- RSS-feed
- blogs
- collective production and improvement (Wikis)
- mashups
- collective communities and the content created by the users
- distribution and sharing of personal content and services
- the long tail
- the Wisdom of Crowds
- implementation of It-programs and applications on WWW-platforms

The results of the case study companies' interviews are taken into consideration while outlining the scope of the theory. This thesis concentrates on certain areas of Web 2.0 that were shown to be of greater interest and importance in the case companies communicational toolbox.

Those central aspects are as follows: RSS-feeds, blogs, collective communities, distribution and sharing of personal content, the wisdom of crowds and collective production and improvement.

3.3.1 Blogs

"Look past the yakkers, hobbyists, and political mobs. Your customers and rivals are figuring blogs out. Our advice: Catch up...or catch you later." (Business Week, 2005)

The previous, more than two years old, quotation was from Business Week's cover story about business blogging. The advice already then was to adapt the culture of blogging before it is unfortunately too late and others have taken a remarkably lead in doing so. Blogging is changing the information world remarkably by offering a new and concurrently revolutionary medium for information exchange for individuals and companies.

A **blog** (a **web log**) is a website where entries are written in chronological order and commonly displayed in reverse chronological order. "Blog" can also be used as a verb, meaning *to maintain or add content to a blog.* (Wikipedia, 2007)

According to Merisavo et al. (2006):"a blog is a webpage or a website, where one or more people writes more or less regularly in a way that the newest post with all the possible attachments is easy to find at the top of the page. All the old posts are still readable and unchanged despite of the newer posts. The emphasis on time, linkages and personal point of view is characteristic for blog entries – unlike in the traditional webpages" (p.185).

Blogosphere

Blogosphere is a super ordinate concept, which is used to describe the entity of all the blogs in the world (Merisavo et al.,2006, p.187). With reference to Jeff Koo, Technorati Media Contact (2007), there is currently, as of September 2007, 107.3 million blogs according to Technorati data and there are over 175,000 new blogs created every day. Bloggers update their blogs regularly at the pace of 1.6 million posts per day, or over 18 updates a second. From that evidence it is obvious how big of a phenomenon blogging is.

The scandal between the former President of United States, Bill Clinton and White House intern Monica Lewinsky, was published for the first time in a news blog called *The Drudge Report*. And all that affaire occurred in 1998, almost a decade ago. So we a dealing with a phenomenon that started to grow as a societal influence channel and becomes more and more popular every day – also in business and economic life. Today, the blogging phenomenon illustrates those substantial changes Web 2.0 will entail to the economy.

Focus groups

According to Tapscott & Williams (2006, p.40) firms use blogs as focus groups and regularly 'listen' on what is the public opinion about the company or products. And facts are supporting the intelligence of this listening. Tapscott & Williams (2006, p.40) point out that there are over 50 million blogs in the *blogosphere*, 1.5 million new blog posts daily and a new blog is created every second.

Reference to Tapscott & Williams reveals that it would not be wise for companies to abandon or disregard the information that is rambling in a form of viral communication. But the information value that blogs contain does is limited only to text which is also recognized by Tapscott & Williams (2006, p.40), "the potential for blogs to become richer and more engaging will only grow as people build audio and video into their posts. Do it yourself Web television stations like YouTube are booming".

3.3.1.1 Why to use blogs as a communication tool?

Jeffrey Hill (2005, p.13-19) presents six reasons why businesses should use weblogs as a communication tool:

- Humanising the company
- Communicating with the customer
- Building a reputation
- PR and Media Relations
- Blogs as a Search Engine Optimization Tool
- Blogging as a Business Model

Humanising

Large companies can easily be seen as cold, distinctive institutions without a clear personality and traditional websites have been seen as platforms for Teflon like corporate declarations. Weblogs have attained a reputation of honesty and openness eventually leading to increased transparency – just by giving readers a more insider-like view on the business, personnel and company at hand.

Communicating

Contrary to traditional company discussion forums and eNewsletters, most blogs support open access. Thus, anyone equipped with an Internet bandwidth can view the material posted on the weblogs and when felt important enough – comment back to the posts supporting the idea of interaction. There exists also blogs where the information is protected with passwords or where the purpose of the blog is only the internal usage within the company itself.

According to S. Gardner, author of the book 'Buzz Marketing with Blogs...', (as cited in Hill, 2005, p.20), "the biggest strength of blogs is in establishing dialogue with readers".

Kaye (2003) uses the term 'customer relationship blogs' to describe blogs, which 'allow businesses to connect with their customers in a personalised, immediate way,' (p.18). Of course, the line must be drawn somewhere to illustrate that how much resources can be utilized in the 'personalized and immediate' interaction with the customers and perhaps naturally with other shareholders also. It most likely depends also on the industry at hand, how are the customers related to the company.

For example, are the products purchased directly from the manufacturer of from various retail outlets. That is, if a restaurant chain owner keeps a blog where is daily conversation going on with customers about upcoming menus, special events and other recommendations and so forth. Or if the blog is hosted by a CEO of a multi billion construction company who vividly explains some basic guidelines of their actions. The type of interactions is clearly going to be different. The example was a coarse generalization but the idea behind the action is apparent.

Reputation

Blogs can be used to demonstrate expertise in a particular business area. Gardner (2005, p. 15) Jonathan Schwartz, CEO, Sun Microsystems, has used his blog (http://blogs.sun.com/jonathan/) to establish a position as thought leader in their particular business area. Is reputation occurring from the blog reputation corporate or personal? Is Jonathan Schwartz gaining reputation for Sun Microsystems or for him self?

> "Now, why do I believe combining groups make sense? It's a recipe that works for us. We combined our high volume x64 server group with our traditionally high scale SPARC server group over a year ago - leveraging the volume skills of the former with the scaling skills of the latter. What did that collaboration yield? The highest scale x64 systems in the market." (Jonathan Schwartz's Blog, 2007)

In my assessment the answer is both. Sun Microsystems' Jonathan Schwarz does not forget to stress the quality and performance of their product offering alongside with his leadership and visionary capabilities. But Jonathan Schwartz is not building a reputation for the company from the bedding.

The quality of their products has been present all the time, the users know it also. A blog just offers a new venue for the declaration. For Jonathan Schwartz the blog is a possibility to bring him self more forward. A chance he did not have before in the same sence – a blog is a potential way to earn more credibility among the blog readers.

Hewitt (2005, p. 131) similarly supports this credibility factor and uses the term 'earned credibility' and characterizes this as 'the crucial difference between websites and blogs'. Blog is personal, when a person reads a blog entry the situation is close to a hearing the news personally. Additionally, when a reader can almost without exceptions see a picture of the person who is keeping the blog. That influences the trustworthiness and credibility factors favoring the corporate blogger.

Howerver, Scoble (2004, p.7) expresses a crucial point that is closely linked to credibility and trust. Robert Scoble forewarns corporate bloggers to always keep in mind the obligation to always to tell the truth. Scoble illustrates a significant pitfall. A corporate blogger, like Jonathan Schwartz discussed earlier, should never lie or hide information. It takes long time to systematically build trust upon the surroundings but trust can be lost in an instance. When trust is lost there never is a guarantee whether the trust can be earned back again.

Ahonen (2007) also acknowledges, “the power of blogs in reputation creation is higher for new organizations than for older, more established organizations”.

PR And Media

Scoble & Israel (2005) share the belief that blogging can assist in companies’ PR and Media Relations management processes.

> “But blogging is necessary. It is necessary because it gives companies and constituencies direct interaction between each other. It is necessary because the other communications tools—press releases, ads, banners, websites, brochures, PowerPoint presentations are all irreparably broken. People neither believe nor trust the slickness of corporate materials and spokespeople.” (Scoble & Israel, 2005)

Ahonen (2007) also expressed a similar view and gave an example of journalists’ work, “The more there is to about companies and their operations for journalists to read the better are the stories. Journalists can implement a more humane perspective and they know better who to contact when necessary. When also using blogs for PR it is easier to achieve a more humane and considerate perspective to the business.”

Is blogging the answer for the lowering efficiency of traditional PR? PR is traditionally about creating and developing images and reputation for companies. The corporate blogger who communicates corporate news or any other issues of current interest has to be alert and considerate when using a blog as a venue for the transfer of information.

Blogs can also cause serious harm to any business and Kryptonite, an American bicycle lock manufacturer is a famous example of the influence of a blogosphere. Mr. Mikko Ahonen, researcher at the University Of Tampere Hypermedialaboratory, illustrated an example at a Mindtrek Conference 2007 held in Tampere of how blogs can harm business.

Kryptonite corporation found out in September 2004 when a blogger posted a video clip presenting how he was able to pick their best-selling lock by using a Bic pen. The story was rapidly reported on other blogs and eventually reached the mainstream press in United States. If the company had had a blog, it could have start crisis communication faster and, perhaps, attenuated the damage which now constituted close to 10 million US dollars.

At present, on YouTube there are dozens of movie clips added and with thousands where people open their Kryptonite locks only by using their own Bic pens.
(http://www.youtube.com/results?search_query=kryptonite+lock&search=Search)

Kryptonite has now learned an important and vastly expensive lesson and hosts a corporate blog. (http://www.unbreakable-bonds.blogspot.com/)

SEO tool

Ahonen (2007), Researcher at the University of Tampere comments that the business blogging community is aware of the blog's importance as a Search Engine Optimisation (SEO) tool. Also according to Hill (2005, p.18), "Search engines are naturally attracted to blogs' constantly-updated, keyword-rich content."

In my opinion Paul Woodhouse (2005), captures the true nature of blogs as a SEO tool with the following quotation:

> "To improve your search engine rankings is simple and can be done quite easily with the aid of a blog. It's fairly easy to write the odd post with keyword filled content and also quite easy to use keyword filled hyperlinks to point at the rest of your site.
>
> BUT, it's quite pointless if you haven't got other blogs linking to you giving you some page rank that you can filter through these links. Going to other blogs and commenting, or talking about other blogs is vital to your survival as a blog and a blogger. If your blog just sits there and is used as an easy web publishing tool for company news, then you're wasting its potential".
> (Woodhouse, 2005)

Reference to Woodhouse (2005) indicates that in spite of the fact that if a company has a blog it results as improved page rank position there still is room for easily accessible improvement. Linkages with other blogs and mentions about a blog at different discussion forums add value to the blog. Situation demands pro-activity in a form of networking in order to reach the higher potential.

Business Model

Why a larger organization should be interested about blogging and blogosphere as business model? What are the ways a blog could help businesses? According to Ahonen (2007), "Blogs and blogosphere is an excellent arena when trying to trace new ideas and innovations for own purposes and it happens constantly on every business sector". Ahonen (2007) extends his thoughts, "when a person reads external blogs it gives an excellent possibility for updating the person's own know-how and then implement it to every day business and thus improving, for example productivity".

Business model as an income producer is also apparent, by selling key word based ads via services such as Google's Adsence or by the blog being bought by a large blog publisihing company such as Gawker.com. Gawker.com holds a legendary status among blog enthusiasts and the money comes in form of advertising revenues attracted by the multimillion user base.

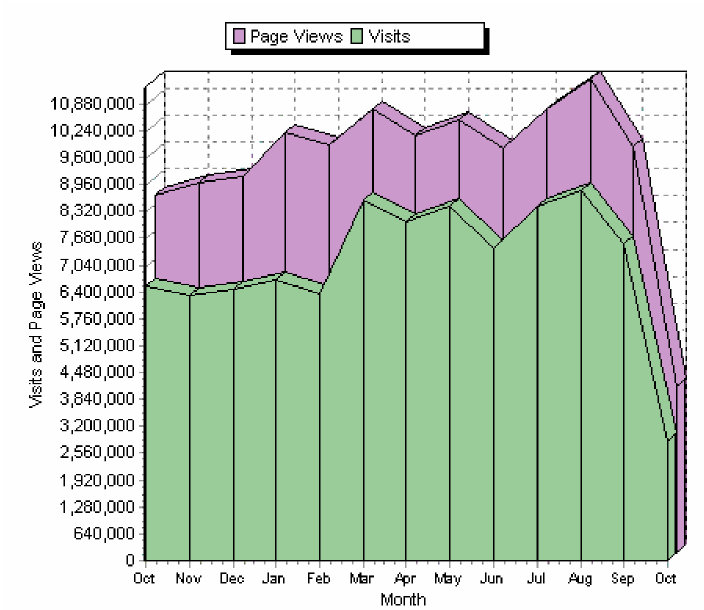


Figure 7. Gawker.com activity graph (2007)

The figure 7 (Gawker.com, 2007) illustrates the time span from October 2006 to October 2007 and the pageviews and visits on Gawker.com website. From the graph it can be observed how popular of a venue Gawker.com is. The list of advertisers on the website is also convincing: NBC, MTV, BMW, Absolut Vodka, The New York Times, HBO, Volkswagen and Puma which also bespeaks for the eminent position of Gawker.com, and blogs, as a media.

3.3.1.2 How blogs can be used in organizational communication?

Hintikka (2007, p.28) has drawn the attention to the fact that for any organization a blog offers an excellent venue for less strictly formed communication and about self decided topics with such a accuracy that press releases can not accomplish and traditional media does not publish.

Hintikka (2007, p.28) continues his thought by pointing out that blogs can be addressed for multiple different stakeholder groups written by management, experts or the work community as a whole.

Examples of how blogs can be used in or organizations (Hintikka, 2007, p.28):

- product information as RSS feeds
- reporting about accession of processes and projects
- product and service development
- testing of new concepts
- quick accumulation of feedback

As it is well known, marketing and communications have distinctively been top-bottom activities in organizations. Images and brands have been caressed with such a care in organizations that it has been a privilege of only a few people who have been playing the key roles in the image and brand shaping. According to Tapscott & Williams (2006, p.262) smart companies should be actively encouraging their employees to blog on company time and gives an example from Sun Microsystems and its CEO Jonathan Schwartz.

Mr. Schwartz has been blogging for years. He might be the first corporate executives to engage regularly in online conversations with employees, partners, shareholders and customers. Schwartz answered to the question why he was blogging (Tapscott & Williams, 2006, p.262), "blogging was just more effective, more personable and more transparent way of communicating than sending an all-Sun e-mail. I wanted employees to understand why Sun executives were thinking the things like we were, why we said the things we did, and what more efficient vehicle than leveraging the network culture was really at the core of Sun to begin with".

The evidence seems to be strong that he did not start blogging in order to lift himself to a pedestal or for the interests of Public Relations. Mr. Schwartz wanted the stakeholders to be aware of the overall situation in the company, so that everyone could be on the same page. He wanted all the employees to know and understand the causal connections behind the company's operations.

Transparency

Explicitly, according to Jonathan Schwartz, CEO, Sun Microsystems (as cited in Tapscott & Williams, 2006, p.262), that was just the motivational factor behind the blogging decision, "we are going to be driving unparallel transparency into everything we do precisely because it is the most efficient mechanism to accelerate change through out Sun. Transparency enables everything to go faster, invites accountability and drives dialogue between Sun and the communities we serve”.

As usual, there exists at least some resistance in every shift and turn of corporate culture and the same has been with Sun Microsystems in the case of this new dynamic and network based communication, which is also confirmed by Mr. Schwartz (Tapscott & Williams, 2006, p.262), “it is definitely alienating the old guard, they would like to believe that the groupwide e-mail is the exclusive vehicle for communication direction”.

Blogs are not meant only for the employees to read in the Sun Microsystems organizational culture. Schwartz demands that anyone with the title of vice president or director – or higher are responsible for reading employee blogs. Schwartz illustrates this matter (Tapscott & Williams, 2006) “I go read those blogs and I see a Sun employee or somebody out in the community, because increasingly you can not tell the difference, and they are criticizing on of our products. And I turn around to the executive who is paid tremendous amounts of money, and I say, why are you not fixing this problem?”(p.262).

Thus it could be concluded that Schwartz believes in the matter that the people working at the “ground-zero”, closer to the product, customer and other stakeholders have an ability and chance to view more closely what is happening in the field. That is naturally vastly vital information and should without exceptions be harnessed into the development of products and services.

The change to the new dynamic and networked communication has also administered positive changes that were the underlying purpose of the shift. Mr. Schwartz also acknowledges that positive facts (Tapscott & Williams, 2006, p.32), “it is yielding pace and transparency into our decisions and it is helping dissolve the boundaries between what is Sun and what is the market. And this in turn brings more and more people in the Sun’s ecosystem.”

Humanizing

Hintikka (2007, p.28) supports the idea of transparency and offers a one more reason for organizational blogging and it is to humanize organizations, to give a company a face, a sound. According to Hintikka (2007, p.28) organization bloggers as a rule write, discuss or make and publics video clips with their own names and faces.

It is clear therefore that in an era when large companies are often not seen as human blogging offers a possibility to add some personality into companies and to the communication.

Regardless of Sun Microsystems’s positive results and success, few other organizations have yet followed the same networked and collective road. A survey initiated by Socialtext’s Ross Mayfield and *Wired* magazine’s Chris Anderson (Fortune 500…, 2006) which has collaboratively emerged into a common matter.

It has become a directory of Fortune 500 companies that have business blogs, defined as: ***active public blogs by company employees about the company and/or its products.***

According to the research (Fortune 500..., 2006), 40 (8%) of the Fortune 500 companies are blogging as of October 5th, 2006. Most of those companies are working in the technology sector.

3.3.1.3 Risks and uncertainties of business blogging

What are the risks and uncertainties of public business blogging? Are risks so great that big companies only do it under pressure, when their traditional corporate communication has lost the sharpest edge? In my assessment one big risk factor could be the problem of PR. How are companies able to efficiently act as gatekeepers, being constantly alert for possible damaging and deterious pieces of information that may go to open public unwittingly?

As an illustration of this counter-intelligence here is presented the code of blogging conduct by Sun Microsystems (Sun Microsystems, 2007):

Sun's Guidelines

"Speaking to the world in public has potential risks for you and for Sun and you need to understand them. Here are the big-picture risks."

Posting the wrong thing on your blog could:

- *Lose Sun its right to **export** technology outside the U.S.*
- *Get Sun and you in **legal trouble** with U.S. and other government agencies.*
- ***Lose** Sun its **trademark** on key terms like Java and Solaris.*
- *Cost us the ability to get **patents**.*
- *Cost you your **job** at Sun.*

Most of these risks can be avoided by just being careful and responsible. Here is a summary of the important rules to follow to avoid getting in trouble. There is an applicable company policy for each of the items listed.

Violation of any applicable company policy may result in disciplinary action up to and including termination of employment.

Summary of the important rules:

1. Do not disclose or speculate on non-public financial or operational information. The legal consequences could be swift and severe for you and Sun.
2. Do not disclose non-public technical information (for example, code) without approval. Sun could instantly lose its right to export its products and technology to most of the world or to protect its intellectual property.
3. Do not disclose personal information about other individuals.
4. Do not disclose confidential information, Sun's or anyone else's.
5. Do not discuss work-related legal proceedings or controversies, including communications with Sun attorneys.
6. Always refer to Sun's trademarked names properly. For example, never use a trademark as a noun, since this could result in a loss of our trademark rights.
7. Do not post others' material, for example photographs, articles, or music, without ensuring they've granted appropriate permission to do this.

8. Follow Sun's Standards of Business Conduct and uphold Sun's reputation for integrity. In particular, ensure that your comments about companies and products are truthful, accurate, and fair and can be substantiated, and avoid disparaging comments about individuals.
(Sun Microsystems, 2007)

Obviously, organizational blogging demands guidelines in terms of what can be said in terms of operational, financial and other confidential functions. Sun Microsystems have decided on these terms to protect the company and the employees accordingly. Disclosure agreements apply naturally also in the Internet where surveillance is different in nature.

3.3.1.4 Popularity of blogs

Authors Robert Scoble & Shel Israel (as cited in Merisavo et al., 2006, p.187) argues following reasons for the popularity of blogs:

- ***Free***: The possibility to publish blogs for free
- ***Easy to find***: With blog search engines such as Technorati (www.technorati.com) a blog is able to be found based on key words and topic
- ***Social****:* The blogosphere is an enormous discussion forum and the most interesting topics move from page to page and are linked to each other
- ***Speed****:* Information usually travels faster in blogs than in traditional news media
- ***Syndication****:* With free, downloadable RSS feed aggregator a blog automatically sends a notification after it is updated
- ***Links:*** Blog contents can have reciprocal links

IBM-example

Tapscott & Williams (2006) used IBM as an example of a blogging company (p.314). Reference to Tapscott & Williams illustrates that IBM recently launched a program consisting all of its 320,000 employees to start blogging and podcasting.

Reason is that many employees are experts in their areas and IBM evidently most likely considers them to be best evangelists for their product offering and technologies.

After the launch, over fifteen thousand employees have internal blogs and over two thousand are avidly publishing thoughts externally (Tapscott &Williams, 2006, p.314).

On this basis it may be inferred that IBM did not leave the matter only on a speculative level. Instead, they have been highly active in launching this new kind of communication tool in the communication toolbox. Because the survey is at current almost a year old, it is likely that the percentage of companies that use blogs has furthermore increased. The tendency points to that direction.

According to Tascott & Williams (2006, p.314) in June 2006 there were only 29 Fortune 500 companies (5.8 %) that were publicly blogging. Thus, there has been an increase of 11 Fortune 500 companies and 2.2 % in just three months time. Anyone interested can become acquainted with IBM' blogs in URL http://www.ibm.com/blogs/zz/en/ where listings can be found.

What is the power behind blogging? Blogs are forceful because they allow millions of people without difficulty to openly publish and share their thoughts, and millions more to read and respond. They have the ability to engage the writer and reader, organization and stakeholder, in an open conversation and are shifting the Internet paradigm as we know it.

Blogging is one element and variable in the structural change, that may even be named as a paradigm swift, in communication technologies. In my opinion blogs have all the potential to be a major contributor to the transformation of both work and organizational structure keeping in mind the codes of conduct.

3.3.2 Wikis

On the World Wide Web things have changed rapidly in the last few years with the birth and arrival of blogs and wikis. The WWW was not anymore a read-only mechanism. The Internet had become a platform of participation, where working together can have enormous positive outcomes.

Wikis and blogs have started to appear in the Intranet world as well. This thesis will now represent the concept of wiki and explain how wikis could be exploited in corporate use.

According to Wikipedia (2007):

> "A wiki is a medium which can be edited by anyone with access to it, and provides an easy method for linking from one page to another. Wikis are typically collaborative websites. One of the best-known wikis is Wikipedia."
>
> "A wiki enables documents to be written collaboratively, in a simple markup language using a web browser. A single page in a wiki is referred to as a "wiki page", while the entire body of pages, which are usually highly interconnected via hyperlinks, is "the wiki". A wiki is essentially a database for creating, browsing and searching information."
>
> "A defining characteristic of wiki technology is the ease with which pages can be created and updated. Generally, there is no review before modifications are accepted. Many wikis are open to the general public without the need to register any user account. "
>
> "Sometimes session log-in is requested to acquire a "wiki-signature" cookie for autosigning edits. Many edits, however, can be made in real-time, and appear almost instantaneously online. This can lead to abuse of the system. Private wiki servers require user authentication to edit, sometimes even to read pages."

Database

Thus it could be shortly concluded that a wiki is a website, a database, that is possible to be edited and modified by numerous different users based on their access limitations.

There exists many different kind of wikis with numerous fields of applications but Wikipedia (www.wikipedia.org) is the most famous. Wikimatrix is a service (www.wikimatrix.org) where all the different wikis are presented and Wikimatrix also has a function it is possible to compare the wikis based on the users own preferences. At present there exists 95 different wiki applications. Originally ‘wiki’ is derived from a Hawaiian word, which states for quick.

3.3.2.1 Different wiki applications

95 different platforms (wikimatrix.org) offer the possibility for rich imaginary utilization of wiki. The opinion of Terentjeff (2007) is that there exist top ten purposes of corporate use for wikis:

- Document management
- Notice board
- Encyclopedia
- Human Resource Management (HRM)
- Customer Relationship Managemet (CRM)
- Attendance of customers
- Controlling of orders
- Group work tool
- Project management tool
- Software development management

Managing data

Based on Terentjeff’s (2007) listing few conclusions can be drawn. When wikis are developed and implemented for document management purposes the use of wiki limits and reduces the amount and size of attachments in e-mails.

Notice board

As a notice board wiki can replace the tradition of group e-mails and e-mail listings and eventually expedite further the e-mail traffic in a company.

Encyclopedia

Encyclopedia wiki basically operates like Wikipedia. Companies can have their own business sector language or different departments within a company can have specific language that is used in daily communication. For example, in a situation where a new employee needs to be guided a encyclopedia can be used as an instrument.

HRM and CRM

For Human Resource Management (HRM) and Customer Relationship (CRM) a wiki can be utilized as a database that a person with adequate access status can edit. Every customer can for instance have a wiki site of their own that sales personnel can edit as required, for example to trace back the order cycle.

Customers

A Wiki offers a convenient venue for the attendance of customers. When a customer has an appropriate access level it is possible to view assorted product descriptions and installation manuals. Order controlling is valuable in companies. Wiki can empower a quick method for sales personnel to edit order status of different products and customers. It can also be made possible for customers to track their orders conveniently without the need to personally contact the company's personnel.

Group work tool As a group work tool a wiki offers multiple benefits compared to the traditional e-mail based communication. Wiki enables simultaneous generation of documents in a group where all the participants can observe at the same time how the project is developing. In a wiki all the comments made to the task at hand are visible to everyone making the work more fluent. For instance, a business plan could be more easily developed in a wiki form.

Projects As a project tool wiki can subsidise in the schedule and resource management. For instance, it offers the possibility for everyone participating in a certain project to be constantly aware of the progress and available human and capital resources in the different stages of a project

This is only the top of the iceberg. Wikis can be employed in numerous ways that are readily planned and programmed. In capable hands wikis can be customized to be the perfect tool for every company and situation.

3.3.2.2 The advantages of wikis

Due to the fact that wikis can be used in numerous occasions there must exist a comprehensive list of the benefits that wikis offer to the end user.

Quick and easy According to Terentjeff (2007) wikis are quick and easy to modify, possibly only a few links away. As stated before, wikis can also be modified by numerous users concurrently. In wiki surroundings the version history of all the documents are saved within the system and it is possible to track back the previous versions. In wikis the user profiles and access limitations can equally be modified without difficulties, which makes the whole management and supervision of the wiki fluent.

Information The disappearance of data can be a problem in companies. Important information vanishes for instance when an employee leaves an organization and the content of the person's e-mail account could be lost at the same time. It can be difficult and time consuming to start tracking back the important contents. In wiki surroundings that situation is not equally alarming. All the information that is written in the wiki is saved in the system and can be easily tracked.

Figure 8. Socialtext's wiki illustration. (Socialtext.com, 2007)

E-mail burden

Figure 8, that is retrieved from Socialtext's website illustrates the way how a business wiki can ease the burden of e-mail overload by inverting the e-mail communication to be written to a wiki. Socialtext is a software company located in Palo Alto, California and Socialtext business wiki is their main product, a combination of a blog and a wiki, and an apparent cause of pride that is purposed mainly in the internal communications.

As Socialtext CEO, Ross Mayfield, comments their methods, "Simple tools with simple rules yield the best results." Socialtext is social software that groups can actually use to make themselves and their organizations more productive, while building trust between participants. (Socialtext, 2007)

Communities

According to Terentjeff (2007) there is also evidence of communities that have started to form in wiki surroundings. In the personnel database every employee can have a personal info site that is open to everyone.

Availability

There exists employees who are distances away, geographically or just in different departments, from each other can talk and communicate with others. Availability is also an advantage gained by using a wiki (Terentjeff, 2007). Unlike people, wikis are always available on the net and the needed information is accessible also after business hours.

Information flow

According to Terentjeff (2007) wikis can aid the information flow in a company by improving the documentation processes and data management. A wiki has the potential of being an efficient and versatile tool when implemented correctly.

3.3.2.3 The problems and risks of wikis

Vandalism	There is no single piece of software or program that is completely free from defects. These facts are also acknowledged by Terentjeff (2007). According to Terentjeff (2007) wikis are open to the possible threat of vandalism. For instance, ready made articles can be modified by evil-intentioned persons in order to make a complete disaster of all the content. There are also counter-preventive restraints against these malicious performances. For example, some articles and data which are decided to be ready can be 'congealed' and no other than the system operator can edit those pieces of information.
Decision making	One problem is also the decision making process when deciding on the most suitable wiki application and the accessibility standard (Terentjeff, 2007). As discussed earlier, there are 95 different wikis and numerous plug-ins and extensions, which makes it time consuming for the it-department to reach a decision on the apt application. The decision about the access-rights is also important and necessary in all wiki applications.
Modification	According to Terentjeff (2007) the installation process is rather easy and quick but the modification stage can at worst take a lot of time and demands pragmatics. The installation on basic, encyclopedia type of wiki, is rapidly installed but the theme and access right modifications demand much more time and programming skills.
Working method	The actual initialization and usage can be complicated because changes in the working methods are compulsory. The replacement of internal e-mail with wiki postings is an adequate example of an actual change in a working method. Wikis also invariably demand maintenance and recurrent updating. "That is especially the situation with open-source wikis, where data security issues are more common", a fact stressed by Terentjeff (2007).

3.3.2.4 Wikis are changing the working methods

As briefly mentioned, wikis are altering the ways business methods can be conducted in companies. Terentjeff (2007) explains this idea further with a comparative table. This thesis will next focus on those matters that have not been explained earlier in the text.

writing alone	→ group work
documents saved in computers	→ documents saved in wikis
word, excel	→ WYSIWYG, wiki conversations
e-mail	→ Instant Messaging, wiki conversations
occasional data transfer	→ continuous data transfer
publications	→ 'living' documents

occasional brain-storming	→ continuous idea generation
customer meetings	→ participatory customers
data chaos	→ systematic data

WYSIWYG

Word and excel sheets are replaced (Terentjeff, 2007) in wiki surroundings with WYSIWYG and wiki conversations. WYSIWYG is an acronym for *What You See Is What You Get* and the term is used in the computing world to describe a system in which content during editing process appear to be very similar compared to the final product.

According to the definition in Wikipedia (Wikipedia, 2007) WYSIWYG:

> "describes a user interface that allows the user to view something very similar to the end result while the document or image is being created. For example, a user can view on screen how a document will look when it is printed to paper or displayed in a Web browser.
>
> It implies the ability to modify the layout of a document without having to type or remember names of layout commands."

WYSIWYG, in other words, lessens the amount on programming language knowledge a person needs to obtain in order to write and create documents in wiki surroundings. A person writing in wiki can use the editing and formatting tools installed in the system and is able to see and observe through the whole process how the text is going to appear in the system. On this basis it may be inferred that WYSIWYG reduces the amount of unpleasant surprises while producing material in wiki and makes wiki more pleasant for the users.

IM

In wiki surroundings IM, Instant Messaging, is also used as a communication tool. IM facilitates immediate responses when a person is online and thus more interactive than a traditional e-mail. According to Terentjeff (2007) the use of wikis has decreased the amount of internal e-mail correspondence in companies.

One goal of wikis is also to create participatory customer relationships alongside with traditional customer meetings. This is a future goal, according to Terentjeff (2007), "wikis are aiming towards this direction but most of the companies are quite not there yet".

Participation

I find that the development from customer meetings to participatory customers relationships a natural direction. Wikis need to be developed taking also other stakeholders than only employees into consideration. Security and access right issues demand accurate planning before these 'extranet' wikis can be implemented. The participation element also includes the idea generation aspect. With the help of wikis the participation to idea generation should be made relevantly more convenient, continuous and therefore more alluring.

3.3.2.5 The wiki initialization process

Terentjeff (2007) notes that, "wiki initialization process should always be conducted in phases, in order to be sure that the end result is optimized".

Exploration

The opinion of Terentjeff (2007) is that as a first phase every company should map out the need for a wiki. In a company following questions should be asked and answered before proceeding with the initialization:

- how a wiki could make the company activities more efficient?
- what functions are needed to exist in a wiki?
- can existing applications be replaced with a wiki? (CRM, HRM, SCM)
- should existing applications be integrated in a wiki?
- what are the initialization capabilies in the company? Is there any obstacles concerning the wiki? How the existing data can be transferred to wiki?
- who will be responsible for the training of the personnel?
- resources concerning time, money and personnel?
- what attributes are appreciated: speed, versatility or simplicity?
- how other stakeholder groups than personnel can be taken into consideration?

The indications are therefore that a company that is planning of adding wiki to the communications tool box should acknowledge their internal wiki know-how and technical capabilities. Do they know everything that is needed in the initialization process?

Is there a need for external resources at some point or is there adequately time in-house to manage the whole process? Is there a sufficient amount of technical pragmatics for installation and maintenance in-house, which is a key question when deciding about the possible outsourcing or in-house programming.

Decision

Second phase of the initialization process according to Terentjeff (2007) is the decision part. The best operations model is chosen from two options:

- open source wiki
  - self installed and maintained?
  - installation and/or maintenance outsourced?

Open Source

With open source wikis, when the installation and maintenance is outsourced, the costs can vary considerably depending on the characteristics of the wiki. With commercial wikis the customer pays a lump sum for the product that is chosen.

Commercial

According to Terentjeff (2007) the more there is different applications the higher naturally are the costs. In my assessment, the maintenance is advisable to be outsourced when the company does not comprise high talent for programming and data processing skills. Taking a software programming company as an example and compare it to a metal industry company where the skills may not be at the same adequate level.

Application

According to Terentjeff (2007) the third face of the initialization process should be the decision upon the most adequate wiki application for the company.

Before the decision can be concluded few issues requires to be solved (Terentjeff, 2007):

- the comparison between the sought-after modes of operation and already existing soft ware applications
- the comparison between the functions of the wiki and existing applications
- if everything is not found ready made, is the company ready to order a customized wiki?
- the cost-benefit assessments of the different options?

Initialization

After all the pre-installation phases are carefully determined and analyzed the actual initialization phase can be set into action.

Installation

Now a company continues with installation and modification of the chosen wiki application/s into service condition. Terentjeff (2007) points out that the vital matters to be solved here are:

- access rights for different users / user groups
- modes of data transfer
- is the wiki internal or external
- open or closed wiki
- themes

Terentjeff (2007) has correctly drawn attention to the fact that the personnel also need to be trained and educated to use the new wiki. The better the personnel can work with the wiki the more confidence they can derive from the use. The increased confidence level eventually leads to more active employment of the wiki.

According to Terentjeff (2007) there can also be motivational factors incorporated in the wikis in order to encourage the usage of wiki, i.e. personal profile pages that makes, inter alia private conversations and picture galleries possible.

Evaluation

Terentjeff (2007) notes that the evaluation of wiki's functionality is a crucial part of the whole utilization process. By surveys, interviews and by listening people's comments on the system it is possible to gather together important qualitative information about the user satisfaction and service level of the wiki:

- has the personnel had any problems with the wiki?
- has the wiki been functioning correctly?
- has the use of e-mail decelerated?
- has the wiki made work more efficient?
- further development ideas for the wiki?

The computer department or the person who is responsible for the IT in a company is able to analyze from the mail server whether the wiki has decreased the number of e-mails sent within the company by comparing the pre- and post-wiki data.

Maintenance

The initialization process requires further development and maintenance in order to be up-date. As Terentjeff (2007) makes clear that further development and continuous development consists of the:

- installation of new upgrades and plug-ins
- updating of upgrades and plug-ins
- monitoring of other wiki-applications
- in-house programming of new upgrades and plug-ins

Given this evidence, it can be seen that the ultimate goal is to make wiki a natural and instinctive part of a day-to-day business life that is not stabil. On the contrary, the aspiration is developing and functional entity that is actively used. Patience is a virtue here because it always takes a certain time to internalize new operation methods.

As mentioned before, the industry that the company is operating in is also crucial. For an IT company workers it naturally takes less time to internalize new methods than for a company where IT and programming does not play such an active role, manufacturing industry for instance.

Terentjeff (2007) finalizes his thought by insightfully stating that:

> "A wiki should always be given to a small test group or team for a test drive, as a piloting phase. After the testing the wiki can be expanded to other parts of the organization and also to other stakeholders".

Based on this evidence it could be concluded that a key is to start with a simple solutions and to change it to a more complicated and versatile version as people are accustomed to the operations as time goes by. It is also important to keep the other stakeholder groups in mind and how they could benefit from the system.

3.3.2.6 The future of wikis

Generalize

According to the research conducted by Gartner (www.gartner.com), which is a world's leading information technology research and advisory company (as cited by Terentjeff, 2007), "50 per cent of the companies will have corporate wikis in use by the year 2009".

However, Ahonen (2007) does not support Gartner's argument that half of the companies will have wikis in use by year 2009. The opinion of Ahonen (2007) is that, "50 per cent is an overstatement, by 2009 wikis are not yet made sufficiently easy enough to use, which is the key issue when talking about coverages of that multitude." Ahonen (2007) continues that, "wikis will inexorably reach extremely high popularity but year 2009 arrives too soon".

It is also the view of Terentjeff (2007) that wikis have already in short time decelerated the volume of internal and partially also external e-mail communication and the same trend is going to be even more obvious in the few coming years.

Replacing CMC

Terentjeff (2007) confidingly also states that wikis will eventually replace the traditional CMS-systems (Content Management Systems) in companies. Examples of CMS-systems are, inter alia document management systems, www-content management systems, customer relationships management systems and net trade management systems.

Rivalry

Ahonen & Terentjeff (2007) jointly expresses their view that the rivalry between open source and commercial wikis is going to stiffen, "not every open source wiki will have enough developers in order to guarantee the constant development. The open source development will dramatically be delayed and ceased leading to customers moving from one wiki application to another because they can not utilize their existing wiki in the way they would appreciate.

Simplification

The indications are therefore that wikis have not yeat reached their full potential and therefore full audience. Soft ware companies and open source developers will need to make the user interface more uncluttered and locigal. When that simplification goal is reached it is, in my assessment, possible to start reaching for company coverages of 50 per cent and even higher numbers.

At present most of the wikis demand too much attention and computer skills from the end user. Luckily, as the evidence reveals, wikis are becoming more than just an effective tool for the wiki-enthusiasts – a common and usefull tool for even the basic user.

3.3.3 RSS feed

The most effective way to manage the enormous amounts of information that is available on the Internet for everybody these days lies with the strength of RSS feeds and RSS feed aggregators.

The British Broadcasting Corporation, BBC, has a well descriptive definition of what RSS stands for (BBC, 2007):

> “News feeds allow you to see when websites have added new content. You can get the latest headlines and video in one place, as soon as it’s published, without having to visit the websites you have taken the feed from.
>
> Feeds are also known as RSS. There is some discussion as to what RSS stands for, but most people plump for 'Really Simple Syndication'. In essence, the feeds themselves are just web pages, designed to be read by computers rather than people”. (BBC, 2007)

As Hintikka (2007, p.28) insightfylly states that, “RSS feeds have started, in all simplicity, to change the use of Internet. RSS feeds are also fulfilling the two corner stones of Web 2.0, dynamicity and interaction.” Hintikka makes an accurate point with that comment. Internet no longer is a static archive for content or a collection of read only websites. Internet indeed has become an active arena where many users decide on what to read or research further on the basis of the current supply of information.

3.3.3.1 Benefits of RSS-feeds for the subscribers

Subscription

Hintikka (2007, p.28) states that an RSS feed is beneficial for both the content provider and to the reader. With an RSS feed the content provider offers for the interested respondents a highly useful medium for up to date information. The information comes to the respondent, or subscriber, automatically, based on the ‘order’, and the respondent does not need to spend time reading and searching information in numerous Web-services. Typical target groups for RSS feeds could be for example consumers, employees, journalists and investors.

Strong link

When a person understands the potential and benefit how feeds can improve the productivity in everybody’s daily work. The key is to get the customers and all the possible stakeholders to subscribe to the company’s website and that way enabling the company not to lose the connection with them. With RSS feeds a company has a possibility to stay in-touch with customers and other stakeholders in a more efficient way than just relying on the fact that they will log on to the company’s website when they feel like it. Also according to O'Reilly (2005, p.3) an RSS feed is much stronger link than a bookmark or a link to a single page.

Wikipedia, a Web 2.0 instrument itself, explains the idea and functionality of RSS in a more detailed manner.

“RSS is a family of Web feed formats used to publish frequently updated content such as blog entries, news headlines or podcasts. A RSS document, which is called a "feed", "web feed", or "channel", contains either a summary of content from an associated web site or the full text. RSS makes it possible for people to keep up with their favorite web sites in an automated manner that's easier than checking them manually.

Aggregator

RSS content can be read using software called a "feed reader" or an "aggregator." The user subscribes to a feed by entering the feed's link into the reader or by clicking a RSS icon in a browser that initiates the subscription process. The reader checks the user's subscribed feeds regularly for new content, downloading any updates that it finds. (Wikipedia, 2007)

Automatically

How does it actually work then? As Cook & Hopkins (2006) explain a RSS / XML is the very small and for the basic user not a noticeable piece of coding that enables websites to automatically send new information to the public after being published (p.9).

A website can admit other websites to publish some parts of its content by creating a RSS document and registers the document with a RSS publisher. Then, a web publisher can post a link to the RSS feed so interested users can read the distributed content on his/her site.

Syndication

The syndicated material includes the data users choose, such as news feeds, listings of events, stories, news headlines, project updates, individual postings from discussion forums or, for example updates about corporate information like stock quotes, interim reports, annual reports. RSS offers a possibility for example to a news site or a personal or corporate blog to feed its news articles or entries to a group of subscribers automatically.

RSS also makes it possible that the web browser is not the only means of viewing a website and that fact is also remarked by O’Reilly (2005, p.3), “while some RSS aggregators, such as Bloglines, (http://www.bloglines.com), are web-based, others are desktop clients, and still others allow users of portable devices to subscribe to constantly updated content”.

Multiple mediums

For example, Apple’s iPod portable mp3-players can be used in order to subscribe and watch and listen RSS-feeds from many different locations, for business and entertainment purposes. Really Simple Syndication (RSS), is a really convenient method to deliver a company’s message through multiple different mediums and venues, mobile phone, e-mail, even in a vehicle like a car or a boat if, like many new luxurious models, it has a Bluetooth capability.

What are the people like who are actively subscribing to different sources? Cook & Hopkins (2006, p.9) draw the attention to the fact that according to researches made on the subject that the people who want to access various information sources through RSS feeds characteristically are connected with many more informative website than the people who tend to rely methods like bookmarking their favorite websites of reading daily newspapers of watching the television which are considered to be more traditional and conventional methods.

Amplitude

Thus it could possibly be concluded that the RSS users typically could find them selves exposed to greater amounts of information, form a greater amount of sources and a greater choice of subjects than the people who rely mostly on traditional means of information search.

Gatekeeper

How are some people so attracted to web feeds? What is the benefit the users gain by using the services that is not possible otherwise? Cook & Hopkins (2006, p.9) argues that a major benefit for the user for using RSS feeds is that they give the user a possibility to be in charge, to work as a gatekeeper in a way.

E-mail spam

The subscriber can not receive anything unwanted due to the fact that user must subscribe to each feed he or she is about to receive, thus avoiding the disadvantage of e-mail spam. That e-mail spam can be kept out of already full e-mail inbox by using a separate aggregator to read feeds. Cook & Hopkins (2006, p.9) continue by noting that still for those people who prefer to get their news in a way that is more comfortable to them, most RSS feeds can also be subscribed via e-mail on a daily basis.

The appropriate ways of receiving material can be personalized according to users' own preferences. Whether the user want so follow and subscribe only to a one certain or few closely considered sources on appropriate point of times or to tailor-make a continuous appearance of for example 70 different RSS feeds from the total supply.

3.3.3.2 Benefits of RSS-feeds for the organizations

Now it is time to discuss RSS feeds more from the organizations point of view. Naturally, simultaneously as RSS feeds dissolve the obstacles of staying informed, feeds and aggregators also alleviate organizations' pursuit of keeping touch with all the possible stakeholders who find it in their interest to know what is current in the business and industry but may forget or not find time to visit the website looking for updates.

Push not Pull

Cook & Hopkins (2006) illustrate this point by acknowledging that "RSS feeds 'push' the information to the subscribers, saving the subscribers valuable time because they do not then have to visit each individual website to find the latest information. And let's face it, how often have you visited a website, perhaps infrequently, and have trouble deciding what is 'new' information and what you have read before — RSS readers allow you to mark new items as 'read', so that you won't be presented with them again unless you deliberately go hunting for them" (p.9).

Cook & Hopkins (2006, p.9) continue by commenting that, "web feeds can also be created for individual subjects. For instance, a company could provide internal users with feeds on subjects like sales, marketing, human resources and so on. This allows users to subscribe to the information they want, rather than receiving everything or going to websites to look for updates on subjects that interest them".

Involvement

It must therefore be recognized that it is important that the audience, the people interested, have the possibility to decide what is important and not the people in the companies' communications department. By giving the people the chance to choose, in ways that is reasonable to them. Companies have a greater possibility to achieve higher involvement for the audience side. RSS feeds and feed aggregators are unquestionably a creditable illustration of the power underlying the concept Web 2.0.

Target groups

Hintikka (2007, p.28) has also drawn attention to the fact that by offering the possibility for interested to order RSS feeds is one of the best ways for reaching the target group. The usage of RSS feeds is not taken away from the person who prefers traditional search and read methods.

Hintikka (2007) also correctly argues that, "RSS feeds could be considered as free of charge, closely targeted and almost real time SMS-message from an organization to the predisposed" (p.28). RSS feeds should be a natural additional part of every WWW-publicists' toolbox.

3.3.3.3 The activation of existing RSS subscriptions

The opinion of Ahonen (2007) is that companies are able to intensify and make more effective their use of RSS feeds:

- By making the subscribing process as effortless as possible just by clicking an RSS icon
- By researching and back tracking subscribers actions: Google bought Feedburner.com which is a service that offers statistics about blog usage
- By personifying the subscriptions' content: Different departments can have their own blogs within companies, certain customers can subscribe to automatically collected summaries of the company's news

Figure 8. RSS feed symbols. (RSS Advisory Board, 2007)

RSS Advisory Board's (2007) figure 8 represents a collection of how RSS feed subscription possibilities have been identified on the Web to alleviate the subscription process.

The user, the person who subscribes to these RSS feeds have the ultimate power to decide what he or she wants, how many times a day, week or a month. It is invented for the benefit of the user, to save time, to improve the quality of information and to refrain from unnecessary information.

For RSS feed providers it is a way to reach all the interested people in the target group. In my opinion RSS feed is a Win-Win situation where nothing is taken away from anyone. Step by step firms and individuals have started to discover that.

4. Introduction of the case study companies

The two industrial companies that were chosen for case companies are Nokian Tyres Plc and Glaston Corporation. Both of the companies also have active operations in many parts of the world, thus the international aspect was also in the consideration.

This section of the thesis concisely describes both of the companies' operations, strategies and business environments.

4.1. Nokian Tyres Plc

"Expertice in Nordic Conditions" (Nokian Tyres, 2007)

Nokian Tyres plc (Finnish: *Nokian Renkaat Oyj Abp*) is a Finnish manufacturer of tires for cars, trucks, heavy duty equipment and bicycles. Nokian Tyres is the largest car tire manufacturer in the Nordic region and the most profitable in the whole world. Nokian Tyres is headquartered in Nokia, Finland.

Native

Nokian Tyres is the largest tire manufacturer in the Nordic countries. The company develops and manufactures summer and winter tires for cars and tires for a range of heavy machinery. Nokian Tyres is also the biggest retreading materials manufacturer and the biggest retreader in the Nordic countries. In addition, Nokian Tyres runs the Vianor tire chain with 261 outlets across Finland, Sweden, Norway, Estonia, Latvia and Russia. Some of the Vianor outlets operate on a franchising basis. (Nokian Tyres, 2007)

Personnel

The number of personnel is more than 3400 and growing steadily due to the growing activities in Russia and Kazakhstan. Nokian Tyres' product development, administration and marketing functions are located in the Nokia facility in Finland. The company has two factories, one in the town of Nokia in Finland and the other one is located in Vsevolozhsk, Russia. The Russian factory is a new one; the operations started in the summer 2005. In October 2007, Nokian Tyres decided to start building a new factory in Kazakhstan. (Nokian Tyres, 2007)

Certain products are produced as contract manufacturing in other tire manufacturers' factories for example in the USA, Indonesia, India, Spain, Slovakia and China. Nokian Tyres has its own sales companies in Sweden, Norway, Germany, Switzerland, Czech Republic, Russia and the USA. (Nokian Tyres, 2007)

Focus

Nokian Tyres focuses on added value business. This business represents 95% of the company's total sales. Other business activities support tyre distribution and added value core business. (Nokian Tyres, 2007)

Market areas

Key markets for Nokian Tyres are regions that feature conditions similar to those in the Nordic countries, which place special challenges on tyre performance: snow, forests, and the harsh and variable weather and driving conditions in different seasons. (Nokian Tyres, 2007)

Offerings

Products delivering added value to customers and consumers developed through special knowledge and expertise in the demanding Nordic conditions: winter tyres, SUV tyres, forestry and forest tractor tyres and winter tyres for trucks and buses.

Processes

Nokian Tyres has interactive and transparent processes designed to serve the customers and end users, especially during the peak seasons. The services include, for example seasonal management systems, 24-hour deliveries, complete tyre and rim combinations to car dealers and tyre hotels. (Nokian Tyres, 2007)

Customers

Nokian Tyres' customer groups consist of replacement markets (jälkimarkkinat in Finnish) and distributors with long-term commitment and loyalty to build Nokian brand positioning as partner principle. Vianor is an example of this kind of a partner relationship. Importers with a limited or one-brand approach are also belong to the customer group of Nokian Tyres. In addition selected groups of OE (original equipment) customers involved in long-term product development co-operation and finally end users. (Nokian Tyres, 2007)

Sales

Vianor tyre chain equals more than 300 outlets in Finland, Sweden, Norway, Estonia, Latvia and Russia. Nokian Tyres has also its own sales companies in Sweden, Norway, Germany, Switzerland, Russia, Ukraine, Kazakhstan, Czech Republic and in the USA. Nokian Tyres has also independent importers in several countries. (Nokian Tyres, 2007)

Values

Customer satisfaction **-** Nokian Tyres has the industry's highest customer satisfaction rate in the Nordic countries, the Baltic States and Russia, and the highest satisfaction rate in core products globally. All activities are geared to support the customer service personnel.

Personnel satisfaction **-** Nokian Tyres is a respected and attractive workplace. The personnel are highly skilled and motivated. The activities are characterised by a desire to continuously develop the personal skills as well as the company.

Shareholder satisfaction **-** Nokian Tyres is the most profitable tire manufacturer and tire distributor in the industry. Nokian Tyres' consistently good performance translates into good share price development and dividend policy.

The best processes in the business **-** The key processes and business network are efficient and represent the cutting edge in the industry. Nokian Tyres uphold the principles of the responsible citizen in all of our activities.

Strategy

Key strategic objectives into 2011: (Nokian Tyres, 2007)

1. Market leadership in the home market in the Nordic countries
2. Best customer service and highest customer loyalty in the home market
3. Market leadership in premium tyres in Russia and the CIS countries
4. Globally strong position in core products
5. Growth through a continuously improved product range
6. Profit growth through high productivity and the best customer processes in the industry
7. Profit growth through skilled, inspired personnel with entrepreneurial spirit

Improvements in operational efficiency and profitability are achieved through the ongoing development of logistic processes, total quality and productivity.

The personnel's active and entrepreneurial attitude towards the development of personal skills and company performance supports the selected focus strategy and company pursuit of an ethical and responsible operating policy. (Nokian Tyres, 2007)

History

The company's roots go back all the way to 1898, when Suomen Gummitehdas Oy, or the Finnish rubber factory, was established. Passenger car tyre production began in 1932 and the company's best-known brand, the Nokian Hakkapeliitta tyre, was launched in 1936.

Nokian Renkaat was split from the mobile conglomerate Nokia in 1988. Nokian Tyres plc was founded in 1988 and it was listed on the Helsinki Stock Exchange in 1995. Nokia Corporation no longer has any ownership-interest in Nokian Tyres, whose largest shareholder (with an 18.9% stake) is the Japanese tire vendor Bridgestone. However, Nokian Tyres still operates as an independent company. (Nokian Tyres, 2007)

4.2 Glaston Corporation

"Global market and technology leader" (Glaston Corporation, 2007)

Glaston Corporation (former name Kyro Corporation), as of June 1, 2007 is a growing, financially solid and global technology group. Glaston is the leading supplier of glass processing machines in the world and One-Stop-Partner. With OSP Glaston delivers combinations of pre-processing and safety glass machines as well as production management systems for various glass processors. (Glaston, 2007)

Focus

Glaston's business structure consists of 6 different sectors. Preprocessing sector provides the Bavelloni pre-processing machines and tools, Heat Treatment provides safety glass machines, Glaston Service Solutions provides service, Uniglass provides flat-tempering, Tamglass Glass Processing provides local glass processing and Albat + Wirsam provides software fpr glass processors.

Personnel	At the end of 2006, the Glaston Group employed 1,211 people, of which a majority worked outside Finland. Hence, one of the key points of developing Glaston's human capital is to continually ensure the personnel a good level of skills on a global scale. (Glaston, 2007)
	On average in 2006 Glaston's team was geographically distributed as follows: Finland 36%, Italy 33%, Other Europe 9%, North America 7%, South America 9% and Asia 7%.
	Glaston has safety glass machine assembly units in Finland, USA; Brazil and China. Pre-processing machines are assembled in Italy, Mexico and China. Assembly plant operations are based on extencive subcontractor networks. Glaston's customer service network operates globally. It has sales and service units in over 20 countries. (Glaston, 2007)
Markets	Glaston's machinery customers are glass processors delivering glass products to the architectural, automotive, and furniture and appliance industries worldwide. The customers range from locally operating firms all the way to the sector's largest global companies.
	Glaston Technologies operates in a growing sector that demands increasingly advanced technology; it is, moreover, that sector's leading supplier. The use of glass in buildings, vehicles, appliances and furniture is growing steadily. (Glaston, 2007)
Offerings	Company's product range and service network are the widest in the industry. Glaston's well-known brands are the pre-processing machine and tools supplier Bavelloni and the safety glass machine suppliers Tamglass and Uniglass. Glaston provides Bavelloni, Tamglass and Albat + Wirsam products and services. Glaston's own glass-processing unit Tamglass Glass Processing is a high quality safety glass producer operating in Finland. (Glaston, 2007)
Customers	Glaston's customers are glass processors worldwide, operating in mainly architectural, appliance and furniture of the automotive industries. Nearly all of Glaston's customers are located outside Finland.
	Glaston operates on all main market areas, both developed and emerging. Exports and foreign operations accounted for 80.5% of Glaston Group's net sales in 2006.
Mission	Glaston's business operations help improve people's living environment and quality of life. The Group's financial success is based on the added value generated in this way. The Group's mission is to promote the development of a safe and attractive living environment through the advanced and innovative glass technology of Glaston. (Glaston, 2007)

Vision	Glaston's vision is to be the world's leading technology group in glass processing technology and related services in 2010, and to be even more expert and comprehensive in its chosen fields than it is now. (Glaston, 2007)
Strategy	1. Good profitability based on technology and market leadership. 2. Long-term growth that is faster than the market in the main business area – both organically and through acquisitions. 3. An organic growth strategy based on a strong competitive position and on maintaining and developing good profitability. An acquisition strategy is based on carefully considered acquisitions that support organic growth and utilise the opportunities provided by it. (Glaston, 2007)
HR-strategy	The Group's HR strategy's main objectives are 1) global HR policies, 2) open and interactive working atmosphere and 3) the best personel and know-how in the industry Know-how is discussed during the annual development discussions. Based on the discussions and skill survey, a learning and developing plan is designed for each employee every year. There are many choices of means of developing skills, including learning at work and training. Internal training is arranged especially for Glaston's international sales network in the Glass Processing Academy and via eLearning environments throughout the entire staff. (Glaston, 2007)
History	Glaston's history dates back more than 135 years and the company has been listed on the Helsinki Stock Exchange (OMX Helsinki) since 1997. Formerly known as Kyro Corporation, the group acquired its first glass processing technology in the 1980's. The Group's Energy business area is being sold to M-real Corporation on 1 July 2007. (Glaston, 2007)

5. Theme interviews' results and analysis

On 5th October, 2007 I had scheduled meetings with Mr Anssi Mäki, e-communications manager from Nokian Tyres Plc and Mr Kimmo Kukkonen, portal coordinator from Glaston Corporation. Both of the interviewees are responsible of the Web 2.0 based solutions in their organizations. The interviews lasted approximately an hour and half each.

A digital voice recorder was used during the interviews because I wanted to capture all the relevant information and not to be constantly interrupting the interviewees while they were responding in order to keep up with the speech. A digital voice recorder enabled a fluent, conversational type interview.

The list of question themes for the interviewees was checked and edited together with my supervisor. The question themes were sent to Anssi Mäki and Kimmo Kukkonen via email beforehand in order to get more detailed answers during the interview sessions. The themes were: Web 2.0, internal communication, external communication, communication tools, and stakeholders.

After the answers were gathered together and recorded they were analyzed.

This chapter will examine the interviewees' experiences and perceptions of Web 2.0 as a marketing and communications tool. The results have been organized on the basis of themes identified when reviewing the data. A key issue is the perceived effectiveness of blogs, wikis and RSS feeds when used as a communication medium. However, a number of other points will also be considered, including for example the traditional internal and external communication activities of the companies and Web 2.0 initialization processes.

First there is always a question asked by myself and followed by the answer of the respondent. 'AM / Nokian Tyres' is Anssi Mäki from Nokian Tyres and 'KK / Glaston' represents Kimmo Kukkonen from Glaston Corporation. My annotations and analysis of the answers are marked with 'Analysis'.

There is a total on 14 questions, out of which question number 14 separately derived from Anssi Mäki's answer about the internal communication. I was also able to interview the CEO of Nokian Tyres, Mr Kim Gran, considering the Nokian Tyres' communicational aspects in relation to Russia and Kazakhstan. There is no answer from Glaston's Kimmo Kukkonen to that specific question.

The questions are divided in three themes: general information, Web 2.0 and communication and general communication. The question 1 is about general information and questions 2-10 are concerning Web 2.0 and organizational communication and the questions 11-14 deal with the general organizational communicational issues. The theme is also mentioned prior to the question group.

General aspects

1. In how many countries and offices is your company actively operating?

AM / Nokian Tyres: It divides to two. There is a factory located in Nokia and one in Russia in Vsevolozhsk. Nokian Tyres has its own sales companies in Sweden, Norway, Germany, Switzerland, Czech Republic, Russia, Kazakhstan and in the USA. In October 2007, we decided to start building a new factory in Kazakhstan.

The Vianor chain that is a part of Nokian Tyres has more than 300 offices around the world. The growth happens in cooperation partners and for example in Russia we get new partners almost on a daily basis.

The number of personnel is 3300 and increasing through the activities in Russia. In Nokia there are 1300 person working and 350 in Russia.

KK / Glaston: Glaston operates in 30 countries, with a total of 60 offices. In Finland there are 10 offices**.**

Glaston Corporation employs 1400 people. Out of which administrative and clerical employees 900 persons and craft-level workers 500.

Analysis: Both of the companies have international communication needs and operations. Nokian Tyres is a bigger company in terms of number of the personnel but Glaston outnumbers Nokian Tyres by having operations in 30 countries. The communicational challenges and need for a quick, reliable and comfortable communication tools is apparent in both organizations.

Web 2.0 and organizational communication

2. How do you personally understand the term Web 2.0?

AM / Nokian Tyres: For me Web 2.0 is a term invented by some consultant for the new possibilities offered by the web. Blogs, wikis, RSS feeds and discussion forums are the first things to come in my mind.

KK / Glaston: For me Web 2.0 relates to blogs, wikis, RSS feeds, discussion forums and internet phone calls and conferences.

Analysis: Both Anssi Mäki and Kimmo Kukkonen were aware of the most common meanings of term Web 2.0. They were able to name the most common Web 2.o related applications. Blogs, Wikis and RSS-feeds were chosen to be the scope of this thesis due to the interest value attached here.

3. Does your company have Web 2.0 based tools for internal communication?

AM / Nokian Tyres: A recent issue is the CEO's blog that has been published once, in September 2007. The blog has caused positive discussions and questions. Our CEO, Mr. Kim Gran, has now a possibility to answer questions about current issues. This is a good way or organizing that in an organization where it is not possible to meet every member of the personnel face-to-face.

Other blogs we do not have yet. It could be interesting to have blogs of some industries' experts writing about issues that concern Nokian Tyres as a company.

We are constructing a Hakkapeliitta academy and it is now in piloting phase. During the next 6 months it will be in wider use. The technical platform has been installed in September 2007. There exists 7 different training modules out of which Vianor has done the first ones. Training modules contain sections like 'customer service' and 'how to change the tyre' and so forth. We want to have all the key aspects of our day-to-day work described there in the academy.

Hakkapeliitta academy is an e-learning platform that is going to contain wiki-tools and tyre industry's dictionary. We are also open to suggestions and new elements can be added to the academy as time goes by. It is not supposed to be immediately ready; it will be developed to serve our employees better. The employees can add information and their personal know-how to the system and that is valuable for us. See appendix II for the screenshot from the Hakkapeliitta academy's frontpage where the different platforms are presented.

In internal communication Nokian Tyres does not implement and utilize RSS-feeds.

Nokian Tyres also uses Genesys Meeting Center for some customer meetings. Genesys Meeting Center is a multimedia conferencing solution, which seamlessly integrates telephone, online, and videoconferences and chat-application to one user interface.

With the help of Genesys Meeting Center it is possible to meet with remote colleagues, customers and partners interactively through online meetings and conference calls and same money and time on travelling. Genesys enables simultaneous work for us.

In co-operation with a digital media company we have developed a wiki-based project management tool where the documents and comments can be attached to the same page view. Commenting via e-mail has proved itself to be complicated and even time-consuming so this has really been beneficiary for us. We use traditional e-mail mainly just for delivering work sheets.

In Nokian Tyres' intranet there are also discussion forums where employees can have conversations. It is called 'Avoin linja', 'Open line' in English. Idea generation is a separate function in the intranet where employees can post their development ideas.

The data administration has probably because of information security reasons been reluctant towards the use of Skype as a communication method.

KK / Glaston: In Glaston's intranet there is an IUS Forum and QDF-feedback system.

QDF is a quality feedback system that has open access to all the employees. In QDF employees can write their praises and complaints about products and services in wiki surroundings.

There is also in the intranet a wiki-based discussion forum that focuses on future development. The project managers of different project can place ideas and propositions of further development in the wiki and any member of the personnel can comment and develop those arguments. The aim is to further the development.

Glaston's IUS Forum is a wiki-based tool that operates as an interactive Q/A-forum and a venue for commenting. IUS derives from *Interactive User Support*. The goal is to create more guidance and instructions in a easily accessible form. IUS Forum is also designated for the collection of 'silent knowledge' that is apparent among the personnel.

An example of IUS in action could possibly be for example when an on-site worker that is working abroad and having some kind of set-up related questions about the machinery. The person could write a question to the forum and receive answers from others. This IUS Forum provides quick-fixes to problems and makes the operations more fluent by harnessing the collective know-how.

Glaston also has a virtual initiative system. There, every employee with an access to the internet can add initiatives and read and comment on other employees' initiatives. There exits many persons that are responsible for the tracking, commenting and controlling of the system. Glaston has also implemented an initiative reward system.

Analysis: Nokian Tyres has recently started to publish the CEO's blog. There Mr Kim Gran has a possibility to discuss current issues in a personal matter that otherwise would not be possible in a large organization where face-to-face contacts are not possible. A blog can limit some of the traditional communication barriers, that is distance and time allocation. A CEO's blog also gives an even more transparent image of the organization. The 'blogging phenomena' has not yet reached rest of the personnel in Nokian Tyres either.

Nokian Tyres is at present constructing and implementing a wiki-based Hakkapeliitta academy that is especially designed to help in the induction process of employees. Induction was one of the purposes of organizational communication mentioned by Åberg (1989).

Both of the companies have utilized the communication installation called the '*Genesys Meeting Centre*' which enables communication over long distances with video and chat possibilities. Genesys is also fulfilling the other original motivator 'cost limitation' with reduced travelling and increased effective working time.

The wiki-based project management tool that Nokian Tyres has generated in collaboration with a digital media company fights against the challenge of data warehousing that was proposed by Åberg (1997). Here the data is easily accessible, commented and developed in collaboration at any hours.

The 'open line' idea generation application is equally a direct response to one of the challenges of 21st century's communication addressed by Åberg (1997). There the person has a venue for addressing his or hers ideas, complaints and thoughts of development free from the limitation of working hours. The fact that the person also has a possibility to discuss the matters in a virtual world could also possibly limit the barriers of conversation. People are possibly not so 'afraid' of other persons' opinions in virtual surroundings.

Glaston's IUS Forum, QDF system and virtual initiative system are all wiki-based applications and they offer similar interactive venue for questions and commenting. Both companies are actively thriving for harnessing the potential and knowledge that lies within the members closely linked to the organization with the help of blogs, wikis and virtual discussions.

4. What was the incentive, a stimulus, for the Web 2.0 processes in your company?

AM / Nokian Tyres: There was a certain need for the distribution of information and opinions in a big organization where it is not often possible to be face-to-face in communication situations.

Also especially the younger parts of the personnel have desired these kinds of communication channels.

Traditionally, when being an industrial organization, we are not the early adopters in the technological areas. But we do follow what is happening in the world and in the world of technology and try to choose the best and most useful applications for Nokian Tyres when the time seems to be adequate. We are never the first one to test some application.

One important goal was also to intensify our customer service and make it more effective and thus lower the costs. We also wanted to have an efficient way for acquiring the valuable 'silent knowledge' that is disappearing almost on a daily basis due to people getting older and retiring. We wanted to have a tool that could activate these people to share that extremely valuable knowledge. It is important to find the proper way of expressing that know-how and for some it is the online discussions where expertise can be shared with co-workers.

We acquired the *Genesys Meeting Centre* because we wanted to cut down the travelling days and costs.

KK / Glaston: We wanted to have an efficient way for acquiring the valuable 'silent knowledge' that is stored the minds of our employees. One goal was also to intensify our customer service and make it more effective and thus lower the costs.

In addition, Glaston wants to acquire 'quick-fixes' in the form of questions and answers that are collected in coherent surroundings and thus, helping their personnel in day to day work.

Analysis: For both Nokian Tyres and Glaston the stimulus has been similar in nature. The practicality of distribution and capturing information, cutting costs on traveling and intensifying the customer service have been the goals the companies have set to the Web 2.0 based functions prior to utilization processes by organizations.

5. What were the initial phases of the Web 2.0 process like?

AM / Nokian Tyres: In the commitment and engagement process we have used our intranet, Hakka-TV and e-letters as a communication means. We have 50 televisions around the factory complex that have been used to share information.

We started this process by experimenting, like baby-steps. We did not want to 'scare' our personnel with a huge broil and clamor over this matter.

We have been constructing the Hakkapeliitta academy intensively for a year now thanks to the investment money we were given from the top management.

The employees have adopted a nice attitude towards these changes because they are aware that nothing is taken away from them – they are getting new ways of communicating and expressing their ideas. Naturally those people that are working in locations far from the Nokian Tyres' head quarters have been most excited because now they can feel that they are closer.

It has also been the most difficult to acquire that 'silent knowledge' from them because in the history we have not been on the same city, or in the same country or even the same continent. These new systems bring us closer together. They have also expressed their gratitude because now they can give and receive information and opinions whenever they want and have the possibility.

For Vianor the Hakkapeliitta academy is an absolute must because they have more than 300 locations. The fact that Vianor chain is so scattered was one of the key reasons for the whole process. It would be impossible to gather them together to a certain location because the business has to operate also daily – and that would also cost enormous amounts of money.

Through Vianor's partner network we receive numerous external instances that also need to be trained and inducted to the organization. In the Hakkapeliitta academy the idea has been from the beginning to share information also to other stakeholders, even to customers with somewhat limited access.

KK / Glaston: We decided to start with a piloting phase and introduce beta-versions. We did not want to start with a 'ready-made' product but to see first how the beta-version works and what are the reactions to that. It is easier to develop the system according to the user feedback than based on testing.

The commitment and engagement process was formal and stilted. We used info sessions, intranet, personnel magazine and e-letters as a communication means.

The Web 2.0 technology is new and the working method is new to the personnel who have been working 'ages' in the company. The average age of personnel is 35-40 years. Web 2.0 is unfamiliar and a stranger in business use but on leisure time they know how, for example how to watch YouTube and chat by using Skype.

Web 2.0 processes are still in such an initiation stage that there exists no lapidary reward or motivational methods. In future there will be a system for that – now it operates on case-by-case principle.

Analysis: Both companies started the new communicational processes by degrees. According to the responses in Nokian Tyres the resistance to the new working methods has been minor than in Glaston Corporation. The employees in Nokian Tyres have acknowledged the fact that nothing is taken away from them and their working methods are not limited by any ways.

In Glaston there has been a bit reluctant atmosphere during the initialization phases. Kukkonen recognizes that the age-structure that they have in their company possibly influences the adaptation to new Web 2.0 based tools and methods. Because they are mainly 35-40 years old they do not belong to the "Net Generation". The challenges that organizations are faced with during these organizational cultural changes, introduced by Tapscott & Williams (2006) in chapter 3, are quite evident also in this case.

6. What have been the results like?

AM / Nokian Tyres: With the Hakkapeliitta academy the Vianor Finland has been the only one to regularly use it during the first months. The feedfack has been good and positive. We have set a general principle that everyone goes through that educational program. Every employee has a set of personal username and password and the system collects a register and statistics. We are aware of the people who have gone through the courses and who have not. In principle we have a block of studies for everyone. We are not in a extreme hurry while waiting for results, patience is a virtue here.

The *Genesys Meeting Centre* has proved to be efficient and has proved to fulfil the expectations that were proposed to the whole system.

KK / Glaston: Web 2.0 is such a new concept for Glaston that no great results have been achieved yet. For example, the IUS-Forum was launched in August 2007 and the operating rate is still really low.

In this early stage it is difficult to identify exact results. The core group gradually learns to utilize the systems. They work as agents and opinion leaders and bring the Web 2.0 systems in the awareness of others also. In one year we know better where we stand with Web 2.0 tools.

One noticeable result is that the use of internal e-mail has decreased thanks to the wiki-based tools even though there always comes a reminder to e-mail when new entries have been written.

Few interesting cases have also come up from very surprising locations, Singapore and Middle-Europe. That was against the expectations, even though the Web 2.0 services have been designed for the people that are working abroad and the significance for them is the greatest. In few years time a greater success and popularity is anticipated among the personnel.

Analysis: For both Nokian Tyres' Hakkapeliitta academy and for Glaston's IUS-forum (Interactive User Support) operation periods have not yet been lengthy enough in order to present circumstantial results.

For Hakkapeliitta academy the early feedback has been positive and that is important for them and thus enabling the further development of the system and procedures.

Glaston's IUS-forum has been operating only since August 2007 and the active user base is still highly limited. Glaston is aiming also for the core group of active users to further the interest among other personnel also. They have been the early adopters and now Glaston is hoping that within a year higher user rates could be achieved.

Glaston has observed that the decreased use of internal e-mail has resulted due to the new systems, which was also projected by Terentjeff (2007) in chapter 3.3.2.4 and Socialtext (2007) illustration in chapter 3.3.2.2. Both companies are patient and able to give time for the personnel to adjust with the new methods.

7. Is your company going to expand their Web 2.0 toolbox in the future?

AM / Nokian Tyres: In the future web is going to be even more important and we are going to invest on the utilization of Web 2.0.

We definitely need to open new internal channels, for example in the Hakkapeliitta academy in a way that personnel could access the systems in a easier manner from their own homes. At the production plants and during daytime it can be difficult to access the system because there are no personal computers and the workers have to share few common computers. In production that is difficult to actualize because the machinery cannot be left without supervision.

This is a process that evolves constantly. We are able to develop our own Web 2.0 systems like wikis if demand for that occurs. Many things are first introduced and piloted at Nokian Tyres and then if it proves to be of benefit it will be forwarded to other offices like Vianor. We have to keep in mind here that we also get sometimes ideas from Vianor.

The Vianor intranet and Nokian Tyres intranet are separate forums. A common platform is still on the planning phase. Then there would be only on place and language of communication. We do acknowledge the problem of language here. It limits the activities of the workers if they are not able to communicate with their own language. Among the tire mechanicians the language skills are not always the best possible but still we want to offer them the same possibilities to communicate and interact. This is an important factor we will focus on.

In addition, this year we have really started to utilize the power of external blogs and discussion forums. We have outsourced the service that tracks and make statistics about Nokian Tyres and Vianor in public discussions. Our plan is to make this online-tracking regular and consistent.

We take an openly positive attitude towards Web 2.0 while taking the cost-benefit calculations into consideration when deciding whether we can invest human resources to open public conversations. There will be interesting forums for Nokian Tyres in the future. It is still a question whether we want to create our own forum or maybe join some international tyre industry forum.

KK / Glaston: Yes, blogs and wikis are going to be developed still. Glaston is also possibly going to introduce a CEO's blog that is accessible for internal stakeholders.

We are also planning to implement a wiki-based technical forum for our customers that would lessen and stimulate the communication between the participants.

We are also planning to start utilizing RSS-feeds in our communication related to our news and other current issues. That way we can aid all the interested parties in the information acquiring process.

Web meetings also need to be developed because they really can save time and monetary resources.

Analysis: Neither company reported to be so satisfied with the current state of affairs that no further development of the Web 2.0 based services is needed.

Nokian Tyres has a development need in the accessibility of the system in order to achieve higher participation rates and make the systems more inviting to use. For Nokian Tyres also the challenge of aggregating the Vianor intranet and Nokian Tyres intranet to a single cohesive network is current. They are also planning to actively start harnessing the public blogs, forums and discussion by tracking services.

Naturally both Nokian Tyres and Glaston are both interested in harnessing the collective intelligence or Wisdom of Growds that was one of the core competencies of Web 2.0 based applications as stated by O'Reilly (2005). But Nokian Tyres is additionally interested in the harnessing of the collective intelligence of other people than their own personnel.

Here it is important to take the industry into consideration because Nokian Tyres manufactures tires for both B to B and B to C customers. But Glaston's clientele consists only of companies that manufacture glass. In my opinion it is highly unlikely that there will be discussions on public blogs about glass machines by the end customers in the same manner as end customers tend to credit and criticize tires, for example on some automotive blogs.

Glaston is also possibly starting an internal CEO's blog which gives transparency to the company. As acknowledged earlier in by Hintikka (2007) in chapter 3.3.1.2 that a management blog is also beneficial in humanizing an organization.

Nokian Tyres already utilizes RSS feeds in their external communication in terms of press and stock reports and now Glaston is formulating to use RSS feeds in organizational communication related to our news and other current issues.

Nokian Tyres is also concidering whether to start an own tyre industry online forum in the future or should they join some international forums. Glaston is the founder in an online forum called Glassfiles that will be introduced shortly later in the thesis.

8. Do you recommend Web 2.0 based communication tools for other companies also?

AM / Nokian Tyres: Yes, but it depends heavily on the processes, goals and organization of the companies. These tools will be the least beneficial for small organizations where all the employees are located in the same offices and premises.

The real benefits are present when the organization starts to expand all over the world and languages, cultures and distances are changing also. That is the moment when the real benefits of these applications can be discovered.

KK / Glaston: Yes, but with some reservations. Web 2.0 based tools require a lot from the organization's working culture. There also needs to be the business benefit behind the decision to implement Web 2.0 based communication tools – not just for the fun of it. For us in Glaston the aspiration was the desire to cut costs.

Web 2.0 based tools are not that beneficiary in small organizations because these demand a bigger community in order to be active and function properly. Everyone should also have the opportunity to participate in the processes.

Analysis: The respondents both recommend web 2.0 based communication tools for other companies but at the same time stressing the fact that the utilization can not be unconditional. The important factors are organization's processes, goals and the organizational culture.

In order to be able to exploit the full potential an organization should be large enough in scale, in terms of number of personnel and amplitude of operations. As mentioned earlier in the thesis, Wikinomics was about openness, peering, sharing and acting globally (Tapscott & Williams, 2006) and also here the same conformities of law exits the in these circumstances and surroundings.

9. Have there been any negative issues related to the Web 2.0 processes?

AM / Nokian Tyres: In discussion forums there is a possibility for exaggeration. But we here at Nokian Tyres support the idea of openness and sharing and we also rely on the judging abilities of our personnel so they can decide for them selves what is trustworthy and what is not.

KK / Glaston: Yes, there has been some resistance to change among the personnel. There were not so many who were interested to join the piloting phase and among the older people there has been also some negligence towards the renewals.

I think it has to do with the thing that people do not want to abandon the way of doing work (and communicating) that they have done for few last decades. The digenesis and change of working culture is just on the way, in few years time.

Analysis: The Web 2.0 processes have not been able to avoid at least some negative issues. In Nokian Tyres the risk of exaggeration in the forums has been identified and in Glaston there was the issue with the resistance against the new working and communication methods mainly due to the age and generation factors.

As Tapscott & Williams (2006, p.46) define this Net Generation as, "born between 1977 and 1996 inclusive, … the first generation to grow up in the digital age, and that makes them the force of collaboration,… these youngsters are growing up interacting. The Net Gen spends time searching, reading, scrutinizing, authenticating, collaborating and organizing everything. The Internet makes life an ongoing, massive collaboration and this generation loves it".

As mentioned earlier, in Nokian Tyres it was indeed these younger members of the personnel who had been asking and suggesting these new communication methods. They belong to that generation who are familiar with the different software and technologies. In Glaston one issue might be that at present the amount of personnel who belong into this Net Generation are still a huge minority. As also projected by Kukkonen, in few years time the situation will eventually change, as it is in almost every industry.

10. Does your company have Web 2.0 based tools for external communication?

AM / Nokian Tyres: Nokian Tyres offers the press releases in relation to their products, stock information and the company itself in RSS feed format.

KK / Glaston: Yes, Glaston uses a web portal in URL: www.glassfiles.com. It is a web service for automotive and architectural glass professionals. There are discussion forums, publications, events et cetera.

Analysis: The Web 2.0 based communication tools for external communication are still in the early phases in both companies. Nokian Tyres uses only RSS-feeds to inform the external stakeholders about the current issues. Glaston is the founder of a web portal called Glassfiles, where there exists, inter alia discussion forums for glass indurty professionals and networking possibilities.

General organizational communication

11. To which external stakeholders does your company communicate?

AM / Nokian Tyres: Nokian Tyres communicates actively with investors, analysts, customers, press and media and partners.

Nokian Tyres also tries to further the general tire expertise and knowledge by press releases.

KK / Glaston: Glaston communicates with investors, analysts, customers, press and media and co-operation partners. Mainly the communicated material consists of stock exchange reports, interim reports and articles generally about glass industry and Glaston.

Analysis: Both of the companies have the same external stakeholders to which the communication is targeted at. These are also influenced by the fact that Nokian Tyres and Glaston are public limited companies and exchange-listed companies which administers them with communication obligations.

12. What are the traditional communicational channels that are used in your company?

AM / Nokian Tyres: The intranet has been of great value for us and as for numerous other companies. In Hakka-TVs we show all the current issues in ppt-slide format that are important and of interest value to the personnel. Hakka-TV is especially important for the people working at the production because there are not so many computers available.

In TVs we also have video production about the current issues. It is important to the people to see with their own eyes their good efforts, for example footage about our annual Hakkapeliitta-triathlon or the Nokian Tyres 2007 Badminton open. That kind of material lifts the overall spirit and atmosphere in the company. We also have traditional bulletin boards in use and in Intra we have electronic bulletin boards.

It is the responsibility of the foremen to communicate current matters to the personnel. There is always room for some improvement even though we have that in good condition.
With the foreman letter 'esimieskirje' we aspire to help the communication process to be about more than just the daily work related issues. We want to bring forward issues concerning education, exercising and rehabilitation possibilities. The meaning of the foreman letter is to make the foreman stop and think about how they could promote the spiritual and physical well-being. It should not be all about work.

For us e-mail still is an excellent project tool. When we need to make work sheets e-mail has proved to be efficient. We will see how for example wikis will change this in the future. It is important that nothing is left only to discussion or meeting stage without some concrete memorandums.

Every member of the Board of Directors informs their own departments. The information that is meant to be communicated to everyone in the organization is presented by the CEO, Mr. Kim Gran.

In Nokian Tyres' business culture face-to-face communication is appreciated so palavers and meetings are common. Now we can also accomplish these meetings virtually. Traditional letters and fax messaging are extremely rare form of communication; in some exceptional occasions contracts are sent via post or fax.

KK / Glaston: Intranet is the most important with all its applications. We have also Info-TV's around all the premises where current issues are displayed. We have not also forgotten the traditional bulletin boards that are located in the factory plants, which have proved them selves to be efficient.

Glaston also holds regular info meetings where the people who are in a position of leadership inform the personnel about noticeable issues. Our CEO also regularly holds interim report presentations.

The communication and HR departments participate in the editing of a letter, which is delivered to personnel by the people who are in a position of leadership in monthly meetings. In Finnish it is called 'esimieskirje'. It is about the current issues that should be of interest to the personnel. Glaston also uses eNewsletters are a communication channel.

Naturally e-mails are in vivid use in Glaston but since the utilization of wiki-based tools the amount of internally sent e-mail has decreased.

Analysis: There were no surprises in the communication methods that have traditionally been used in both companies. The respondents brought forward most of the mechanisms that were introduced by Itävalko (1995) in chapter 2 , "staff meetings, press conferences, internal TV, internal radio, telephone news, CEO's review, press releases, e-mail, bulletin boards, leaflets and personnel magazines are the traditional internal communication channels in organizations".

Mäki and Kukkonen both accentuated the importance of intranet as a traditional communication vehicle, which was not an unexpected result.

13. What type of information is communicated internally in your company?

AM / Nokian Tyres: In Sales Department pricing, marketing, logistics and particular problem issues are communicated. The communication in the Finance Department consists mainly of legislation, taxation, accounting, auditing and appreciation related issues. The issues that are communicated widely to everyone consist in substance of health care, education and training.

KK / Glaston: Glaston communicates internally press releases, stock exchange reports, internal notices and appointment news.

In Glaston's intranet there is a list of all the possible information updates that have occurred.

Analysis: The respondents were asked about the communicational issues that are communicated via the different mediums internally.

The results were parallel to the examples given by Itävalko (1995) in chapter 2.5.

Press releases, stock exchange reports, internal notices, appointment news, pricing issues, marketing issues, logistical issues, legislation issues, taxation issues and financial statement related issues are communicated internally in the case companies. Some of the issues are only communicated department-wise and the issues that are general in nature but still of importance are communicated widely to everyone in the organization.

14. How does Nokian Tyres manage the communication to Russia or Kazakhstan?

AM / Nokian Tyres: A principal decision has been made that the office in Vsevolozhsk, St Petersburg deals with the communication to the Commonwealth of Independent States (CIS). The personnel in Vsevolozhsk manages the marketing and communication that is carried out in Russia, Kazakhstan and Ukraine.

Reason for that is the valuable benefit of local knowledge. There can be some issues that are communicated directly from Nokia to Ukraine or Kazakhstan but clearly the majority will be managed from St Petersburg.

Every country has an Export Manager who is specialized in doing business in eastern parts of the world but work from Finland. The office in Kazakhstan was established by Finnish managers.

From the local people we will find appropriate persons and train them to be the experts who are able to train new experts from their own people and nationality. Then it is possible to be managed by local talents in the future.

In St Petersburg and in Kazakhstan the early stages have been set on by a group of ten or twenty Finnish key persons. They have educated and trained the personnel from the beginning. Because they have no experience about tire industry we have needed to set forth from zero. The know-how has been communicated by the Finns.

When functions are properly functioning the communication will be managed via Intranet, *Genesys Meeting Centre* and Hakkapeliitta academy.

Analysis: The decision that the office in Vsevolozhsk, St Petersburg is responsible of the communication to the Commonwealth of Independent States (CIS) is probably really wise. The local expertise is highly valuable and already has proved its importance in Russia. When the constructions in Kazakhstan are further away, the same issue will most likely be detected there.

Nokian Tyres has decided to communicate the first-hand expertise and know-how to Russia and Kazakhstan and to their local, qualified persons via Finnish experts. After that the “system” can be self-sufficient and produce experts internally from their own personnel, without Finnish participation.

The purpose of these Web 2.0 based applications is to bring people closer together and to aid the various communication processes and needs. In Nokian Tyres the communication to Russia, Kazakhstan and Ukraine will be managed using the same mechanisms and mediums as before, personal face-to-face meetings, Intranet, *Genesys Meeting Centre* and increasingly, the Hakkapeliitta academy.

According to Mr Kim Gran, CEO of Nokian Tyres, there are problems with the personal communication between the Russians, Ukrainians and Kazakhstanis “it derives to the time of the Soviet Union and the cuts are still rather fresh in some situations. It could even be dramatically said that they detest the Russians and The Russians have a somewhat racist views towards the Ukrainians and Kazakhstanis. Luckily, we are doing business and the people are professionals but still this is a challenge we have to address carefully.”

Culture is naturally one important aspect of international communication and this Mr Gran’s remark is an illustrative example of it. In my opinion cultural factors could be one more example of noise in a communication process that was presented in chapter 2.1 (Itävalko, 1995; Fill, 2006). Personal dislikes and discomforts can cause noise in the communication processes but the role of management to try to minimize the harm and difficulties caused by the noise.

6 Summary and Conclusions

The purpose of this thesis was to assess the utilization of Web 2.0 based communication tools in the publicly listed industrial companies in the Tampere economic area. Intention was to explore the amplitude of wikis, blogs and RSS feeds in internal and external communication in the case companies, which were Nokian Tyres Plc and Glaston Corporation. The thesis also wanted to inquire into the underlying reasons for the utilization of blogs, wikis and RSS feeds and how the internal and external communication is managed in the case study companies.

One goal was also to explore what are the general key aspects and prospects when considering the possibility of viestintägran providing consultancy services about the Web 2.0 based communication.

Lastly, this thesis was designed to be suitable for being exploited as a comprehensive and up-to-date information package for organizations and persons who are interested in the area of Web 2.0 and ant its utilization organizational communication. Thesis presents the reader with two case studies with real life examples.

The theory used in this thesis about Web 2.0 is relatively new-to-the-world. As the term came to the public awareness in 2005 by Mr Tim O'Reilly there does not exist extensive amount of academic literature considering the subject. The concept of Web 2.0 is evolving constantly and even the 'established interpretations' can change. As was stated earlier by Mr Ahonen (2007) the most reliable and up-to-date sources of information about the Web 2.0 and the concepts derived from the core are found in the internet and often written by the experts in their blogs and in Wikipedia postings.

The theory part that is considering the traditional organizational communication is collected from academic books and journals and it is also written by established professional on their subject areas.

This thesis demonstrated that during the last few years one of the most fundamental changes transforming business life and societies in general in the 21st century is the quick emergence of open and collaborative communication mechanisms and methods. The organizational boundaries are loosing at least some of their significance and people can co-operate and participate intensively, interactively and openly. Organizations have discovered the power and resourcefulness that lies within their employees and other stakeholders also. Step by step organizations start to utilize more intensively the capacities of *openness, peering, sharing* and *acting globally.*

Also Nokian Tyres and Glaston Corporation have started to harness the power of mass collaboration. Both companies are thinking forward and they know that the Net Generation is heavily approaching and the general operating and communication methods need to be developed to be equivalent with the standards they have used to. A fact also is that both companies are still starting to utilize their Web 2.0 communication methods and the focus at present is on employees. The next step is to get the other stakeholders than the personnel involved in the communicational processes and, thus increase the collaborative force and openness of the company. Both companies answered to be at present planning and developing communicational means for activating the other stakeholder groups, such as customers and business partners.

Both case companies have acknowledged the fact that in an era of globalization in every industry, even industrial and manufacturing, collaboration acquiring a higher status in the hierarchies of need. Peer interaction, collaboration and creativity are the forces that organizations are tackling the challenges of the 21st century.

Blogs, wikis and RSS feeds have established a position where there is no return to the times when those applications were not utilized. Both companies rightfully announced that they have just begun their communicational journey in the world of these new Web 2.0 based methods. The only option is to develop further the existing systems and try to explore at the same time whether some new applications could be implemented in to the working culture.

The reasons for the utilization of blogs, wikis and RSS feeds have to be more than just the willingness to follow the latest trends in order to reach the full potential offered by the applications. According to the evidence provided the case companies the reasons could include an eagerness to save time and monetary resources and to be able to more efficiently to collect the valuable and almost irreplaceable silent knowledge that is located in the know-how of the personnel and to make the customer service more efficient. The fact that case companies also try to accumulate innovative development ideas and also constructive criticism from the personnel implies that the companies have also acknowledged the creative, resourceful and collective force of the personnel. Thus, it would be irrational not to harness into products, services and other operational developments.

The processes have to be set into action incrementally; at least that is the situation in the case study companies where the personnel are not working in a knowledge-intensive industry and where the capabilities to absorb new technical skills as a starting-point is higher. The processes have been started first with piloting phases and progressed from a smaller test group to bigger entities after the basic functionalities have been proved to be working properly.

Problems have also been discovered in the case companies. Naturally, partly due to the age distribution and the fact that the Net Generation is not yet a majority in the companies the adaptation to new technologies is challenging and confronted by the personnel. Both companies acknowledge the fact and realize that time to adopt has to be given and it should also be made clear to the personnel that the new systems exist also to benefit the employees accordingly.

The issues of exaggeration and hyperbole that exist as a risk or a challenge in every type of communication are naturally apparent also in the Web 2.0 based communication. That risk is obvious in surroundings and situation where the speech is free and comments can be posted without supervision and the writer has criticism towards something. The cure for that is the stressing of the importance of realism and truthfulness. Exaggerated information can provoke similar behavior and that does not support anymore the original purpose of an open channel. Here one solution could be to assign persons who scan the wikis and blogs and other forums and report information that has a potential of not being truthful. Also a clear rules and regulations towards the online conversations should be assigned as the example of *Sun Microsystems* blogging guidelines (Sun Microsystems, 2007) demonstrated earlier in chapter 3.3.1.3.

The answers considering the traditional, Web 1.0 communication methods and target groups did not present any unexpected answers. As Itävalko (1995) already earlier in this thesis concluded that staff meetings, press conferences, internal TV, CEO's reviews, press releases, e-mail, bulletin boards, leaflets and personnel magazines have traditionally been the main tools in the organizations communicational toolboxes. The use of intranet naturally has become the medium number one and both interviewees confirmed that fact. The communicational nature of an exchange-listed company obviously sets the guidelines and companies have used the mechanisms that have proved to be efficient in the era of conventional organizational communication.

For viestintägran the thesis set the principles of what should be included in the consultation packages considering the Web 2.0 communication tools. The important applications would be blogs, wikis and RSS-feed. The purpose is not be specific about the technological aspects but instead to give a wide and detailed presentation for interested companies about above mentioned subjects.

Viestintägran has decided to start to assemble a power point-presentation about Web 2.0 in organizational communication of duration of approximately an hour that will be marketed forward to our existing customers and to new clientele accordingly.

Aim would be to demonstrate companies what and how they could possibly benefit from the utilization, what the utilization process is like, what possibilities do they have to choose from, what are the risks and requirements for the company and how blogs, wikis and RSS feeds are changing the working methods all over the world.
A consultation would have been successful if afterwards the members realize and understand what is 'Web 2.0' and have better tools for critically and objectively analyzing the actual need for blogs, wikis and RSS feeds.

I personally think that this thesis can function as a circumstantial base for the presentation from both the ample Wikinomics section and for the part of the blogs, wikis and RSS feeds. And can be applied for more numerous situations than just for the case companies, Nokian Tyres Plc and Glaston Corporation. The goal that was set early on that this thesis could possibly be cultivated as a real business idea will be taken to the next level and will act as a challenge in the near future of viestintägran.

The thesis was interesting from the very beginning due to the nature of the topic. Web 2.0 as a concept is so new and it still means different things for different persons. The topic illustrates the current changes in organizational communications and I had the possibility to examine these aspects in form of case companies. One challenge was the nature of the references but I believe that I managed to accommodate a wide scope of reliable references regardless of the fact that not much academic writing exits yet on this matter.

After the analysis of the theme interview results was made there was a quite definable picture of the overall situation at hand. Both organizations, Nokian Tyres and Glaston Corporation, are taking their first initial steps towards Web 2.0 and mass collaboration. Naturally, as it is evident the development has to begin from within and that is the issue both Nokian Tyres and Glaston have realized and organized their functions accordingly. Now the companies should patiently wait for the results and opinions of their employees. I would recommend a survey to be conducted in order to perceive employees' thoughts of criticism and development about the new communication systems.

Next step, after the internal use of the systems, mainly wiki-based applications, has attained more established position in the working cultures of the organizations the next step is to look outside. How could the case companies intensify their collaboration and communication with the external stakeholders?

Based on the research, neither Glaston nor Nokian Tyres use the Genesys Meeting Center for external communications. Genesys Meeting Center is a multimedia conferencing solution. It seamlessly integrates telephone, online and videoconferences to one user interface.

I would recommend that the companies examine the need of their external stakeholders closely. According to *Infor Consulting's* Investor Relations Barometer ("Sijoittajaviestintä". 2007) the target groups of Investor Relations are extremely interested in the future, business environments, markets and competitive situations of publicly listed companies.

The management ("Sijoittajaviestintä". 2007) was anticipated to give more information and guidance more actively about the future and market situations of the publicly listed companies because the current mechanisms to deliver advance information have been recognized as failures in many occasions. The article ("Sijoittajaviestintä". 2007) states that some target groups find that personal meetings and organizational contacts are extremely important sources of investor information.

Both Nokian Tyres and Glaston should examine the possibility to join at least some of their customers and partners to the Genesys network and thus deepen and intensifying the relationship with them without always the need to meet personally, face-to-face. As the study by *Infor Consulting* (“Sijoittajaviestintä”.2007) pointed out, especially the financial journalists would capitalize on from more direct contacts to organizations.

Other benefit supporting this expansion of *Genesys Meeting Centre* network was presented by Ahonen (2007) in chapter 3.3.1.1,”the more there is to about companies and their operations for journalists to read the better are the stories. Journalists can implement a more humane perspective and they know better who to contact when necessary.” This fact most admittedly would also apply to the relationships and direct linkages created by the *Genesys Meeting Centre* between the organizations and external stakeholders.

In my opinion the companies could accordingly form more direct contacts with these external target groups with the help of Web 2.0 based communication tools – blogs, wikis and RSS feeds. For example, by creating blogs and wikis where these people would have the allowed access rights and there they could form a bidirectional communicational ‘inside-channel’ with the company. The blog or wiki could also be equipped with RSS feed subscription possibility in order to guarantee the timely functions. Organizational communication of the 21st century is about creating participatory relations with the stakeholders and at the same time it is one of the main benefits and goals provided by the Web 2.0.

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Appendix I — Theme interview form for the interviewees:

General information

i. In how many countries and offices is your company actively operating?

Web 2.0 and organizational communication

ii. How do you personally understand the term Web 2.0?

iii. Does your company have Web 2.0 based tools for internal communication?

iv. What was the incentive, a stimulus, for the Web 2.0 processes in your company?

v. What were the initial phases of the Web 2.0 process like?

vi. What have been the results like?

vii. Is your company going to expand their Web 2.0 toolbox in the future?

viii. Do you recommend Web 2.0 based communication tools for other companies also?

ix. Have there been any negative issues related to the Web 2.0 processes?

x. Does your company have Web 2.0 based tools for external communication?

General organizational Communication

xi. To which external stakeholders does your company communicate?

xii. What are the traditional communicational channels that are used in your company?

xiii. What type of information is communicated internally in your company?

<u>Appendix II</u> A screenshot from the Hakkapeliitta academy's frontpage.

Retrieved, 15th October, 2007, from a personal e-mail from Anssi Mäki, e-communications manager, Nokian Tyres Plc