Bachelor Thesis

The alignment of web 2.0 and social media with business strategy.

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1. Introduction

1.1 General introduction
In the past IT developments and infrastructures have enabled and facilitated growth and globalization of organizations. Now we are at the point of new developments in IT and business in the form of social software and social media applications. Many organizations and researchers have begun experimenting with the internal use of social software in the workplace (Brzozowski et al. 2009). The use of these technologies is quickly maturing and moving to enterprise-level projects and platforms and the social software marketplace is now starting to attract large vendors such as Google, IBM and Microsoft (Gartner research, 2008).

Taking note of these developments, the goal of this research is to develop a model that allows web 2.0 and social media –often referred to as social software from an IT perspective- to be connected/aligned with organization strategy. The model can be used by different types of organizations to identify how web 2.0 and social media fits in their organization and with their strategies. Managers can also use the model to map out the different social media applications and platforms in the organization and analyze the strategic fit between them. Reason for this is that aligning the business and IT strategies in organizations helps realizing more effective investments (Henderson et al.1993). These theories are analyzed in this paper and come together in the model that will be presented.

1.2 Practical Relevance
There isn’t much known yet about the consequences of new social media developments and web 2.0 applications on the business strategy of organizations and how organization can manage the alignment of these. This stresses the need for strategic theory for organizations to manage and coordinate these social technologies and systems within their organizations and with their environment. Now that social media is moving into the enterprise space, business and IT frameworks and theories should be developed to facilitate management decisions.

1.3 Scientific relevance
While there are academic papers about web 2.0 and IT technologies and their applications in enterprises, there is little scientific research about social media and web 2.0 and the alignment with organization strategy. This paper tries to add value to academic IT and Organization literature with fundamental research of these topics in a business strategy context and by developing the alignment model that can be used for as a basis for future research.
1.2 Problem statement

Corporations trying to adopt and use web 2.0 and social media applications in their business, raises the question of how organizations can use these in extend to their strategies.

- How should web 2.0 and social media be approached and how can organizations align these web 2.0 and social media developments with their organization strategy?

To answer this question the following sub questions need to be answered:

- What is web 2.0 and social media and what are good definitions?
- How can social media be approached and used by organizations?
- How can social media be aligned with the business strategy of organizations?
2. Web 2.0 and social media theory

To get a clear definition of what web 2.0 and social media is and how organizations can use these, first web 2.0 will be researched. At the end of this chapter a clear definition of web 2.0 and social media is given and how they are connected.

2.1 Historical perspective of web 2.0, the dot-com bubble

After the burst of the dot-com bubble in 2001, it became clear that organizations that survived the crash had certain web business characteristics in common that were later identified as web2.0. (O’Reilly, 2007)

O’Reilly’s definition of web2.0 in 2006 is the following: “The business revolution in the computer industry caused by the move to the internet as a platform and an attempt to understand the rules for success on that new platform” (Valacich & Schneider, 2009). This indicates a shift in thinking about internet as a new platform. Web 2.0 is not only a collection of technologies but also a way of approaching these new technology applications to create successful business model.

The following list was created by O’Reilly when analyzing which applications are thought of as web2.0.

<table>
<thead>
<tr>
<th>Web 1.0</th>
<th>Web 2.0</th>
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<tbody>
<tr>
<td>DoubleClick</td>
<td>Google AdSense</td>
</tr>
<tr>
<td>Ofoto</td>
<td>Flickr</td>
</tr>
<tr>
<td>Akamai</td>
<td>BitTorrent</td>
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<tr>
<td>mp3.com</td>
<td>Napster</td>
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<tr>
<td>Britannica Online</td>
<td>Wikipedia</td>
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<tr>
<td>personal websites</td>
<td>blogging</td>
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<tr>
<td>evite</td>
<td>upcoming.org and EVDB</td>
</tr>
<tr>
<td>domain name speculation</td>
<td>search engine optimization</td>
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<tr>
<td>page views</td>
<td>cost per click</td>
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<tr>
<td>screen scraping</td>
<td>web services</td>
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<tr>
<td>publishing</td>
<td>participation</td>
</tr>
<tr>
<td>content management systems</td>
<td>wikis</td>
</tr>
<tr>
<td>directories (taxonomy)</td>
<td>tagging (&quot;folksonomy&quot;)</td>
</tr>
<tr>
<td>stickiness</td>
<td>syndication</td>
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From an internet business perspective main key to what web 2.0 is: “The embracing of harnessing collective intelligence”. The new technologies and use of the web allow to a collective intelligence to be formed and created online, businesses who succeed in embracing this can use it to their advantage.

According to O’Reilly (2007) internet businesses need to embrace this as a core competence and understand that: “Network effects from user contributions are the key to market dominance in the web 2.0
era”. This stresses even more the need for companies—especially internet business related—to understand this shift towards web 2.0 and the changes that it has brought.

2.2 Definition of web 2.0

While O’Reilly’s paper mainly focuses on the changes after the dot-com bubble for internet businesses it helped identify the general business aspect of web 2.0 as the ‘harnessing of collective intelligence’. It is hard to have a clear definition of a concept like web 2.0, because it doesn’t have clear boundaries (O’Reilly, 2007) and web 2.0 cannot be reduced to one principle (Hoegg et al. 2006).

Web 2.0 technologies can be used to develop different web 2.0 services and platforms. These web 2.0 services include: Blogs, Wikis, Podcasts, Social Networks and Social Bookmarking. Technologies like AJAX, API’s and RSS have made these new web 2.0 services possible and feasible. Hoegg et al.(2006)

Anderson(2007) presents a list of principles that he sees as key ideas that help define web 2.0. These key principles are in line with O’Reilly’s ‘collective intelligence’ definition and add to the definition of web 2.0 not only being a collection of technologies.

<table>
<thead>
<tr>
<th>Key Idea</th>
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</thead>
<tbody>
<tr>
<td>1 Individual production and User Generated Content</td>
</tr>
<tr>
<td>2 Harness the power of the crowd</td>
</tr>
<tr>
<td>3 Data on an epic scale</td>
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<tr>
<td>4 Architecture of Participation</td>
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<tr>
<td>5 Network Effects</td>
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<tr>
<td>6 Openness</td>
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All these key principles offer new possibilities for communication, collaboration and business. The key idea of openness refers to the social philosophy of web 2.0 and data on an epic scale refers to the amounts of data we produce electronically. Some argue that maximizing the collective intelligence of the participants is fundamental to web 2.0 (Hoegg et al.2006). Web 2.0 isn’t just only about technological aspects, but also about social aspects like collective intelligence, communication and collaboration.

2.2.1 Definition of social media

From a sociological perspective, social media can be described as “collective goods produced through computer-mediated collective action”. An example is Wikipedia, where the collective goods are articles,
and the collective action is the co-editing process of article writing (Smith et al. 2008). These goods are produced and shared on web 2.0 computer-mediated platforms.

Social media platforms offer valuable high quality content that is embedded in socially constructed repositories and the structure of these content collections is different from the web 1.0 structure (Smith et al. 2008). Social media uses the possibilities of the web 2.0 structure to enable the social aspect of collaboration, communication, media sharing and more.

2.2.2 Conclusion: Technology, services and platform aspects of web 2.0

Web 2.0 is not just a collection of technologies, but is a broader concept where technologies, services and platforms come together (Hoegg et al. 2006). To get a clear view of what web 2.0 and social media is and how these affect organizations a distinction is made between the different aspects of web 2.0.

Web 2.0 is a combination of technologies, services and platforms. For organizations to better understand web 2.0 and social media we make a distinction between three aspects of web 2.0. First we have web 2.0 technologies like AJAX, API’s and RSS. These enable web 2.0 services like Blogs, Wikis and Podcasts. These services come together on web 2.0 platforms like Facebook (social networks), Google, Blogger and Twitter. These platforms also allow new applications to be created on top of them like crowd sourcing, viral marketing campaigns and real-time information. On this platform aspect of web 2.0 is where social networks are found and where Social Media operates.

I argue that Social media can be identified in web 2.0 services and platforms and thus overlaps with the application aspect of web 2.0. Defining social media as: collective goods produced through computer-mediated action on web 2.0 services and platforms, gives a better indication on which level of web 2.0 social media operates. This has led to the following distinction between web 2.0 aspects and gives a clear overview of both web 2.0 and social media definitions, that can help identify where the business use of both can be found.
I argue that the business use of web 2.0 can be found in social media. Social media is where the application and platforms that are interesting for the business use of web 2.0 come together and where strategic decisions are made. These platforms offer opportunities for organizations like crowd sourcing, collecting data, marketing and many more. Making use of the collective intelligence aspect of web 2.0 and using social media platforms to collect and share this collective intelligence among the users. In this paper social media is identified as the services and platforms that are interesting for business use and where we the focus will lay on in this paper.

2.2.3 Internal enterprise use of social media.
The social aspects of social media that allow the collecting and sharing of collective intelligence among the social media platforms users can be used by organizations to internally collect, retain and share information. The web 2.0 structure and technologies can also be used for easier communication and collaboration in organizations.

Brzozowski et al. (2009) write about the internal use of social media at Hewlett-Packard (HP). Social media provides a free broadcast platform that allows authors to circumvent traditional organizational hierarchies and reach organizationally distant readers. Unlike email that is targeted to specific recipients.

HP offers all employees a variety of social media services used for internal collaboration and communication. Internal blogs for example can facilitate internal collaboration and knowledge sharing and aim at the benefits of lightweight informal collaboration among employees.

To reap the benefits of internal social media usage managers should be stimulated to ‘lead by example’. For venues that imply discussion (e.g. blogs, comments, forums) external validation from managers is more important to the users than in venues of archives (e.g. links, wikis). Culture and organization structure also influence the internal support to use social media.

2.3 Analyzing the building blocks of web 2.0 and social media
Organization theory also indicates the importance of technologies and their consequences on organizations. Dhar & Sundararajan (2007) argue that the past forty years certain principles in IT can be recognized that remain constant. These invariants can be used to interpret the past and make predictions about information technologies in the future. They present a model where in the influence of these technological invariants and the consequences on IT in Business are explained. These invariants will be
used to analyze web 2.0. The consequences on IT that are found seem to be in line with the technological trends we see in web 2.0.

![Figure 1: A Technology-Centric View of IT in Business](image-url)

### 2.3.1 Technological invariants

The first technological invariant is *digital representation*, the visualization of things as information and in particular digitally represented information. Examples are: a bank balance, music, our voice or video can all represented as digital information. This digitalization allows for new possibilities in the use and transport of information.

The second invariant is *computing power*. This is: “the long-term exponential growth of hardware power, broadband, storage and the miniaturization of IT devices”. Moore's law, which states that the processing power doubles each six months, can explain this growth in computing power and has proven to be accurate. Computing power has grown, become cheaper and software has made it more reliable.

The last invariant is *modularity*, this is the sustained increase in programmability of IT systems in a modular way. This allows aggregated complexity to be easier integrated into existing standardized software platforms. This allows existing IT systems to add new functionality and usability with just modular additions to the software. This way Modularity fundamentally provides power to the first two invariants by making these possible and easier to achieve.

Digital representation is the technological invariant that has enabled many of the web 2.0 services to exist and grow with further digital representation of information. Blogs and wikis contain text, pictures, sounds and videos and increasingly more data and information that is made possible by digital representation of this information (Dhar & Sundararajan, 2007).
Computing power has increased and become cheaper (Dhar & Sundararajan, 2007) making internet publishing on blogs, wikis and other services fast, reliable and cheap. Barriers that might have existed in broadband for the streaming of video for example have been overcome by this continuously increase in computing power over the past 40 years.

Modularity drives the flexibility of web 2.0 allowing new functionalities and usability to be added to existing systems. Existing technologies on web 2.0 platforms are often updated enabling new functionalities. Gmail labs from Google and new functionalities in video’s on Youtube are examples of this. Widgets on blog services and widgets/apps on mobile phones also enable publishers to aggregate complexity through modularity and offer users new functionality and usability through updates and releases of widgets.

These three invariants are clearly identifiable in web 2.0 and contribute to the three consequences in the model.

2.3.2 Consequences in business
These three technological invariants form the building blocks to recognize the consequences of IT developments in business. Dhar & Sundararajan (2007) recognize three business consequences of these invariants. Digital representation together with the growth of computing power and communication power facilitate the separation of information from a growing number of artifacts. An example is the music CD, where the digital distribution of mp3’s only became feasible once there were internet connections fast enough to transfer the data.

This separation of information from its artifacts can alter the fundamental economics of an industry, making their products become information goods. The economics and production of information goods differ from tangible goods and will have many consequences for the way business operates once this separation starts to plays a role in the company's sector. The music industry is one of the greatest examples of this and had to change traditional business models to still make profit in the digital music age.

The second consequence is the growth in computing hardware power and the ability of software to be layered in a modular way. This allows for IT infrastructures to become larger, more powerful and more accessible. Supply chain management software platforms and on-demand search platforms like Google are an example of this. Modularity results in functionality adopted by early innovators to be incrementally integrated into these powerful and shared infrastructure platforms.
The third consequence is a growth in society of the importance and variety of IT mediated spaces of interaction. The difference between Technology-mediated spaces and spaces in the physical world is that technology mediated spaces are shaped continuously by the participants, where as real-life spaces are developed and launched in less continuous form. Digital representation is key in facilitating exchanges of information in these spaces. Computing power supports this by allowing the built of complex Technology-mediated interfaces and Software modularity enables the evolvement of spaces and build of new ones with little effort.

The first consequence ‘information separates form its artifacts’ in some industries has led to products to become information goods. In combination with electronic networks this has enabled and hasten the transformation of physical products to service products (Rust & Kannan, 2003), fundamentally changing economics and production of businesses in industries that are affected. In the music industry this has had great consequences. On the internet we see iTunes and Hulu as a response from the music and film industry to adapt to these changes and create new business models.

The second consequence, shared IT platforms of growing functionality, where IT infrastructures become larger, more powerful and more accessible. An on-demand search platform like Google is an example of this. These large accessible IT platforms can create opportunities and threats for companies which need to be addressed in corporate strategy.

The third consequence, the growth in importance of technology-mediated spaces and interfaces. Digital representation enables exchanges of information in these spaces and is what happens on blogs, wiki’s and other web 2.0 services. These exchanges are mediated in services and spaces that are found on IT and web 2.0 platforms. This is resembles what we see in social media spaces where: “collective goods are produced through computer-mediated collective action”(Smith et al. 2008). And these exchanges arise on web 2.0 services and platforms.

I argue that the third consequence is largely connected to the second consequence on the web. The technology-mediated spaces can be found in the social media part of web 2.0 that operates on large shared IT platforms.

2.3.3 Conclusion
The technological invariants and consequences of IT in business can be used to analyze the building blocks of web 2.0 technologies and the consequences of web 2.0 on IT in organizations. Web 2.0 is
greatly driven by modularity and result in the creation of large IT platforms and computer-mediated spaces. Analyzing these IT developments in business has show that web 2.0 technologies are important for organizations.

3. Organization strategy theory

3.1 Aligning business and IT strategy

Now that we have definitions of web 2.0 and social media and the importance of them for organizations we continue the research on how organizations can approach these and align them with their organization strategy.

Organizations can adopt an internal or external focus, for their business strategy as well as their IT strategy. This chapter will present evidence that IT, electronic and social media strategies should also be formulated in internal and external dimensions and how these strategies should be governed by organizations.

3.2 The strategic alignment model

![Strategic Alignment Model Diagram](image)

*Figure 7.1* The proposed strategic alignment model.

Strategic alignment model, Oxford University Press US (1992)
IT strategy should be articulated in terms of an external domain and an internal domain. Where the external domain focuses on the position of the firm in the IT marketplace and the internal domain focuses on how the internal Information Systems should be managed. To acquire an adequate fit that delivers benefits to IT investments a strategic fit between internal and external domains is needed. Benefits can be realized by finding a fit between internal and external IT applications and platforms.

Between IT strategy and business strategy there is also a need for functional integration that takes note of the impacts each has on another (Henderson et al. 1993). This way, more value can be realized from investments in IT as they take note of the business strategy and goals the organization has. IT effects on business performance varies across organizations, because of the ability to achieve a link between business and IT strategy (Rai et al. 1997).

3.3 The need for strategic alignment of IT

IT has evolved from an administrative role towards a strategic role that can support and shape business strategies. Yet sometimes there seems to be an inability to realize value form IT investments. Henderson et al.(1993) argue that this is due a lack of alignment between business and IT strategies in organizations.

Trying to achieve strategic fit between the dynamic internal support structure and the external product-market is a continuous process of adoption and change. Exploiting IT functionality on a continuous basis can deliver sustained competitive advantage. Organizations try leveraging their IT capabilities to differentiate operations from their competitors and use these capabilities to shape and support their business strategies. This underlines the importance and value of aligning both strategies in organizations.

3.3.1 Technology Investment and Business Performance

Rai et al. (1997) argue that when calculating the return on corporate IT investments focus must lie on the links between IT, business strategy and competitive context.

While IT likely improves organizational efficiency the effect on business performance varies across organizations, because of the firm’s management processes links with IT strategy. This emphasizes the need for linkage between IT and business strategy.

IT investments are often not well measurable with ROA or ROE. This paper suggest to break down IT investments, not treating as a whole entity and following an justification process that considers specific
objectives of the proposed investments. For example investments aimed at reducing labor costs can be justified on the basis of cost savings

3.3.2 Corporate governance of IT

Raghupathi (2007) recognizes the value of internal and external strategic fit (Henderson et al.1993) and argues that modern IT governance should formulate strategies according to this model.

IT Governance can be defined as: “The organizational capacity to control the formation and implementation of IT strategy and provide direction to achieve competitive advantages for the corporation”. IT is critical for supporting and enabling enterprise goals. Effective ITG can generate real business benefits like reputation, trust, product leadership, time-to-market and reduced costs. These benefits all increase stakeholder value.

This emphasized the alignment of IT objective with business strategy. IT governance cannot be an isolated activity and must be part of top management. IT Governance is changing: "Boards of directors are beginning to look beyond the accounting roots of IT governance toward the risk of legal liability and harm to product brand and corporate reputation.”

3.3.3 Conclusion

Inability to realize value from IT investments is due to lack of alignment between business and IT strategies in organizations (Henderson et al.1993).

There is a need for strategic fit between internal and external domain of IT and a functional integration between business and IT strategy (Henderson et al.1993). To achieve this alignment IT governance cannot be an isolated activity and must be part of top management (Raghupathi, 2007). Modern IT governance should formulate strategies according to this model that recognized the value of internal and external strategic fit (Raghupathi, 2007).

I argue that social media strategy should be aligned with the business strategy of organization to achieve successful investments. With the growth of social media importance in organizations it should become part of IT governance. Where the "Boards of directors are beginning to look beyond the accounting roots of IT governance toward the risk of legal liability and harm to product brand and corporate reputation (Raghupathi, 2007)."
3.4 Internal and external business approach to the electronic environment

The strategic alignment model states that strategy must be addressed in an Internal and external domain. The research that follows on electronic strategies and business types also indicate organizations can have an internal or external focus.

3.4.1 E-service: a new paradigm for business in the electronic environment

Rust & Kannan (2003) argue that the traditional path of e-commerce has largely failed after the dot-com crash, and that organizations must learn to embrace the e-service paradigm that can offer new forms of competitive advantage. Putting the firm in a position attending to the needs of the customer by providing software service in addition to selling products.

The transformation of physical products to service products is enabled and hasted by electronic networks. For firms to garner long-term customer relationships they must take full advantage of the e-service opportunities that these electronic networks can offer. They predict that product-centered orientated firms that resist the call of the customers for control are not likely to survive in this electronic environment and give the example of record labels.

The traditional path is focused on automation and efficiency to reduce costs. While the e-service path is focused on enhancing service and building profitable customer relationships to increase revenues. There is a shift from focusing on technology and systems towards focusing on understanding the customer.

While the new path offers new forms of competitive advantage both can still be used by organizations to perform successfully.

The electronic environment enables both this inward and outward-looking view of e-commerce. The e-service paradigm identifies a new use of internet for improved customer satisfaction as opposed to...
increased efficiency and productivity. The e-service paradigm takes advantage of the nature the online environment with its flows of information to learn about customers, communicate and engage in long-term relationships to build customer equity (Rust & Kannan, 2003). E-services identify customer service as an important new approach of businesses in electronic environments.

According to Rust Kannan (2003): “Dell Computers is a good example of how a firm selling products in an increasingly commodity market can follow an e-service orientation to build its customer equity.” Organizations as IBM, HP and Sun are also undergoing this shift and increasingly focus on their services as prime revenue source.

3.4.2 Business types, e-strategies, and performance

After the dot-com crash IT developments continued shaping towards web 2.0 and new services emerged (Hoegg et al. 2006) creating new business opportunities (Rust & Kannan, 2003) and new e-strategies emerged. Lai & Wong (2005) mention that the companies that survived the dotcom crash needed to device innovative e-strategies and restructure around new business models. After reengineering efforts some companies recuperated from the debacle.

In their research they look at companies after the EC crash and investigate the influence of different business types (B2B & B2C) and non-EC on the company performance. Also the e-strategies from the different companies are identified and their effectiveness correlated with the company performance.

The results indicate a moderating the relationship between business type and e-strategy performance.
Findings indicate that many EC companies used four different types of e-strategies. Savings-related strategies were most effective for B2B and B2C companies, while marketing-related strategies were only effective for non-EC companies. The business type that benefited the most from the e-strategies were B2B companies and also performed better than their B2C counterparts.

3.4.3 Conclusion

E-strategies further help identify how organizations approach the electronic environment and which strategies they use. The four main types of e-strategies are identified as: savings-related, structure-related, policy-related and marketing-related. These identified strategies can also be subdivided between internal and external strategies. Savings, structure and policy-related are inward focused strategies while marketing-related strategy is focused outwards.

Rust and Kannan (2003) identify two different paths of e-commerce. The traditional path focused on automation and efficiency to reduce costs and the e-service path focused on enhancing service and building profitable customer relationships to increase revenues (Rust & Kannan, 2003). The traditional e-commerce path and e-service path help identify two approaches of businesses to the electronic environment. One focused inwards on processes and the other focused outwards on customer satisfaction. Organizations can adopt an internal as well as an external focus.

Both papers indicate the existence of an internal and external focus for organization strategies and are in line with the strategic alignment model that was presented and help identify how different organizations can use social media and web 2.0 in their (electronic) strategies.

I argue the same strategies can be used when formulating strategies for the use of social media in organizations, because social media operates in the same electronic environment on web 2.0 services and platforms. Also the e-strategies theory can be connected to e-commerce or e-service paths by making a distinction between internal and external focus.
3.5 Functions of web 2.0

3.5.1 Possible uses of the World-Wide Web for business

Having answered what web 2.0 and social media is and developed definitions for both, now the possible use of social media by organizations can be researched. Cockburn and Wilson (1996) present a list of applications for which businesses are using the WWW. While their paper was written at the beginning of the internet era, it can still be used to identify the purposes and goals of businesses on the internet. They identified the following application areas:

*Publicity, marketing and advertising*: the WWW appears to be an ideal medium for businesses to promote themselves and their products. Gaining access to millions of people can be achieved by a small fraction of the costs of conventional methods.

*Direct online selling*: can revolutionize the way in which people shop. Virtual shops and catalogues are available on the web where customers can directly buy products.

*Research and development*: especially companies involved in research and development can use the internet as an additional resource for collecting information. Many databases are available and discussion boards that can be searched and queried for information and data.

*Communication*: use of low-cost electronic mail (and other ways of online communication) that allows many companies to link together and communicate internal and external in an easy and fast way.

*Collaboration*: fast and easy forming of links and collaboration over the internet instead of using private (network) links.

After the dot-com crash new web business characteristics were identified as web 2.0 (O’Reilly, 2007) and businesses had to understand the new rules for success on that new platform (Valacich & Schneider, 2009). The survey was done in 1996 before the dot-com crash and new developments have led to new approaches and use of the internet. Modern web 2.0 business uses like e-commerce can be seen as part of *Direct online selling*, *Crowd sourcing* that makes use of the collective intelligence of web 2.0 (O’Reilly, 2007) can be seen as part of *Research and development* and *Collaboration*.

Internal enterprise use of social media focuses reaping the benefits from *internal collaboration and communication* and makes use of web 2.0 services to achieve this. The free broadcasting platform that
social media offers, helps to circumvent traditional organizational hierarchies (Brzozowski et al. 2009).

While the list of applications for which businesses use the internet still is valid, I argue that one business application is missing that was identified after the dot-com crash. Customer service is the main new business application that originated from the paradigm shift after the dot-com crash (Rust & Kannan, 2003) and should be added to the list. Zappos.com is an example of a company that mainly focuses on using internet to offer customer service, with the use of a blog, chat and other messaging services. These are used as a support function on their e-commerce services that are used for direct online selling.

3.5.2 Conclusion: How organizations can use social media

The possible uses of the Internet for business were identified by Cockburn and Wilson (1996) in their survey that presented a list of applications for which businesses were using the internet. I identified one main application that was missing and updated the list. The business uses of internet are: Publicity, marketing and advertising, direct online selling, research and development, communication, collaboration and customer service.

The list of possible business applications of the internet helps identify the use of social media for organizations. I argue that these applications can also be applied to the use of social media that operates on top of web 2.0 services and platforms. Web 2.0 and social media that operates on top of it offer new opportunities, but I argue that the same goals on the web remain. One of the new opportunities that arrived with the rise of web 2.0 and e-services is customer service that can be a goal of businesses on the internet, and was added to the list.

These possible uses of the internet overlap with the possible uses of social media. Only now web 2.0 and social media has really enabled the possibilities to achieve these uses and goals on the internet while at the start of the internet era the possibilities were still limited. These uses will be important for the model that is presented later on in this paper.

3.6 Organization strategy formulated in Value disciplines

Treacy and Wiersema (1993) presented the value disciplines model that describes three value disciplines that can help define the main focus of an organization’s business strategy, helping the organization to make strategic decisions. Choosing one will shape strategy and operational decisions in a company. These value disciplines are guidelines for organization strategy and in order to be competitive organizations
need to maintain an acceptable level on all three disciplines while excelling in one. The three value disciplines are:

*Operational excellence*: Aims at offering the best total cost. Optimizing internal and external processes to minimize costs. The focus in the organization is on standardization and streamlining of operations, efficiency and low total cost. Most large international corporations like McDonald’s, Wal-Mart and Dell focus on this discipline. (Marc Eichen, 2006)

*Product leadership*: Aims at offering the best product or solution. The focus in the organization is on R&D, design and innovation. Organization structure and culture need to be flexible to stay ahead of competition and offer cutting-edge solutions to customers.

*Customer intimacy*: Aims at offering the best solution and focus on customers to maintain long-term relations and growth. Continuously tailoring and shaping products and services to fit customer needs. Organization structure needs to be flexible, close to the customer and solving the customer’s problem has to be put above all.

Marc Eichen (2006) argues in his article “Value disciplines: a lens for successful decision making in IT” that the value disciplines are a good method for IT strategy decisions to be aligned with the institutional goals of organizations.

### 3.6.1 Conclusion: Value disciplines: a lens for successful decision making in IT

Formulating organization strategy in terms of choosing one value disciplines gives and clear view on the business strategy of an organization. Having this clear definition helps communicating the strategy to the rest of the organization.
Operational excellence, product leadership and Customer intimacy can all be used to formulate the goals of IT strategy and shape strategic decisions. I argue they should be used by organizations as a starting point from which to formulate their social media strategy. This way the social media strategy will have a basis that is aligned with the business strategy of the organization.

4. The social media governance framework

In this paper I have argued that social media should be part of IT governance (Raghupathi, 2007). This social media governance framework can be used to formulate strategies within modern IT governance in organizations that make use of social media.

In e-commerce theory that was used to analyze the approach to social media for business use, two paths were identified (Rust & Kannan, 2003). The traditional inward e-commerce path resembles the internal IT strategy where focus is on internal processes, efficiency and Information systems. And the outward focused e-service path resembles the external IT strategy where focus lies on the marketplace and can be used to create customer value.

The research on e-strategies identified four main strategies used in the electronic environment that can also be subdivided between internal and external strategies. Savings, structure and policy-related are inward focused strategies while marketing-related strategy is focused outwards.

Both research on e-commerce and e-services show that organizations can have an internal as well as an external focus. The strategic alignment model also indicates that IT strategy can be formulated in terms of an internal and external dimension and that a strategic fit between them is needed (Henderson et al.1993). The strategic alignment model also indicates the need for a functional integration between the business and IT strategy in organizations.

The choice for one of these e-commerce paths and e-strategies should be aligned with the business strategy that can be formulated in terms of value disciplines (Treacy and Wiersema, 1993). The functional integration is done by using the value disciplines as a starting point to formulate social media strategies. I argue that my social media governance framework can be used to identify how to use social media services and platforms by different types of organizations. Deployment of social media/social software applications must be guided by the value disciplines of the organization to achieve the functional integration/alignment between the business and IT strategy (Henderson et al.1993). These social media
services and platforms are used in internal or external strategic fit depending on the value discipline of the organization.

Operational excellence organizations can use the traditional e-commerce path with focus on internal operations and efficiency to minimize costs. In the framework the application of social media will focus on the internal strategy. E-strategies that are effective for this kind of organization are internal-related.

Customer intimacy organizations can use the e-service path with focus on the external customer relations to fit customer needs. In the framework these organization will focus on internal social media strategy to be flexible and close to the customer and their problems.

Product leadership organizations that aim to offer the best product or solution need to find the right mix between internal and external application of social media. To stay ahead of competition internal R&D, design and innovation are important, but also the offering of cutting-edge solutions to the customers in the external domain. Focus for these organizations lies on both internal and external domains and the links between the different domains.

The starting point is for the organization to recognize which value discipline they excel in. All following social media strategies should be aligned with this discipline to create value for the organization and realize effective investments in social media. The value disciplines also help different organizations identify if their social media efforts should focus on the internal or external domain. In the end achieving an strategic fit between both domains benefits the value and successfulness of social media usage in organizations.

In the social media governance framework, the horizontal axis indicates the strategic fit focus on the internal and external domain. I argue that operational excellence organizations should have a focus on internal use of social media and that customer intimacy organizations should have a focus on the external use of social media. The vertical axis indicates the social media channels that can be used for business use. These channels exist trough web 2.0 services and applications. These channels were identified as possible business uses of social media and help organization recognize for which applications social media can be used in organizations. Managers role on different social media applications depends on its position in the framework, depending on the strategies and goals of the organization (Brzozowski et al. 2009).
When an organization decides to use a social media service or platform, they can use the *social media governance framework* to identify how to deploy the use of it in the organization and how to align it with the business strategy. Social media is aligned with the business strategy by focusing on the internal or external domain depending on which value discipline the organization excels or wants to excel in. How social media is deployed in the organization depends on the goal or the purpose of the business use of the social media-web 2.0 service or application. The possible channels that can be used are listed in the framework, but organizations can add or remove possible uses of social media in their organization. The
framework helps organizations to strategically implement social media and software into their organization.

Web 2.0 and social media services and platforms can be implemented differently in different organizations. This is where the alignment with business strategy comes into play and helps identifying which implementation an organization should focus on. A wiki, for example, can be used for internal collaboration purposes among employees, but could also be used in the external domain for communication purposes with customers. The Research and Development channel can use various web 2.0 services like a blog and social networks to achieve this goal, but can be deployed in the internal or external domain, depending on who the organization wants to contribute to the research, which then again depends on the value discipline of the organization.

This framework can also help organizations identify social media or social software they already use by mapping them to the framework to get an overview and review the strategic fit between the different applications that are used in the internal or external domain. Alignment and strategic fit of IT and business strategy in organizations that use social media could be evaluated by filling in the services and applications in the social media governance framework which should result in a skew to the side that the organization’s value discipline predicted.

5. Conclusion

Web 2.0 was identified after the dot-com crash and is a collection of technologies, services and platforms. Key to business in web 2.0 is the ‘harnessing of collective intelligence’ often also called the ‘power of the crowd’. Social media can be defined as ‘the collective goods produced through computer-mediated action on web 2.0 services and platforms’. When focusing on the business uses social media encompasses these services and platforms that can be used by organizations. Social media and web 2.0 are greatly driven by modularity and result in the creation of large IT platforms and computer-mediated spaces.

Like Internet, social media can be used for: Publicity, marketing and advertising, direct online selling, research and development, communication, collaboration and customer service. E-services helped identify the customer service path as a new business use after the dot-com crash and rise of web 2.0. Enterprise use of social media mostly focuses on reaping benefits from internal communication and collaboration across traditional organizational hierarchies. Social media can be approached from an
inward (internal) e-commerce perspective or from an outward (external) e-service perspective e-strategies depend on the approach.

For investments in social media to be effective corporations need to have an alignment between social media (IT) and business strategy. Also the strategic fit between the internal and external IT domain needs to be considered. The social media governance framework I present helps identify how different types of organizations should deploy social media applications depending on the purpose and business strategy in the internal or external domain. Alignment between the social media (IT) and business strategy occurs by using the value disciplines of an organization to formulate social media strategies. I argue that operational excellence organizations should have a focus on internal use of social media and that customer intimacy organizations should have a focus on the external use of social media. With the growing importance of social media in organizations, social media should become part of IT governance in organizations top management to support the alignment.

6. Further research
This paper made a start in connecting social media IT theory with organization theory. More research should be done on this subject to better understand the role that social media can play in different types of organizations. While this study has made the first steps in identifying how different organization types can use social media, more research should be done on the use of social media in different types of organizations. This paper and the developed framework could be used as a basis to start from.

Of the 3 value discipline types of organizations the product leadership organization remains less clear which focus they should adopt. A case study of different types of organizations and how they use social media seems like the next step to confirm the conclusions of this paper and to map in more detail the focus of each and the problematic product leadership type. Experimentation with the framework in practice can give better insights on the channels that social media is used for.

For good IT governance of social media I argue that methods to measure the value like ROI need to be developed for social media. While there are some theories on how to measure value of IT, a framework specialized for social media activities could greatly benefit the governance and implementation of social media across organizations.

The findings of the importance of web 2.0 for organizations gives material that could be further researched. The large IT platforms and spaces of interaction that are created on the web and where social
media operate on and their consequences for business can be further researched. Which consequences does this bring and which opportunities and new concepts could be build?
References


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