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Exploring the Perceptions of Inhibitors and Drivers of Social Media Progression among Small and Medium Enterprises at Different Stages of E-Business Maturity

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ABSTRACT

The adoption of social media (web 2.0) in the e-marketing strategy of small and medium enterprises (SMEs) is not yet researched much. Research findings in bigger companies in the USA, Europe and the Netherlands suggest that the issue is high on the think list of marketers and entrepreneurs. But what are the drivers and barriers for small and medium enterprises to make, execute, and further develop their strategy on social media? This paper places the perceptions and actions of 10 SMEs in the Netherlands in the Stages of Growth for e-Business model (SOG-e model) which focuses on e-business maturity. Findings are that general expectations and customer wishes are important drivers and that, besides time and money, the fear of negative comments on the Internet are important barriers.

INTRODUCTION

With the growing success of the Internet at the end of the last century the interest in using the Internet as a commercial and marketing tool increased at the same pace. This growth led to the 'new economy' with its high expectations of future online turnover and profit.

Close to the millennium the first models appeared which tried to describe the natural growth of the use of the Internet in marketing processes in order to help companies with their development. The idea was that a good understanding of the logical steps in the development of the internet strategy of a company could have describing and predicting value for the phases of development that individual companies go through (Rao, 2003).

The problem with this kind of research and model generation is that during the process of trying to understand the nature and possibilities of the use of the Internet in commerce, the Internet and its possibilities change rather radically. Therefore this study is based on the most recent maturity model for small and medium enterprises (SMEs), namely the Stages of Growth for e-Business model (SOG-e model).

The aim of the study is to understand and explore the effect of recent changes in the use of the Internet, called web 2.0, on the development of SMEs in their Internet strategy. More specifically the focus of the study is on the drivers and barriers for adopting web 2.0 in the Internet strategy of SMEs. In order to understand these drivers and barriers within their context it would be prudent to consider them within the maturity that a business has reached when it comes to

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electronic business (e-business). The notion of e-business maturity is described further in the next section.

Barriers are defined for the purpose of this study as factors that inhibit the development of a company to the next level of maturity. And in the same way drivers are defined as factors that facilitate the move towards a higher phase of maturity. Describing these barriers and inhibiters in terms of maturity is valuable for discussing, evaluating and assessing entrepreneurs' behavior in advice situations.

This study could be the first step to integrate web 2.0 in the SOG-e model.

ELECTRONIC BUSINESS MATURITY IN SMES

There are several models that have helped to bring clarity and understanding of e-business maturity in SMEs. These are described in the following section starting with Stage Models.

Stage Models

The literature reveals that when it comes to e-marketing or e-business stage models frequently consists of four stages (Rao, 2003; Prananto, 2001):

- Presence; where the organization provides corporate information and digital possibilities for contact (website, extranet, e-mail);

- Marketing; where the organization provides information about products and/or services, accounting models, search functionality and so forth with the purpose of helping and influencing customers' decisions;

- Transaction; where the organization facilitates the match between supply and demand in online transactions; and

- Chain integration; where the organization connects with customers and other parties in such a way that it creates the possibility for them to participate in the supply/value chain and to steer relevant processes online. The first step within this phase is internal integration within the company; connecting the front office with the back office.

Different companies progress through these stages at different rates depending on factors that are commonly referred to as barriers or inhibitors and facilitators or drivers.

A related idea is the notion that the way in which companies handle the use of IT can also be described in stages of growth that follow each other in a more or less predictive way. Research on this topic goes back into the sixties of the last century with contributions from, for instance, Earl (1983) and Nolan (1979). Their models are based on the premises that the ways companies handle their IT evolve following certain maturity stages.

Early research contributions offered models that were rather IT-centric but Galliers and Sutherland (1994) made an important improvement by describing IT maturity more as a development that organizations go through instead of technical configurations that follow each other. Their stages of IT maturity are:

- Adhocracy, the procurement of tools

- Fundamentals; adjusting with users

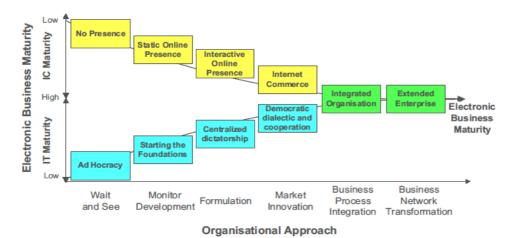- Centralized; Top down standardization

- Cooperation; Adjustment between business and IT

- Entrepreneurial; outside focused development

- Harmony; integration, business is IT

In an effort to provide a more holistic view of this area McKay et al. (2000) combined the aforementioned models and used these ideas as the foundation for developing the so-called SOG-e model as depicted in Figure 1.

Figure 1: The SOG-e Model of E-business Maturity (McKay, et al., 2000)

As can be seen in Figure 1, the SOG-e Model incorporates these growth and maturity models to provide a description of the stages of development that a company move through.

In line with the model of Galliers and Sutherland (1994), McKay et al. (2000) described 4 stages of maturity that can lead to the 5th stage of the Galliers and Sutherland (1994) model, namely the integrated organization.

In these four stages the e-business activities of a company happen to be executed apart from the standing organization, both in an organizational and a technical way. The first step is 'no presence', where the company waits and sees whether a competitor makes a first step or the commitment within the organization grows to do something.

The second step is 'static online presence', which entails the publication of company content like service information, assortment, mission statement, or job possibilities.

In the third step, 'interactive online presence', the company tries to involve the customer in the selling process of the company. There are possibilities to interact with the company via its website about products and conditions.

In the fourth step, 'Internet commerce', the website has full transactional capability, so that purchases can be completed and delivery often can take place without further human contact. In this stage systems are still not integrated with the back office and other business channels of the company. When that occurs, then the company moves into stage five of the Galliers and Sutherland (1994) model in which front office and back office are integrated.

The SOG-e model also highlights four aspects of business as most defining for maturity of e-business in SMEs:
- Strategy, having an e-business strategy that is linked to the business strategy.

- People; the skills level of both e-business and business departments and management in the process of e-business.

- Systems; the level of adjustment and being steered of the e-business structure by the Business targets en technically is integrated in the business IT infrastructure.

- Processes; the level of integration of the e-business processes in the business processes.

Further research led to the identification of factors that help companies to grow from one stage to another (Prananto et al., 2001). The theory is that a balanced development on all factors leads to the fastest growth towards a more mature situation. These factors are:

- The right investments in systems

- The right changes of process design

- Effective marketing and CRM

- Good management of relations and sources

- Development and management of logistic resources (Prananto et al., 2001)

These factors make clear that e-business maturity is about the whole core business process and that makes the interest in a maturity model understandable.

The SOG-e model has been fairly useful in describing the position of an organization in terms of e-commerce development (Ghachem, 2008) and in discussions with management of organizations for developing a balanced (e-) business strategy (Prananto et al., 2001).

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A related issue of interest is a more recent trend in the growth and development of the internet that suggests a fundamental shift in how it is used. O'Reilly (2004) suggested that the fast growing number of Internet users lead to new phenomena. He is most likely the first who used the term 'web 2.0' and defined it as:

> "*a set of economic, social, and technology trends that collectively form the basis for the next generation of the Internet—a more mature, distinctive medium characterized by user participation, openness, and network effects.*"

The relevance for organizations is that a lot of different, rather new, functionalities such as user generated content, web logs, communities, customer reviews, product ratings, affiliate marketing, Really Simple Syndication feeds (better known RSS feeds, which regularly updates changes on, for instance, a news website to a persons computer), give customers many new possibilities to obtain information, share their beliefs and (product) experiences, live their creativity and form new social networks. Organizations might very likely feel both threatened and challenged by these new social media.

Nevertheless Web 2.0, or social media, is seen as one of the most important innovators of e-marketing and marketing as a whole and research show that business managers consider Web 2.0 as very important (Berenschot, 2008; Forrester, 2007; and Mckinsey, 2007).

The literature reveals that the effect of customer interaction and web 2.0 on the relation between customer and company can be considered as significant, both in Business to Consumer

relationships (Abhamid et al., 2005; Yang et al., 2005) as well as Business to Business e-commerce (Zhang et al., 2005; Chan et al., 2007).

So the question remains, what are the driving and inhibiting factors in the adoption of web 2.0? And to understand these factors better, they need to be considered within the context of the natural phases of development (maturity) of web 2.0 in e-marketing strategy, and for the purpose of this research, specifically within the context of the small and medium enterprise (SME).

Towards this end it is possible to map the maturity models, specifically the SOG-e model, to the logical development of the use of social media, in the e-marketing strategy of SMEs.

The steps in this model are therefore similar to the SOG-e model:

- Phase 1: No use at all

- Phase 2: Use only at corporate level

- Phase 3: Use on marketing level, products are involved

- Phase 4: Transaction level, social media facilitate transactions

- Phase 5: Use on relation level, the customers influence the complete process of the company

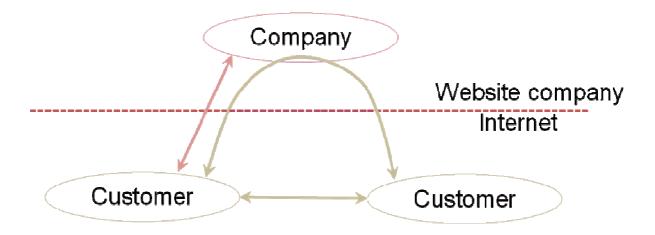- Phase 6: Transformation, the whole chain is influenced

It has to be noted that the assumption here is that Phase 6, for instance, points to a higher level of maturity than Phase 3. Whether these phases always occur in the same order is debatable and there is not space in this paper to fully argue this point. However, it will be assumed for the

purpose of this paper that it may be possible for a company to skip certain phases under certain conditions. What is more important for this research is that a company that is studied might find itself in a certain phase at a certain point in time.

For clarification it is possible to suggest a mental model of web 2.0. Figure 2 shows a company that interacts with its customers. New in the picture is the interaction between customers that can happen on the website of the company or 'out' on the Internet. Also the interaction between customer and company can be valuable for other customers when it can be followed on the website of the company.

Figure 2: The web 2.0 Framework

So the six phases of the SOG-e model can subsequently be mapped against the use of social media in the relationships between the business and the consumer (B2C), the relationship between consumers that is facilitated by the business inside its website (C2C internal), as well as

the relationship between consumers outside of the business website (C2C external). This mapping is depicted, in this order, in Tables 1, 2, and 3

Table 1: The use of social media in B2C

Phase	Description
2	Customers reactions and opinions about company affairs can be written and read on the corporate website
3	Customer opinions and reactions about products can be written and read on the marketing website
4	Customer choices can be seen on the transaction site (people like you also bought….)
5	Customer relation is transparent to other customers
6	The whole chain is involved, from producer to end customer

Table 2: The use of social media C2C internal

Phase	Description
2	Customers talk to each other about the company on the corporate website or corporate community, corporate web log
3	Customers talk to each other about products on the marketing website or marketing community, marketing web log
4	Customers transact with each other on the company website (like second hand books at Bol.com)
5	Customers have a relation with each other within the company domain (co-creation, crowd sourcing)

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6	The customers are the chain via the company

Table 3: The use of social media in C2C external

Phase	Description
2	The company listens and talks with customers in their communities about the company.
3	The company listens and talks with customers in their communities about products.
4	Transactions are distributed to the external community (affiliates)
5	Customer relations have an impact on the company
6	The customers can play every role in the chain

This structure is suggested in order to have a clear understanding of the activities that need investigation, to gather data about all these aspects, and to have an idea about how web 2.0 ideas fit into the SOG-e model.

THE RESEARCH PROCESS

Research Method

The research method of this study is case study research. Case study research is a method to find in depth understanding of more complex situations within its real life context by looking at different aspects and use more than one source (Yin, 2003). In this study semi-structured interviews were used to collect primary data in combination with the collection of secondary data from relevant websites.

Sampling

A sample of 10 SMEs was studied. Companies with more than average experience with e-marketing were targeted because the assumption was that richer data could be found in these cases. Another decision was to take samples from different industries. The aim of this sample strategy was to be able to identify both the broadness of possible drivers and inhibiters and the similarities in the answers.

The sample therefore included software development companies, a travel agency, a fitness studio, an art and culture portal, a business trip portal, a producer of pet foods, a pharmacy, an undertaker, a music community, and a producer of children's electronics. The size of the companies varied from 1 to 60 full time equivalents (FTEs).

As a result 5 of the targeted companies were small (less than the equivalent of 10 full-time staff, or 10 FTEs), 3 were middle-sized (between 10 and 50 FTE's) and two were big (more than 50 FTEs). All were situated in the middle of the Netherlands near Utrecht except one that was based in the south of the Netherlands. These businesses were local (4), national (3) and international (3). All the companies were independent, more than 50 % of the shares were owned by the management.

Data Collection

The data were collected from the websites of the companies, of websites were the companies were mentioned and from their managing owners (except one, a non-owning marketing manager).

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The websites were visited and their functionality was reported. A search was conducted in web logs and other social media on the company name and the most important brands. The online information was used as input for the interview to be sure that all activities of the companies were covered.

The owners were interviewed, and the interviews were taped. The interviews were structured around the stages of e-marketing growth (in other words the SOG-e model) and our Framework of web 2.0 growth stages, and the online check was used to confront the entrepreneur with his/her online exposure and behavior. The focus was on find-ability, functionality of the company website and posts on web logs and communities about the company and its products.

Analysis

The interviews were taped and analyzed and transcribed. Their e-marketing activities were structured in the SOG-e model around strategy, people, process and system. Web 2.0 activities were matches with the hypothetical web 2.0 model. Barriers and Drivers of web 2.0 adoption were categorized in the (similar) items mentioned by the owners

FINDINGS AND DISCUSSION

Maturity level

Based on the four factors of the SOG-e model (strategy, staff, systems and processes) the companies had varying levels of maturity as depicted in Table 4.

Table 4: Maturity level E-marketing

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Level of maturity	1	2	3	4	5	6
Amount of companies		2	4	2	1	1

In Table 4 the first row represents the six levels identified earlier and the second row indicates how many of the ten participating companies were categorized under each level. The inventarization of their activities and their strategy gave a clear picture of their maturity although some of them had a mixed score, so their categorization is debatable.

Based on the three factors of the Web 2.0 model (B2C, C2C internal, C2C external) the companies had the maturity levels displayed in Table 5.

Table 5: Maturity level Web 2.0

Level	1	2	3	4	5	6
Number	3	4	1	0	1	1

As can be seen in Table 5 seven out of 10 companies had some form of web 2.0 activities, one had tried some but was disappointed and stopped their activities. One other was far in implementing a web 2.0 plan and one didn't want to make a plan until his competitors would do it. Also this categorization was rather clear.

Barriers for development

A lot of barriers were mentioned. Lack of time was the most mentioned (7), although it was not possible to make a real distinction between lack of time to make a plan and lack of time to

execute plan. Nearly all (9 out of 10) entrepreneurs were thinking of possibilities and were eager to learn and to move, but time was an easy-to-mention cause for not moving as fast as they would want.

A second barrier mentioned (6) was fear for bad comments on the internet when they would give customers the possibility to rate and review the company and its product on the corporate website. Contradictory to this however all companies said that they had very satisfied customers and whenever there was a complaint it has been arranged properly. Only two of the companies actually gave the possibility to rate and review on the website yet. They both never had suffered severe problems with bad comments and in both cases it had helped to reach there marketing goals.

Costs were mentioned 4 times as a barrier. When their budget was higher they would spend more on web 2.0 features. These were the same respondents, which did not feel general expectations of the medium as a driver for their web 2.0 development.

Less mentioned factors were 'priority' (3) and a 'small team' (2), which can be interpreted as to little time and 'knowledge' (2) that was remarkably low for such a new phenomenon.

Two barriers were only mentioned by one and the same company, the pharmacist, namely 'regulations' and 'quality of content of communities'. In this branch quality of content is very vulnerable and that is why (para) medics are not allowed to communicate about medical issues

when it can be interpreted as advertisement. The pharmacist was very disappointed by the quality of public discussions on the Internet and didn't want to be associated with it.

The findings are summarized in Table 6, which presents the category of barrier in the first column, the number of respondents who mentioned this as a barrier in the second column, and some examples of responses by the participants.

Table 6: Barriers

Category of barrier	Nr of Respondents	Examples of responses
No time to make a plan or to execute	7	'because of time, the priority is not high'
Fear for bad comments on the Internet (when there is a possibility for ratings and reviews on the company's website)	6	'That's what always frightens you, what they say about you on the Internet' 'We don't dare it yet, we're afraid that the reactions will disappoint us'
Finance	4	'Our pay back time on investments is short'
Our team is to small	2	'I have to do all on my own'
No priority (yet)	3	'Our website is still better than most competitors, we grow as fast as the market'
Not enough knowledge	2	'I don't think I know enough about web 2.0' 'Technically it's not so easy, they're a lot of

		new possibilities'
Regulations	1	'Pharmacies are very limited in there communications'
Quality of content of communities	1	'The quality of discussions about medications and illness is so low that I don't want to be involved'

Drivers of development

The most mentioned driver is customer demand for web 2.0 functionality. In this study 6 out of 10 participants mentioned that their customers demand, or have demanded, web 2.0 solutions or entrepreneurs see web 2.0 as a possible solution for customer wishes.

'General expectations' about the value of web 2.0 for both consumers and companies are an important driver to move (5 out of 10). Of course the hype effect of web 2.0 plays a role here, but at least we can say that the hype has reached SMEs too.

'Examples on the internet' were mentioned 4 times as a driver, so the willingness to follow these examples is rather high.

'Partners who can help' was mentioned only once by the most web 2.0 developed company, the only one that thinks in partnerships.

'Action of competitors' was mentioned only by the only entrepreneur that didn't think of a web 2.0 strategy yet at this moment.

The findings are summarized in Table 7, which presents the category of driver in the first column, the number of respondents who mentioned this as a barrier in the second column, and some examples of responses by the participants.

Table 7: Drivers

Category of driver	Nr of Respondents	Examples of responses
Customers ask for it	6	'We get sometimes a request to start a community' 'I want to work together with our customers on a site, so they can feel that we listen to them ' 'Customers do ask for it'
General expectations	5	'Web 2.0 increases trust and that increases turnover' 'With our target group it is very hard to form a community, web 2.0 is a chance for them and me'
Examples on the Internet	4	
Partners who can help	1	'An investor with vision really helps'
Actions of competitors	1	'I try to compare me with competitors'

Growth level on social media compared with the growth level of E-marketing

It's interesting to look whether there is any connection between the level of maturity in e-marketing and the adoption of web 2.0. And in these findings there is some reason to believe that

maturity in e-marketing helps adoption of web 2.0. All the companies that are implementing web

2.0 have an e-marketing maturity of at least level 3.

Table 8: The average growth level on social media per level of e-marketing

Nr of companies	Growth level on e-marketing	Average related growth level on social media
2	2	1,5
4	3	2,75
2	4	3,5
1	5	3
1	6	1

Table 9: The average growth level on e-marketing per level of social media

Nr of companies	Average related growth level on social media	Average growth level on e-marketing
3	1	4
4	2	2,75
1	3	5
-	4	
1	5	3

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1	6	3~~4~~

There is also a tendency (although this was not focused on in this study) that the more mature e-marketing companies have more actual plans for web 2.0 activities.

CONCLUDING REMARKS

The findings show some interesting results. Based on our findings it can be argued that web 2.0 is believed by entrepreneurs to be a significant trend among customers and has a great influence on the innovation agenda of SMEs. What is already known about bigger companies (Forrester, 2007; Berenschot, 2008) might also be true for the smaller ones. General expectations and the perception that customers want web 2.0 tools in their interaction with companies are important drivers for development.

But, the barriers for making a plan or execute a plan are still high. Of course time and money play an important role but fear for bad comments is an important barrier for SMEs to set their first steps.

The comparison of the growth levels of E-marketing and social media give no significant results accept that some maturity on e-marketing seems to be needed to set the first steps on web 2.0. On the other hand, a high growth level of E-marketing does not guarantee a high level of social media.

Other findings and ideas for further research

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In this research the SOG-e model was used as a frame of reference for evaluating the use of Social media in the E-marketing strategy of SMES. What was found is that social media effect the growth factor 'effective marketing and CRM' (Prananto, 2001) most because entrepreneurs feel the need to find new ways to interact with and find information on their target groups.

The (potential) role of the Internet in expanding and improving market research and market testing, in product/market extension, in market exposure, in prospect generation and contact, in sales channel support, and in post-sale customer support (Stroud, 1998) seems to be influenced by social media in significant ways. Further research will help to understand this influence better. Forrester (Bernoff, 2008) did some useful work in describing and categorizing possible strategies to use Web 2.0 in e-marketing and could be a good model/reference for further research.

The growth factor 'management of resources' is also mentioned in the literature. This factor is based on the assumption that building an e-business capability in a reasonable time period is via building and managing alliances with business partners and/or entering into relationships with outsourcing vendors of various types (Grenier, 1995 and Chesborough, 1996). In this research it became clear that for both making and executing a social media plan external help is most often required and useful. But there is an extra dimension: Web 2.0 gives the possibility to see the customer and the public in general as a source for product development and content production. In two of the cases reported in this study this was actually at hand.

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