

2010

BACHELORTHESIS
BUSINESS ADMINISTRATION

BY BURAK GENC

UNIVERSITY OF TWENTE.



+



["E-COMMERCITY": A NEW TYPE OF E-BUSINESS?]

This paper outlines the findings of this research on the subject of combining an e-commerce and an e-community into one e-business. The three most important subjects are the structure, the critical factors for the e-business' success and segmentation of the users.

**"YOU CANNOT DO TODAY'S JOB WITH YESTERDAY'S METHODS AND BE IN BUSINESS
TOMORROW"**
- NELSON JACKSON (1872 - 1955)

"The difference between study and research?"

In study, you are taught a lesson and then given an assignment. In research, you're given an assignment that teaches you a lesson."

COLOFON

Document:	Thesis
Version:	1.0
Date:	30-04-2010
Status:	Final
Author:	Burak Genc
Student number:	0120782
Email:	s0120782@student.utwente.nl
Phone number:	+31644748065
Address:	Hengeveldebrink 21, 7544TL, Enschede
Institution:	University of Twente
Education:	Business Administration
Phase:	Bachelor
Faculty:	School of Management and Governance
Supervisor:	Mr. J.M.J. Heuven
Second Supervisor:	Mr. M.J.M. Habets
Visiting address:	Drienerlolaan 5, 7522 NB Enschede
Postal address:	P.O. Box 217, 7500 AE Enschede

© Burak Genc, Enschede, 2010

No part of this thesis may be reproduced by print, photocopy or any other means without the written permission of the writer.

VERSION HISTORY

Component	Start date	End date
Global competitor analysis (86-sites)	12-08-09	25-08-09
Intensive competitor analyses	25-08-09	10-09-09
Finding/reading articles (UT-part)	14-09-09	02-10-09
Article overview	03-10-09	04-10-09
Thesis structure	06-10-09	06-10-09
Introduction	06-10-09	06-10-09
Company introduction	10-10-09	18-10-09
Literature review	19-10-09	27-10-09
References	27-10-09	27-10-09
Feedback processing	10-11-09	15-11-09
Methodology	18-11-09	22-11-09
Processing feedback	30-11-09	17-12-09
Typing questionnaire	20-12-09	25-12-09
Waiting for responses	26-12-09	03-02-10
Validity & reliability	04-02-10	05-02-10
Empirical study and analysis	08-02-10	17-02-10
Conclusion and implications	17-02-10	24-02-10
Processing feedback	10-03-10	18-03-10
Research limitations	21-03-10	21-03-10
Lay-out/front-page/references/etc.	01-04-10	07-04-10
Processing final feedback	21-04-10	29-04-10
Finalizing document	30-04-10	30-04-10

PREFACE

This thesis is the result of my graduation trajectory for the Bachelor Business Administration of the University of Twente. My time during this thesis was a very busy time, in which I worked at lot of things at the same time. I worked at two jobs, finished the courses for my bachelor Business Administration, followed several courses for the Master Business Administration - Financial Management track and I even found the time to write this thesis.

I started working on this thesis in July 2009. I had a difficult start because at first I tried to integrate both the wishes of .. and the University of Twente into one research, which proved to be very difficult. I first started working on the thesis from the point of view of the University of Twente (mainly because my supervisor from Xx was on a holiday), which later turned out to be too theoretical to be of practical use for Xx. Therefore, I had adapted the research to the wishes of Xx, but it then turned out to be too practical for to serve as a bachelor thesis (mostly due to the absence of my university supervisor, as he was on a holiday) . After this, I decided to follow the suggestion of my supervisor, to divide the research into two parts, a practical part and a more theoretical (University of Twente) part.

The first part resulted in two products on which I worked during the summer break at the location of the Xx. These were a global competitor analysis and a competitor analysis grid. After I completed the XX part, I started working on the University of Twente part, which resulted in this report.

The past months I learned a lot about doing research and I had a lot of fun working with SPSS (sarcasm intended). E-business is a very difficult subject to grasp, especially because it is so heavily associated with competition. The effects of the actions taken seem to be magnified compared to traditional businesses.

It did take me a lot longer to complete this thesis than I originally planned (mostly because I had plans to study at the Rijksuniversiteit Groningen), but in the end, I am very pleased with the result.

I would like to thank several people for their help and guidance while working on my thesis. First, I would like to thank Joris Heuven, for his enthusiasm, great feedback and his guidance, especially while trying to figure out the best structure for this report. Second, I would like to thank Martijn den Ouden, for his valuable advice and an interesting look into the organization of xx. Xx is a great company, with a very informal culture, making it a pleasant environment to work. I would also like to thank Thijs Habets, especially for his feedback during Joris' absence.

In addition, many thanks to my family, friends and everyone else who helped me through the past few months with their motivating words and their support. Special thanks go to my sister, who enthusiastically helped me with figuring out how to perform a factor analysis with SPSS. Last, but not least, thanks to Cherreny for keeping me motivated at lesser times and for her inspiring words.

Burak Genc

Enschede, April 2010.

EXECUTIVE SUMMARY

E-business is one of the fastest growing types of businesses, mostly because they lower the costs for the company, while at the same time increase the comfort for the customer. In order to compete with e-printers, the xx decided to launch its own e-business. However, launching a successful e-business is very difficult, especially in the extremely competitive environment of e-printers. The numerous bankruptcies of e-printers in the past year emphasize this fact.

To make an e-printer successful, it is important to retain the customers as much as possible. It has never been easier for customers to switch between suppliers, since competitors are literally a mouse-click away. An e-community is an excellent way to attract and bind the customers to the e-business. However, the question remains of how to combine these two types of e-business, as they have completely opposite goals. Therefore, the main goal of this research was to answer the question: **"HOW CAN AN E-COMMUNITY AND AN E-COMMERCE BE SUCCESSFULLY COMBINED INTO ONE E-BUSINESS?"**

The purpose of this study was to investigate the possibilities of xx's idea to combine an e-community with an e-commerce. The most important issues were:

- The focus of the e-business; whether to design the e-business as an e-community with a webshop or a webshop with an e-community
- Finding the critical success factors of the e-community; what are the most important determinants for an e-community's success
- The segmentation of the users; whether the management should focus on specific member types during specific times in the development of the e-community

In the literature study, the various existing theories about e-business models, success factors and segmentation possibilities were examined. The research itself consisted of two parts: 1) a questionnaire, designed to measure the importance of various success factors and 2) a factor analysis, to reduce the large amount of questionnaire items to several factors.

The first conclusion of this research was that the e-business should be designed as an e-community with its own webshop, and not the other way around. This is because members value the neutrality of the e-community high.

The second conclusion of the research was that the most important success factors are:

1. Handling member data with care
2. Striving towards maximum member satisfaction
3. Stability of the website
4. Speed of the website
5. Content-quality

The third conclusion is that as the e-community moves through the three development phases of an e-community, the management should constantly review and adapt their focus. As the e-community is launched, the focus should be on building a strong and active member base for the e-community. As the e-community grows, the management can start to shift their focus towards the lesser active member types. After the e-community reaches its critical mass, then the management can start to shift their focus from the e-community towards the webshop.

MANAGEMENT SAMENVATTING

E-business is een van het snelst groeiende markten, vooral omdat de kosten voor het bedrijf lager zijn en het gemak voor de consument groter. Om te blijven kunnen concurreren met online drukkers, heeft de xx besloten om haar eigen online drukker te lanceren. Het lanceren van een succesvolle online drukkerij is echter erg moeilijk, vooral in de zeer competitieve omgeving van online drukkers. De talloze faillissementen in de afgelopen jaar benadrukken dit.

Om een online drukkerij succesvol te maken, is het belangrijk om zoveel mogelijk klanten te binden aan het bedrijf. Het is nog nooit zo gemakkelijk geweest voor klanten om te veranderen van leverancier, aangezien de concurrenten letterlijk één klik verderop zijn. Een mogelijke oplossing voor dit probleem is het opzetten van een e-community om klanten aan te trekken en te binden aan het bedrijf. Echter, de vraag van hoe een e-community en een webwinkel met elkaar gecombineerd kunnen worden is moeilijk te beantwoorden, aangezien ze beide totaal tegenovergestelde doelen hebben. Daarom is het doel van dit onderzoek een antwoord vinden op de vraag: **"HOE KUNNEN EEN E-COMMUNITY EN EEN WEBWINKEL GECOMBINEERD WORDEN IN ÉÉN E-BUSINESS?"**

Het doel van dit onderzoek was het onderzoeken van de mogelijkheden van het idee van de xx om een e-community te combineren met een webwinkel. De belangrijkste punten waren:

- De focus van de e-business: zou de e-business een e-community met een winkel moeten zijn of een webwinkel met een e-community?
- De kritieke succesfactoren voor de e-community identificeren: wat zijn de belangrijkste factoren die het succes van een e-community beïnvloeden?
- De segmentatie van de gebruikers: moet het management zich focussen op een specifiek type leden tijdens specifieke tijden in de ontwikkeling van de e-community?

De het theoretisch kader zijn verscheidene bestaande theorieën over bedrijfsmodellen, succesfactoren en segmentatie onderzocht. Het onderzoek zelf bestond uit twee delen: 1) een vragenlijst, ontworpen om het belang van de verschillende succesfactoren te onderzoeken en 2) een factor analyse, om de grote aantal items op de vragenlijst terug te brengen naar een aantal factoren.

De eerste conclusie van dit onderzoek was dat dit e-business opgezet zou moeten worden als een e-community met een webwinkel, in plaats van andersom. Dit is omdat leden de neutraliteit van een e-community erg belangrijk vinden.

De tweede conclusie was dat de belangrijke vijf succesfactoren zijn:

1. Gegevens van leden met zorg behandelen
2. Streven naar een maximale tevredenheid onder leden
3. Stabiliteit van de website
4. Snelheid van de website
5. Kwaliteit van de inhoud

De derde conclusie was dat, wanneer de e-community de drie ontwikkelingsfasen van een e-community doorloopt, dat het management hun visie en focus constant moeten aanpassen. Zodra de e-community wordt gelanceerd moet de focus liggen bij het aantrekken van actieve leden, om zo een sterke basis op te bouwen. Zodra de e-community begint te groeien kan het management hun focus verbreden naar het aantrekken van minder actieve leden. Nadat de e-community de kritieke massa heeft bereikt, dan kan het management hun focus langzaam verplaatsen van de e-community naar de webwinkel.

CONTENTS

1. Introduction	9
§1.1 Background	9
§1.2 Research design	10
2. Literature review	12
§2.1 Structure	12
§2.2 Success factors	12
§2.3 Segmentation	13
3. Methodology	16
§3.1 Research design	16
§3.2 Validity	17
4. Results	19
§4.1 Generic data	19
§4.2 Structure	19
§4.3 Success factors	20
§4.4 Segmentation	21
§4.5 Factor analysis	23
5. Conclusion	25
§5.1 Implications for theory	25
§5.2 Implications for XX.nl	26
§5.3 Research limitations	26
List of references	28
Appendix I: Organizational chart of the Xx	30
Appendix II: Figures, diagrams and tables	31
II.a: Research Framework of Wirtz & Lihotzky (2003)	31
II.b: Ranking of success factors (Leimeister et al., 2006)	32
Appendix III: Questionnaire	34
Appendix IV: Factor analysis	38
IV.a: Total variance explained	38
IV.b: Scree plot	39
IV.c: Rotated component matrix	40

1. INTRODUCTION

§1.1 BACKGROUND

E-companies are growing in popularity because they increase the comfort for the customers while at the same time reduce the costs for the company. Nevertheless, it is of course not risk free (see the dot.com crash in 2000-2001). Online shopping is nowadays strongly associated with heavy competition. The prices of online companies are usually much lower than of conventional companies, as e-companies have lower fixed costs. This competition usually leads to more pressure for innovation, lower prices, improved service and increased differentiation, which all benefit the customer.

This context also applies to the (online) printing industry. As pointed out in an article in the newspaper "De Morgen" of 12 June 2009¹, the sector is experiencing a heavy recession. The numbers of Febelgra show that printmakers had an average of 12% decrease in revenues compared to previous years. The most important cause of this recession is the competition caused by the overcapacity in the market. Decreasing revenues, increasing wages and the necessary investments in new technologies, result in the declining of the profit margins. This, in combination with the current financial crisis and the relatively calm summer period, leads to the expectation of more bankruptcies in the fall of 2009. The ING industry outlook for 2009 largely confirmed these expectations². The occupancy rate in the industry declined from 85% to 80% in just one year. However, the current financial crisis is not disadvantageous for all manufacturers, since the many bankruptcies result in fewer suppliers in the market. Many companies, which adapt risky pricing strategies, fail to survive because they cannot pay their debts. The many 'restarting companies' however do pose a threat to current manufacturers, because these companies have financial advantages.

This research will focus on a new project of xx. In order to keep up with the increasing competition from web-based printers, Xx decided to go online with their printing activities. These e-competitors have a pricing advantage, because they (usually) produce their orders by buying the overcapacity of traditional printing firms, which allows them to print cheaper. They also do not have to pay fixed costs (rent, investments in machinery, etc.). All of these financial advantages are included in the prices of the e-competitors, which is one of the reasons for the big margin decrease in the sector in the past couple of years.

However, XX faces a trade-off whether to compete on price or service, since these two competitive advantages are usually mutually exclusive. Xx has chosen to take a radically different approach to launching an e-printer.

The idea is to combine an 'online community', where people can talk and exchange information, with a webshop, where people can order prints. Kannan, Chang & Whinston (2000) define online communities as: *"e-communities are made up of individuals who aggregate into a critical mass driven by common needs which could be social as well as commercial. This common bonding is strengthened by personal relationships that ensure some degree of loyalty of the members to the community"*. (p. 217). According to Bughin & Hagel (2000), a community is better at converting traffic into customers than other e-business models. This requires the community to have members who actively contribute to the community's social capital, which in turn will attract more members. Therefore it is important to keep in mind the desires and wishes of the members when designing the community itself. The most critical step in the launching of a successful online community is, according to Preece (2001), to find a delicate balance between sociability and usability issues. However, at the same time, the online community must also add value to the organization running it, whether it is financial, (word-of-mouth) marketing or even social rewards.

The website will consist of two parts:

- The community part: consisting of a news section, forum and a wiki
- The 'webshop'

The first part of the website, the community, is a 'meeting place' for people from the all over the graphic design industry, where people can ask each other questions or exchange experiences. It can also contain an

¹ <http://www.medialogue.be/nl/e23dce0d-99f6-40b3-8940-b0b9c71e8754/b5b7109e-3591-4d92-a980-d558e7790027/DetailBlog/?id=76a20f83-0276-4011-8322-c64014cdf3ba>

² <http://www.cmbo.nl/weblog/wp-content/uploads/2009/10/My-Industrie-outlook-2010.pdf>

online encyclopedia about everything that has a connection to the graphic design sector. The second part of the site will be the 'webshop', where customers/visitors can place an order for printed materials. Automation is an important issue for the webshop. Ultimately, the intent is to free the process of human hands as much as possible.

§1.2 RESEARCH DESIGN

§1.2.1 RESEARCH GOAL

An e-commerce and e-community have different goals at their foundation. An e-commerce' ultimate goal is to add value by transacting business with customers. An e-community' goal is to create an environment where people can share experiences and exchange information (Wirtz, Lihotzky, 2003). Combining these two business models seems impossible at first, because of the conflicting goals. On top of this, there seems to be a gap in the literature about combining these two business models, without interfering with each other. Therefore, the goal of this research is to fill this gap in the theory, by finding how a combination of an e-commerce and an e-community can be effective.

The end goal of this research is twofold:

1. Fill the gap in the theory about combining an e-commerce and e-community.
2. To advice Xx on launching a combined e-community/commerce for the graphic design sector.

§1.2.2 RESEARCH QUESTIONS

The main research question is: **"HOW CAN AN E-COMMUNITY AND AN E-COMMERCE BE SUCCESSFULLY COMBINED INTO ONE E-BUSINESS?"**

The first issue that comes to mind when studying the research question is how to combine an e-community and an e-commerce into one successful business structure, since both structures seem to have conflicting end-goals. Where an e-community focuses on bringing the customer up-to-date information in order to assist them in selecting a supplier, an e-commerce focuses on acquiring as much customers as possible. Preece (2001) and Wirtz & Lihotzky (2003), both suggest that trust has the biggest influence on the success of an e-community. This brings up the question of how the link between an e-community and an e-commerce will influence the customers' trust towards the e-community, because customers could be skeptical towards an e-community hosted and run by a profit-oriented commerce. On the other hand, there is little knowledge about how, or even if, an e-community can convert members/visitors into customers for the e-commerce. This means that the decision the Xx is facing, choosing whether to make the e-community or the e-commerce central to their e-business, will be a difficult one. Therefore, the first sub-question is ***"Should the focus of the e-business be on the e-community, or on the e-commerce?"***

The second part of the research will also be the most important part of this research. There are multiple ideas and theories about what the most critical success factors are for an e-community' success. Leimeister, Sidiras, & Krcmar (2006) found in their research that different types of e-communities could have different success factors. The choice of Xx to combine an e-community and an e-commerce puts additional emphasis on their conclusion. Therefore, the second sub-question will focus on the success factors for 1) launching an e-community in the print industry and 2) combining the e-community with an e-commerce. Therefore, the second sub-question is ***"What are the critical success factors of the combination?"***

The final part of this research will focus on finding segments in community users. De Valck, van Bruggen, & Wierenga (2009) have found in their research six different types of users who all have different requirements for e-communities. Knowing whether there are different type of users and what their requirements for the e-community are, can be of great assist to Xx' flexibility in adapting to the needs of their customers. Therefore, the third and final sub-question is ***"Are there any distinguishable segments and if so, what are the major differences between these segments regarding their requirements?"***

Chapter 2 will continue with a literature review and chapter 3 will discuss the methodology. Chapter 4 contains the presentation and analysis of the results. Chapter 5 will close off this research with a discussion of the research conclusions and an advice to the management of Xx.

2. LITERATURE REVIEW

This chapter is a discussion of the currently available literature on the subject. The first paragraph will discuss e-business structures and their implications for the organization. The second paragraph will discuss which factors have an influence on the success of an e-community and why these factors are relevant for XX. The third paragraph will discuss member segmentation.

§2.1 STRUCTURE

Margretta (2002) claims that a clear and firm business model is essential for a business in order to achieve its strategic goals, because without a clear business model, a business strategy has usually no real meaning to the organization. However, traditional business models, like defined by Mintzberg (1983) in his article 'Structures in fives', fail to cover the distinct aspects of e-businesses. The net-business models, as defined by Wirtz & Lihotzky (2003) (see appendix II.a), will be at the core of this sub-topic, as this model provides a better cover of the e-business aspects. One of the most important findings of their research is the fact that an e-community strategy is not well suited for an e-commerce business model. This means for XX that having a central webshop with a built in e-community would not be effective. However, the authors do not address the reason why an e-community is not an effective strategy for an e-commerce. Bughin & Hagel (2000) found in their research that an e-community is much better at converting site-traffic into customers, because of the increased sense of trust and belonging towards the website. However, they do not answer the question of how the combination of an e-commerce with an e-community affects the trust of customers. Wirtz & Lihotzky (2003) do not address whether a successful e-community can increase the sales of an e-commerce, because of the increased usage frequency and usage duration of the website by the members. Macaulay et al. (2007) found that the offline shopping motives of customers also apply in an online environment. This means that XX.nl is likely to attract customers who have functional motives (customers who are actively looking to acquire a product/service) and non-functional motives (customers who are 'just looking around' or searching for information). The application of this finding to XX.nl, justifies the choice of Xx to combine an e-community and an e-commerce, since this combination allows both types of customers to use the site. Attracting users to one part of the website could also result in the increase of the number of users on the other part of the website. Having active members on the community could lead to: 1) loyal customers, 2) word of mouth marketing which could quickly spread online and offline (Dwyer, 2007). Wirtz & Lihotzky (2003) also do not address whether it is possible to combine multiple business models. For example, Xx is planning to combine the Content and Commerce business model. According to the model (see appendix II.a), this should be possible by for example using the community/content part of the website as a "Trust Building" service for the Commerce part, because customers develop strong emotional bonds with virtual communities. This sense of belonging should increase the customer loyalty towards the company that operates the community. Whether this is actually true is one of the central questions of this research. Kannan et al. (2000) adopt a different perspective to e-communities, claiming that an e-community should be an intermediary instead of a stand-alone e-commerce. This would help the customers to fully trust the e-community and companies to offer their products to/on the e-community itself. This would mean for XX.nl that the 'webshop' should be a meeting place where customers and suppliers can transact businesses.

A possible limitation of the discussed articles above is that they have a strong business-to-consumer focus, whereas this research will include both B2C and B2B. So therefore, any conclusions from these articles require careful analysis and strong empirical proof to guarantee their validity and reliability.

The paragraph above leads to the conclusion that it is very important for an e-business to choose the right structure. The central issue is that different structures will attract different users. There are two possible scenarios for the e-business, one with the e-community at the center and one with the e-commerce at the center. Putting the e-community central will attract people who look for social interaction. Putting the webshop central will probably lead to attracting customers, who have no interest on being active on its e-community. Finding a balance between the two is necessary to satisfy both types of customers.

§2.2 SUCCESS FACTORS

"E-commerce entrepreneurs take a very broad view of community. Any communications software that can be added to a web site is regarded as an online community. The hope is that customers will be attracted to the site through social interactions with each other, but this naive view often produces cyber ghost towns, because

inadequate attention is paid to the social interactions needed to build a community." (Preece, 2001, p. 350). This quote effectively captures the main cause for the failed launches of most e-communities. Since communities are a product of social interactions between people, user focus is crucial for an e-community's success (Preece, 2001). Without careful analysis of the desires, wishes and problems the users are facing, it will be hard for an e-community to succeed, since users are a mouse-click away from browsing to a different site. Pre-determining the wishes and desires of potential users, allows designers to create an e-community in the most effective way.

The central model for this sub-topic will be the 32-success factors as listed in the research of Leimeister, Sidiras, & Krcmar (2006), because this list contains basic factors which apply to every community and therefore can be easily translated into this research. In their article, the authors found that the top-five success factors are:

1. Handling member data sensitively
2. Stability of the website
3. Fast reaction time of the website
4. Assistance for new members by experienced members
5. Establishing codes of behavior to avoid/resolve conflict

Appendix II.b contains the list of the full ranking of the 32 success factors identified by the authors. Multiple other researches support this ranking. Lin (2008) for example found that reliability, convenience and user-friendliness are the most important factors. These three factors respectively translate into success factor number 2, number 3 and number 4/5. A high level of interaction between members stimulates member satisfaction, member loyalty and the sense of belonging. Trust, on the other hand, has the biggest influence on the sense of belonging (Lin, 2008). Trust translates into the number 1 success factor found by Leimeister et al. (2006). S. Kim, Yang & J. Kim (2008) again emphasize the importance of trust and sense of belonging for an e-community's success. The fundamental problem with buying something from the internet is that customers cannot verify the quality of the product they are buying. Customers can only rely on their trust in the supplier. A high quality website, that looks like it required a high investment from the supplier, can stimulate trust, because it inspires confidence (Dwyer, 2007). Another way of looking at customer trust is that as people interact with the community, they build social bonds with other members. When these social bonds are positive and customers feel comfortable with interacting with other members, these positive feelings usually transfer to the products and the supplier (Kim et al., 2008). This point obviously reinforces the number 4 success factor of Leimeister et al (2006). Another important factor according to Kim et al (2008) is the efficiency and speed of operational elements. This statement reinforces number 2 and 3 success factors in the listing of Leimeister et al. (2006). Leimeister et al. (2006) also found in their research that operators of e-communities find it more important to reach a large number of members in a short period than members, who prefer smaller e-communities. Members of non-commercial e-communities were also found to be critical of the commercialization of the community, which is why members value "sustaining neutrality when presenting and selecting offers" higher than operators. Andrews, Preece, Turnoff (2001) have looked into the reasons and possible solutions for this resistance towards this type of change. Their study also supports the finding of Leimeister et al. (2006) that the main cause for this resistance is the fact 1) the inability to identify with whom they are communicating 2) the lack of privacy and security of personal information and 3) the general presumption that people cannot be trusted in e-media. Therefore, members do not like it when a neutral e-community, suddenly adopts commercial goals. The reason for this is that members use e-communities as a way to connect with other users to enhance their enjoyment after purchasing and using a product (Dwyer, 2007) and as a way to vent negative feelings when they are unsatisfied with a product (De Valck, Van Bruggen, Wierenga, 2009). Nevertheless, knowing why users resist change is of course not enough, which is why this research will try to answer the question of how to mitigate this resistance.

These findings above have important implications for XX.nl, one being the fact that members will probably not support the commercialization of the e-community. This again stresses the importance of choosing the right structure for XX.nl (see §2.1), because members value neutrality much higher than operators do (Leimeister et al. 2006). The second implication is that the e-community website has to respond fast, offer stable operation, exude quality and be user-friendly. The third implication is that trust is crucial to the success of XX.nl, and therefore earning the trust of members is the most important goal. Knowing what the members actually want and designing the e-community according to their wishes could stimulate trust.

§2.3 SEGMENTATION

Segmentation offers three principal benefits to managers: it helps identifying opportunities, it helps in designing marketing programs that are most effective for reaching homogenous groups of customers and it improves the allocation of marketing resources (Kerin, Peterson, 2007). The segmentation process usually starts with searching for variables that effectively create groups of customers who have the same basic needs. The two basic groups of variables are socio-economic variables and behavioral variables. However, since the online environment is much more anonymous than the real world, socio-economic variables have a very low reliability (De Valck et al., 2009). Behavioral variables offer much more reliability, because it is possible to observe these directly as the actual behavior of users inside the e-community. Analyzing these behaviors is easy, since all user communications and activities on the e-community are stored. Vleerbos (2008) found in his research (by order of Xx) that there are five segments in the traditional printing industry: academic, educational, governmental, business and consumer. However, the research of Vleerbos (2008) focused only on the traditional online printing business, whereas XX.nl will be an online community-based printer. Therefore, an empirical analysis of this segmentation is necessary before applying this segmentation to Allesoverdruk.nl. The segmentation of community members by De Valck et al. (2009) seem to offer a better segmentation model, since it focuses on all e-community users instead of just customers. They have identified six member segments in their research, based on average frequency and duration of visits to the website:

- Core members: most frequent visitors and longest visits.
- Conversationalists: short but frequent visits in which they participate to a relative high degree in supplying and discussing information.
- Informationalists: supply and retrieve a lot of information, but do not participate in discussions a lot.
- Hobbyists: score low on supplying/retrieving information but do use their personal page a lot and are engage actively in discussions.
- Functionalists: they only retrieve information from the community
- Opportunists: more active 'information retrievers' than functionalists

This classification makes a clear distinction between members who contribute a lot the community' social capital and members who do not contribute. As stated here below, targeting all community members with a single marketing strategy is difficult to achieve, since different member types have different wishes and desires. De Valck et al. (2009) recommend targeting the core members first, because they are at the community's 'heart'. To reach the core members the managers of XX.nl have to increase their expert power, for example by offering information about new products/product improvements first to them before the other users. Directing the information and practices to the core members can start a word-of-mouth spread of the new product on the e-community. Trying to reach the core members by means of other member types usually will not work, since the core member's view themselves as more knowledgeable than the other member types. To reach the other member types De Valck et al. (2009) recommend the following actions:

- Conversationalists: start a buzz or a viral marketing campaign in the community forums
- Informationalists: feeding background information about a product, service or company in the forums
- Hobbyists: start an online contest/poll. This functions as entertainment and informs about a product
- Functionalists/Opportunists: their short visits requires the product information to be short and concise

According to the authors, using this typology of members facilitates more effective and customized marketing. However, the authors do note that the core members are the most important user group of the community, because without them the community would disintegrate. Therefore, managers should to take special care of the core members. Andrews et al. (2001) have found in their research the three phases that an e-community passes through in its development:

1. Starting the online community
The authors encourage focusing on the most contributing members at the start, because these members are the ones that will form the heart of the e-community. This means that the primary focus at this time has to be on attracting the Core Members. Sociability is the most important success factor at this stage.
2. Encouraging early interaction
At this stage, the focus shifts from attracting members towards interaction between members. The primary concern here is to attract members that will interact a lot with others. These member types are, besides Core Members, the Conversationalists and Hobbyists. Usability becomes more and more important as the amount of members and interactions increases.
3. Moving to a self-sustaining interactive environment
After the e-community interactions become self-sustaining, the management can focus on the member types that do not contribute back to the e-community. These are the Informationalists,

Functionalists and the Opportunists. These members are mostly interested in retrieving information, so the primary concern shifts to making the available information easily available.

In short, finding the segments in the user groups is an important step before launching XX.nl, because it allows the managers to focus on a subgroup as the e-community develops. There are three main segments, which are Members (Core members and Conversationalists), Users (Informationalists and Hobbyists) and Lurkers (Functionalists and Opportunists). The primary goal of segmentation is to find out what the most important differences are between the segments and how the management must individually approach these segments as the e-community develops. According to Andrews et al. (2001), the management of an e-community has to first focus on the Members, as they will contribute the most to the e-community. After there is some decent activity on the e-community, the management can start to focus on the Users. When the e-community becomes fully self-sustaining, then the management can also start to focus on Lurkers.

3. METHODOLOGY

This chapter discusses the methodology of this research. The first paragraph describes the research design and in particular the subjects for study, measurement, data gathering procedure and the data analysis. The second paragraph discusses whether the results of this research are reliable and whether they accurately represent the concepts that it intended to measure.

§3.1 RESEARCH DESIGN

This research follows the basic research guidelines as discussed in Babbie (2007). Since the goal of this research is to find out how to combine an e-commerce and an e-community successfully into one business, this research is a deductive survey research. A deductive research tests theory by submitting them to empirical data and a survey is a type of research, which allows forming generalizations about a population by asking questions to a selected sample (Babbie, 2007). By asking potential users, what their thoughts are about an e-community, it is possible to test theories of what the most important factors are to consider when designing the e-community. The next four sub-paragraphs will discuss the main four elements of an inductive survey research.

§3.1.1 SUBJECTS FOR STUDY

The research population consists mainly of people who are active in the graphic design/printing business. The main subjects of study are the thoughts of these people on using an e-community for informational purposes and shopping at the associated e-commerce for transactional businesses.

The research sample contains 116 people, which were contacted by email and by posting in various e-communities. The sample consists mostly of people who have had at least some experiences with e-communities, since the questionnaire was first posted only on several existing e-communities. However, in order to get more responses from the Lurkers group, the sample has been widened, by emailing the questionnaire to people in the respondent database of thesistools.cc.

§3.1.2 MEASUREMENT

The questionnaire (see appendix III), collected among potential customers (consumers and companies), measures the key variables. The questionnaire consisted of (mostly): matrix questions (5-point bipolar ordinal Likert-type scale) and close ended (numerical) for basic questions. The matrix questions are a Likert-type scale, to find out which of the items are the most valued by respondents. The questionnaire itself was designed according to the guidelines of Babbie (2007).

Each sub-question has its own measurements. For the first sub-question, the key question was to find out whether the users prefer to have the e-community central or the webshop. This was done by asking respondents to score two questions: "I will be an active member on the webshop' e-community" and "I will order from the e-community webshop". A significant difference between the scores of these items would show what structure the respondents preferred. For the second sub-question, the central question was to find out what the most important success factors are for an e-community when combined with a webshop. This was done by asking the respondents to score the 32-success factors list of Leimeister et al. (2006) combined with several other items derived from other theories and self-made items. The higher the score of an item, the more important it is. The third sub-question focused on finding segments of users. Three member segments were formed by combining several member types that De Valck et al. (2009) found in their research: Lurkers (Opportunists and Functionalists), Users (Hobbyists and Informationalists), and Members (Core members and Conversationalists). The following table represents the basic characteristics of the segments:

	Lurkers	Users	Members
Amount of community memberships	0	1-3	>3
Longest membership duration	0 years	1-3 years	>3 years
Amount of replies a week	0	1-25	>25
Amount of e-community webshop orders	Never	Sometimes to regularly	Often

Lurkers are the people who just look around on the community or search information, without contributing anything to the community. The characteristics of a lurker are that he is not a registered community member and does not reply to topics. Users are registered members and occasionally reply to topics. Members are also registered community members, but their membership duration is usually a lot longer and they are registered

members of multiple communities. Users on the other hand tend to drift between communities and are active on fewer communities at one time. Members also post a lot more replies than users.

§3.1.3 PROCEDURE

As already mentioned, the questionnaire was collected among potential users. The questionnaire was hosted online (on thesistools.com), because this made the data immediately available for analysis, without having to process the data manually. To contact the respondents, two methods were used:

1. At first, the respondents were contacted by posting the questionnaire several existing e-communities. However, since the users from the Lurker category only use the e-community to gather information, this method produced only a few responses for the Lurkers category.
2. In order to get more responses from Lurkers, the contacts database of thesistools.com was used, after which a sufficient amount of responses for the Lurkers category were collected.

The data-collection lasted six weeks. All responses after the deadline were ignored.

§3.1.4 ANALYSIS

The first analysis phase was to find which structure the respondents would prefer, by comparing the scores of the two questionnaire items for the structure, as discussed in the previous paragraph.

The second step was to find the overall ranking of the success factors by comparing the scores of the questionnaire items.

The third step was to find what the most important differences are between the segments Lurkers, Users and Members (as discussed in §3.1.2), in order to find the implications of this segmentation to the evolution of the e-business, as each segment has its own preferences, which put different requirements on the e-business. Andrews et al. (2001) suggested that e-communities move through three development phases, from 1) starting, 2) encouraging early interaction, to 3) becoming self-sustaining. According to de Valck et al. (2009), the most active members should be central in the first development phase and as the e-community evolves, the focus can shift to less active members. This segment analysis was done by ranking the questionnaire items per segment and performing an ANOVA-test (with $\alpha < 0.05$) to check for significant differences. These differences were the basis for the segment analysis, which discusses how the e-community should be managed as it develops.

The final step was a factor-analysis, to test whether some variables could be grouped together. For this last step, the factor-analysis option of SPSS was used, with the options: principal components extraction and varimax rotation. A KMO and Bartlett's Test were also applied to test the applicability of a factor analysis.

§3.2 VALIDITY

The validity of a research depends on four parts: statistical conclusion validity, construct validity, internal validity and external validity (Shadish, Cook, Campbell, 2002).

Appropriate use of statistics is central to the statistical conclusion validity. Low statistical power is one of the most common research problems. This research has a total response of 116. At first glance, this amount seems to suffice, however with a large amount of questionnaire items, the minimum response amount also increases. With approximately 65 questionnaire items, the response rate of 116 could be insufficient. This means that unusually big differences should be checked to determine whether they are valid. A factor-analysis requires a minimum of 200 responses in order to produce reliable results. With only 116 responses, the factor analysis requires extra attention.

Central to the internal validity is the issue of whether the co-variation between two variables is actually a result of a causal relationship. The central question of this research is very sensitive to internal validity, because it is hard to determine whether the community attracts customers, or whether the webshop attracts members, or whether both influence each other. In order to determine this, additional questionnaire items have been added to measure whether there is a difference between the effects of temporal precedence.

Construct validity involves making inferences from the sampling particulars of a study to the higher order constructs they represent. The biggest problem is confounding the needs of webshop customers with the needs of community members. The solution for this problem is an additional research, which will also include non-community members. Of course, the fact that only one research method is used, a self-administered questionnaire, also poses a threat to construct validity. In addition, some comments by respondents suggest that 'reactivity to experimental situation' can be an issue. Some tried to incorrectly guess the research purpose, which could have led to biased answers. In order to mitigate these problems, respondents were

allowed to ask questions in the forum and give feedback after filling out the questionnaire. This proved a vital asset, as much of the received feedback during the test phase of the questionnaire was incorporated into the final version of the questionnaire.

External validity concerns the extent to which causal relationships hold over variations in persons, settings, outcomes and treatments. The biggest threat to the external validity is of course whether the conclusions made in this research about community members, will also hold for non-community members. In order to mitigate the effects of context-dependencies, the questionnaire has been posted on a variety of communities, to include people from all backgrounds in the research.

4. RESULTS

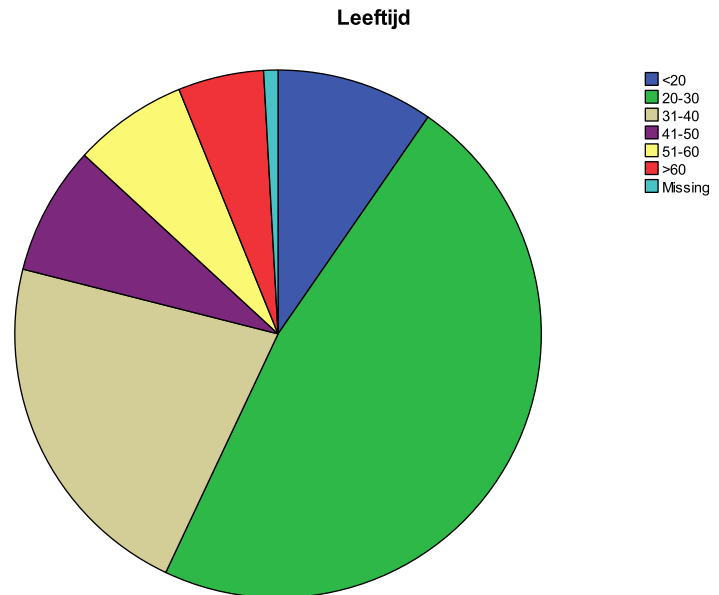
This chapter is a summation and analysis of the empirical data. The first paragraph discusses some generic data about the research population. The next four paragraphs discuss the empirical research data related to the three sub-questions.

§4.1 GENERIC DATA

About 47.5% of the respondents were in the age range of 21-30. The average age of the respondents is relatively low, since about 80% of the respondents are younger than 40 years. The people from the 20-30 years category are the most active people on the internet and the community. Compared to other age groups, they spent the most time online and on the community, they have the most community memberships, they post the most replies and they place the most orders from webshops. An interesting finding is that as people get older, the time they spend on the internet and community declines until the 60+ category, after which the time spent on the internet and community increases. In addition, there is a sharp difference between younger and older people on the amount of products ordered from webshops. As the respondent age increases, respondents tend to order less from webshops, until again the year 60+, after the amount of ordered products from webshops increases.

There are also some differences between men and women, the biggest difference being the fact that men are a lot more active on the internet than women. Men are longer online on the internet and the communities, have more community memberships and place more orders on webshops.

The respondents regard by far the forum as the most important part of a community, the webshop as second most important and the headlines/comments parts as third most important.



§4.2 STRUCTURE

	N	Mean	Std. Deviation
Trust	82	4,54	,706
Price	82	4,23	,758
Satisfaction	82	4,09	,984
Importance of webshop partners	82	3,60	1,087
Knowing who the supplier is	82	3,51	1,147
Price-comparison tool	81	3,30	1,078
Webshop surveys	82	3,23	1,114
Being an active e-community members stimulates amount of order from e-community webshop	82	3,21	1,119
Customer experiences on the e-community are reliable	82	3,15	1,008
The e-community webshop is my first choice webshop	82	2,98	1,111
The e-community webshop is more reliable than other webshops	82	2,90	1,096
I would shop on the e-community webshop	82	2,78	1,031
The e-community as an intermediary	82	2,48	1,021
I would like to be a member of the webshop' e-community	82	2,07	,886

Based on schale ranging from 1 (not at all important) to 5 (very important).

The table above shows what the respondents expect from an e-business, designed as a community-webshop combination. As expected, the results confirm Wirtz & Lihotzky's (2003) conclusion that respondents are not very likely to join an e-community of an e-commerce. The results also confirm that having the e-community central instead of the webshop is more effective (2.78 vs. 2.07). However, a score of 2.78 is too low to confirm

that the combination could be an effective net-business model. Combined with the scores of "e-community webshop is my first choice for e-shopping" and "the e-community webshop is more reliable than ordinary webshops", which are respectively 2.98 and 2.90, the potential success of an e-community/e-commerce is unclear. The intermediary perspective of Kannan et al. (2000) also scores low, probably because customers expect convenience from e shopping, without having to manually search for a supplier through an intermediary. However, the results do clearly show that, putting the e-community central is a better option than putting the webshop central.

§4.3 SUCCESS FACTORS

	N	Mean	Std. Deviation
1. Careful handling of member data	85	4,64	,687
2. Striving towards maximum member satisfaction	85	4,58	,730
3. Stability of the website	85	4,46	,646
4. Fast responding website	85	4,22	,777
5. Offering high-quality content	85	4,13	,842
6. Community administrators who apply ideas and suggestions of the members to the e-community	85	4,02	,723
7. Establishing codes of behaviour in order to contain conflict potential between members	85	3,98	,938
8. Professional appearance of the website	85	3,82	,889
9. Trust between members	85	3,80	,910
10. Offerring up-to-date content	85	3,69	,913
11. Sustaining neutrality when selecting and presenting offers to members	85	3,61	1,235
12. Intuitive user-interface	82	3,59	1,030
13. Encouraging interaction between members	85	3,51	,959
14. Appreciation of the contributions of members by the administrators	85	3,33	1,016
15. Allowing the formation of sub-groups within the e-community	85	3,28	,971
16. Continuous growth of offerings	84	3,18	1,008
17. Competitive prices for the offered products and services	85	3,09	1,140
18. Building a strong trademark	85	3,07	1,142
19. Increase of market transparency for the members	84	2,95	1,201
20. Integrating the members into the e-community administration	85	2,94	1,051
21. Devining the sources of revenue	85	2,81	1,170
22. Reaching a high number of members in a short period of time	85	2,81	1,200
23. Focusing on one target group	85	2,76	1,172
24. Striving towards a maximum amount of website visits	85	2,58	1,169
25. Personalized page design	83	2,47	1,141
26. Offering bonuses to members	84	2,45	1,069
27. Striving towards a maximum amount of members	84	2,33	1,155
28. Having an existing customer group as a starting advantage	84	2,29	,939
29. Organizing regular meetings between members	85	2,25	1,122
30. Personalized product and services offerings to members	85	2,14	1,025
31. Arranging regular offline events	85	2,08	1,060
32. Special treatment of loyal members	85	1,96	,879

Based on schale ranging from 1 (not at all important) to 5 (very important).

The table above shows the ranking of the e-community success factors as perceived by all e-community members. The ranking shows that the most important factor contributing to the success of an e-community is "handling member data sensitively". The second most important factor is striving towards maximum member satisfaction, followed by the technical factors stability and fast response time in respectively third and fourth place. The factor "offering high-quality content" ranks at the fifth place, which emphasized the importance of the quality of the editorial staff. An interesting finding is that the social factors also rank high. Apparently, members appreciate the interaction between members and operators, which is why members ranked the social factors, such as factor number 6, 7, 9, 13, 14 high in the list. At the other end of the spectrum, the factor

"special treatment for loyal members" scored lowest and the "offering bonuses to active members", which again highlights the shows that members value the social interaction a lot. Organizing real world meetings and events also score low, which show that e-community members value the virtual interaction more than the real-world interaction. Members also seem to prefer smaller e-communities than bigger e-communities. This combined with factor number 24, leads to the conclusion that members prefer a fast growing e-community, up to a certain size, after which they prefer a lower growth rate. Another interesting finding is that members prefer neutrality above personalization when the e-community operators present them product and service offerings from third parties.

When the scores of factor number 17 in the table above and the factor "Price" in the first table, a notable difference emerges. While the "Price" factor in the first table scored a 4.17, the factor "offering competitive prices" in the second table only scores a 3.09. A possible reason for this could be that e-community members pay more attention to whether the prices reflect the value of an offered product/service. Therefore, as long as the offered quality is higher, the e-community members place less value on competitive pricing. Quality includes the factors that influence the final product, from manufacturing to delivery speed to the amount of trust between the buyer and supplier.

§4.4 SEGMENTATION

§4.4.1 DIFFERENCES IN STRUCTURE DEMANDS

The following table shows the differences between the structure demands as perceived by Lurkers, Users and Members.

(x) = rank in segment	Lurkers	Users	Members
1. Trust	4.50 (2)	4.49 (1)	4.62 (1)
2. Price	4.50 (2)	4.22 (2)	4.21 (2)
3. Satisfaction	4.50 (2)	4.14 (3)	3.93 (3)
4. Importance of webshop partners	4.75 (1)	3.65 (4)	3.34
5. Knowing who the supplier is	3.50	3.55 (5)	3.43 (4)
6. Price-comparison tool	4.25 (5)	3.27	3.21
7. Webshop surveys	3.25	3.14	3.38
8. Being an active e-community members stimulates amount of order from e-community webshop	3.25	3.08	3.41 (5)
9. Customer experiences on the e-community are reliable	3.50	3.08	3.21
10. The e-community webshop is my first choice webshop	3.75	2.80	3.17
11. The e-community webshop is more reliable than other webshops	3.00	2.82	3.03
12. I would shop on the e-community webshop	2.75	2.71	2.90
13. The e-community as an intermediary	3.00	2.39	2.55
14. I would like to be a member of the webshop' e-community	1.75	1.89	2.28

Items in red are significantly different (ANOVA-test; $\alpha < 0.05$)

Trust seems to be more important to Members than the other types, which is probably because Members spend a lot more time on the e-community and interact more with other members. Price on the other hand is, as one would expect, more important to Lurkers, because Lurkers only visit the community to get information. This is probably also the reason that Lurkers score "Price-comparison possibilities" way higher than the other two types.

The need for satisfaction seems to decrease as the amount of time and effort spend on the e-community increases. A possible reason for this could be that as members invest more in the e-community, they are less likely to switch to another e-community, even if they are less satisfied.

The same goes for "having partners/affiliates", which is a tool for webshops to stimulate trust, by linking the feelings that customers have for one brand, to their own webshop. The more members interact with the community/webshop, the more they tend trust the community, which decreases the need for partners.

Another significant difference is that Lurkers tend to trust the customer experiences with the e-community webshop more than the other types. It is not clear why this is, but it could be because Lurkers do not know how

to use the information about the writers of the customer experiences. For example, a review by someone who has just one post in total is a lot less reliable than a review by someone who is an active member, who posts frequently. Lurkers do not know who the active members are, because they only use the e-community for information gathering, and therefore tend to trust what they read more easily. The same goes for the item "e-community webshop is my first choice webshop". An active e-community could stimulate trust towards the associated webshop, by means of "social proof". Lurkers also rank "e-community as an intermediary" higher than the other two types, probably because their motive for visiting the e-community, gathering information, is very different from that of the Users and Members, which is discussing and to have a conversation with other members.

The result of the item "shopping on the community webshop" somewhat contradicts the previous results. Even though Lurkers scored higher on the "e-community webshop is my first choice webshop", they scored lower than Members did on the "shopping on the e-community webshop" item.

The last item clearly shows a distinct difference between the classes, namely their readiness to join new e-communities. Member scored highest while Lurkers scored lowest and Users scored in between the two.

§4.4.2 DIFFERENCES IN SUCCESS FACTORS

The following table shows the differences between the differences between success factors as perceived by Lurkers, Users and Members.

(x) = rank in segment	Lurkers	Users	Members
1. Careful handling of member data	4.98 (1)	4.75 (1)	4.38 (2)
2. Striving towards maximum member satisfaction	4.83 (2)	4.52 (3)	4.62 (1)
3. Stability of the website	4.50 (3)	4.54 (2)	4.31 (3)
4. Fast responding website	4.17 (5)	4.22 (4)	4.24 (4)
5. Offering high-quality content	4.00	4.22 (4)	4.00
6. Community administrators who apply ideas and suggestions of the members to the e-community	3.83	4.02 (5)	4.07 (5)
7. Establishing codes of behavior in order to contain conflict potential between members	4.17 (5)	3.98	3.93
8. Professional appearance of the website	4.33 (4)	3.68	3.97
9. Trust between members	3.83	3.68	4.00
10. Offering up-to-date content	4.17 (5)	3.76	3.48
11. Sustaining neutrality when selecting and presenting offers to members	3.17	3.68	3.59
12. Intuitive user-interface	2.67	3.69	3.59
13. Encouraging interaction between members	3.00	3.48	3.66
14. Appreciation of the contributions of members by the administrators	3.17	3.38	3.28
15. Allowing the formation of sub-groups within the e-community	3.50	3.22	3.34
16. Continuous growth of offerings	2.83	3.27	3.10
17. Competitive prices for the offered products and services	3.50	3.16	2.90
18. Building a strong trademark	3.50	2.96	3.17
19. Increase of market transparency for the members	2.67	2.94	3.04
20. Integrating the members into the e-community administration	2.50	2.86	3.17
21. Devising the sources of revenue	2.83	2.96	2.55
22. Reaching a high number of members in a short period of time	2.83	2.29	2.91
23. Focusing on one target group	2.67	2.70	2.90
24. Striving towards a maximum amount of website visits	3.00	2.46	2.69
25. Personalized page design	2.50	2.31	2.75
26. Offering bonuses to members	2.67	2.45	2.41
27. Striving towards a maximum amount of members	3.17	2.72	2.31
28. Having an existing customer group as a starting advantage	2.33	2.08	2.62
29. Organizing regular meetings between members	1.50	2.20	2.48
30. Personalized product and services offerings to members	2.33	2.08	2.21
31. Arranging regular offline events	1.50	2.00	2.34
32. Special treatment of loyal members	2.00	1.92	2.03

Items in red are significantly different (ANOVA-test; $\alpha < 0.05$)

The Item "handling member data sensitively" shows that the more a respondent is involved with the community, the less important this item becomes. The reason for this is probably that the more time an user spends on the e-community, the better he/she gets to know the e-community, the more he/she will end up trusting the e-community, making this item less important.

Member satisfaction, as can be seen in the previous sub-paragraph, is most important to.

An interesting finding is that members score lower on the stability of the website item. This is probably because members invested a lot of time in the e-community and are therefore less inclined to leave if the website does not always function correctly.

Users scored "offering high quality content" higher than the other types. This is probably because the Users group consists of people who mainly visit the e-community to search and gather information (the Informationalists), which is why they value high quality content higher than Members or Lurkers.

A trend is visible at the item "Operators who apply the ideas and suggestions of members to the community" and the item "Establishing codes of behavior". The first item is valued higher as the amount of time invested in the e-community increases. The reason is possibly that after being active on the e-community for a while, members get ideas about how to improve the community. Members value an e-community staff that appreciates these ideas and suggestions. The second item is valued lower as the amount of time on the e-community increases, probably because seasoned members are much better handling conflict..

Lurkers value the items "professional appearance of the website" and "offering newest content" higher than the other user types. Lurkers only visit the e-community when they need information, so having the newest information easily available is an important issue for them. Members on the other hand also use the e-community for other purposes, which make the appearance and up-to-datedness less important for them.

Members also value "trust between members" higher than the other member types, probably because as the most active members, they interact the most with other members.

A rather surprising result is that Members score higher on the items "sustaining neutrality when selecting product/service offerings" and "Increase of market transparency". Especially the second item is surprising, since the Lurkers are the people who only visit the e-community in order to get more information. Combining these two results, results in the conclusion that perhaps Lurkers just want some guidance in the right direction, instead of having to plow through lots of information.

Lurkers also score lower on "Intuitive user interface", "Stimulation of interaction between members" and "Constantly growing offerings". The first is probably because Members spend a lot more time on the e-community and therefore want an easy-to-use website. The second is of course because Members interact more with others, and therefore value it higher. The third is probably due to that Lurkers do not use most of the website regularly, so this item is less important to them.

In line with the results from the previous sub-question, the importance of price drops as the amount of time spent on the e-community increases.

Developing a strong trademark is more important to Lurkers than it is for the others, probably because Lurkers usually visit the first website that comes to mind when in need of information (ex. Tweakers.net - ICT).

As expected, Members value the item "integration of members into the administration of the e-community", higher, which means that Members are more likely to join the e-community crew than other members, probably because they have invested a lot more in the e-community. This is probably also the reason why Members score lower on "Making the sources of revenue public", as they are more willing to join the e-community crew.

Members ranked "Focusing on a subgroup" higher, probably because Members value the interaction on the e-community more than the others do, and having a subgroup focus enables the community to attract likeminded people. In line with this is the scoring of "Striving towards maximum website visits" and "Striving towards maximum member growth". The more time members spend on the e-community, the more they tend to appreciate a smaller, more tightly knit group of users. Indirectly, this also influences the scores of "Organizing real-world meeting" and "Organizing regular events", which Members scored higher. The more members interact with each other on the e-community, the more they tend to appreciate real-world meetings. Lurkers scored awarding bonuses to members higher, probably because they are usually not members of an e-community, and offering bonuses to members could be a stimulus for them to register for an account.

§4.5 FACTOR ANALYSIS

The first step in the factor analysis is to test whether relationships between the variables are large enough. The KMO and Bartlett's Test of Sphericity:

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,589
Bartlett's Test of Sphericity	Approx. Chi-Square	1897,286
	df	1035
	Sig.	,000

The sample scores a 0,589 for KMO test, which is barely satisfactory. The Bartlett's test of sphericity, with a significance level of 0.000, leads to the conclusion that the correlation matrix is not an identity matrix, and thus the relationships between the variables are strong. The anti-image matrix contains many small values, indicating that there is likely to be a factor structure underlying the variables (Brace, Kemp, Snelgar, 2009). The scree plot has an 'elbow' at component number six (see appendix IV.b). Cattell's scree test says to drop all further components after the one starting the elbow, which would mean that six components should be sufficient. However, extracting only six components resulted in an explained total variance of less than 50%, which is why for this research, the Kaiser-Guttman rule (Eigenvalues > 1.0) proved most appropriate. After the extraction procedure, 15 components remained with Eigenvalues over 1.0, which explain 75.5% of the variance in the data (see appendix IV.a), which is a decent number. This in combination with the rotated components matrix (see appendix IV.c) leads to the following 15 identified components:

Factor #	Name	
1	Synergy	This factor mostly deals with the synergy effects between the e-community and the e-business.
2	Trust (customer)	Deals with the effects of price, customer satisfaction and a professional appearance of the website have on trust
3	Focus (members)	This factor looks at whether the e-community should have an individual or a collective focus (regarding the treatment of members)
4	Focus (customer)	This factor looks at whether the e-business should be neutral or commercial
5	Trust (members)	This factor looks at how the trust between members can be stimulated
6	Popularity	This factor deals with the popularity of the website
7	Technological backbone	The speed and reliability of the website
8	Partnerships	This factor deals with the suppliers and partnerships of the e-business
9	Sources of revenue	This factor deals with how the e-business should generate its revenues
10	Content	This factor deals with the content of the e-business (quality and up-to-datedness)
11	Competitiveness	This factor deals with how competitive the e-business is (price and customer satisfaction)
12	Member influence	This factor looks at the influence that the members can exert on the design of the e-community
13	Subgroups	Allowing members to define subgroups
14	Member data	Sensitive handling of member data
15	Codes of behavior	Establishing codes of behavior

§4.6 SUMMARY

In short, the results show that the best structure for the e-business is an e-community with its own webshop, instead of the other way around. The most important success factors are related to (in order of importance) trust, usability, content and sociability. However since an e-community is always evolving, this order can change as the e-community develops. This is why segmentation is very important; it enables the management to adapt the e-community to the wishes of the type of members they want to attract. The biggest differences are that Members find sociability the most important, while Lurkers find the quality of the offered content the most important. Users tend to drift in between. The factor analysis reduced the 46 items to 15 factors.

5. CONCLUSION

The goal of this research is to find the best way to combine an e-commerce and an e-community into one e-business, by the means of a case study of XX.nl. This chapter contains the conclusions of the research and the advice to the management of XX.nl. The first paragraph answers the three research questions, formulated in the introduction. The second paragraph is the advice to the management of XX.nl.

§5.1 IMPLICATIONS FOR THEORY

Sub-question 1: *"What structure should the e-business have?"*

The central topic in this sub-question was to whether the e-business should have an e-community or a webshop at its center. The net-business model of Wirtz & Lihotzky proved to be of good use for this research. The conclusion of Wirtz & Lihotzky (2003) was that a combination of Commerce with an e-community is not a good idea. The results of this research confirmed their conclusion. However the other way around, an e-community with its own e-commerce, did score a lot better, which means that a fifth net business-model, the E-community, should be added to the model of Wirtz & Lihotzky (2003). The biggest difference of the E-community model with the others' is that an E-community focuses on interaction between members whereas the other models focus on transacting businesses or retrieving information. An e-community is a place where people can gather, meet, interact and transact business if they need to.

The intermediary perspective of Kannan et al. (2000) did not score well, which means that this model is only suited for an independent e-community. When the e-community has its own webshop, the customers are more critical towards an intermediary, as it is no longer neutral.

Sub-question 2: *"What are the critical success factors of the combination?"*

The 32-success factor listing of Leimeister et al. (2006) also proved to be of good use for this research. In line with the results of Leimeister et al. (2006), the most critical success factor is "Handling member data sensitively". This means that providing technical security is one of the most important aspects when designing an e-community website. It is also important to communicate this technical security to members, for example by encrypting login credentials. The members must feel that their data is completely secure, before they will create an account. Selling member data to third parties for example is out of the question.

"Striving for maximum member satisfaction by the e-community operators" is valued as the second most important success factor. This effectively means that the wishes and desires of the members should be leading the development of the community, and not the vision and goals of the operators (if these two contradict).

The third and fourth success factor both have implications for the performance of website. Stability and speed are both very important for members, since browsing a website that does not function right can be very frustrating. The same also applies to the intuitiveness and the professional appearance of the website.

"Offering high-quality content" is valued fifth, emphasizing the importance of the quality of the editorial and moderating staff.

Sub-question 3: *"Are there any distinguishable segments and if so, what are the major differences between these segments regarding their requirements?"*

The chosen segmentation of Members, Users and Lurkers proved unable to divide the respondents into clear segments. There were some notable differences between the Lurkers and the Members segments, as these two are on opposite sides of the spectrum. The Users segment turned out to be harder to distinguish, as it was designed to drift somewhere in between the Lurkers and Members.

As already discussed in the second chapter, an e-community usually passes through three phases as it develops. Each phase requires the management to focus on different member types. Different member types have different demands, which mean that the management has to adapt the e-community as it develops. The most important implications for each development phase are:

1. Starting the e-community (focus: Members)

As Members are very devoted to the e-community, it is imperative to listen to their wishes. They are also the only user type that is interested in joining the administration of the e-community, so it is important to ask their opinions when taking decisions about the e-community' future. The central focus at this point is stimulating interaction between members, as interaction is the reason why members join an e-community. Neutrality is also more important to Members than it is for the other types and Members are more likely to choose the e-community webshop as their primary webshop (because of their loyalty to the e-community). Therefore, at this stage it is best to keep the e-

community and webshop separate and focus on improving the quality of the e-community. Members are also willing to pay a premium price for the products of the webshop. Members also appreciate offline events, so it is a good idea to organize a real-world meeting between members and operators. As for the size of the e-community, Members prefer a smaller e-community, which means it is a good idea to keep the member growth rate under control.

2. Encouraging early interaction (focus: Members/Users)

As the amount of members and interactions on the e-community start to grow, the management can slowly start to focus on the Users. At this stage, usability is crucial and sociability becomes more and more important. Users are less likely to choose the e-community webshop as their primary webshop, which means that the management has to start to integrate the webshop into the e-community. In addition, as Users are less involved with the e-community, their trust for the webshop is also lower. This requires the management to take additional measures to stimulate trust. The importance of the content quality also increases as more Informationalists join the e-community. Competitive pricing also gains importance as less devoted members join the e-community. Users also prefer a bigger e-community, which means that the management can start stimulating member growth at this stage.

3. Moving to a self-sustaining interactive environment (Lurkers)

At this stage, the e-community should have become a meeting place for like-minded people to discuss and share information and buy the products/services they need from the webshop. However, the biggest percentage of visitors will be Lurkers (85% according to Destination CRM³), which is why this user type offers the biggest revenue potential. However, since Lurkers are also the least devoted to the e-community, the management has to start focusing on the demands of Lurkers. The most important one is that Lurkers visit an e-community in order to retrieve information, without supplying any back. The central information source for the Lurkers is the discussions and interactions of the Members and Users, which means that the management must not make the mistake of neglecting these members as the e-community reaches critical mass. The biggest changes at this stage are; competitive pricing becomes more important, trust keeps declining, the need for market transparency increases, the importance of content-quality rises even more and the bigger the e-community gets the better (as this will attract more Lurkers).

Even though the name of the third phases suggests that the e-community can survive on its own now, it could not be further from the truth. At this stage, the management has to put even more effort in order to keep the e-community alive, as the increase of Lurkers will stress the e-community's usability and sociability.

The factor analysis did point out that out that the 42 questionnaire items can be explained by 15 factors. The most important three factors are the synergy, customer trust and member focus.

§5.2 IMPLICATIONS FOR XX.NL

§5.3 RESEARCH LIMITATIONS

Although this research provided valuable insights into about how to integrate an e-community and an e-commerce into one e-business, it has its limitations. The first limitation of this study is the fact that the primary data source was the e-community members, whereas the research conclusions also include non e-community members (such as e-customers), which puts stress the external validity of the research. A second limitation is that this research only used one data gathering method: an online self-administered questionnaire. Apart from the problems with self-administered questionnaires, an online questionnaire adds additional validity problems, since it is impossible to determine whether the answers given by the respondents are honest. A third limitation was the available time. Because of time constraints, the questionnaire was online for four weeks, which resulted in +- 100 responses. If there would have been more time, more responses could have been gathered. The fourth limitation is that the amount of responses from the Members and Users categories was much larger than the amount of responses from the Lurkers category, threatening the representativeness of the research sample.

³

<http://www.destinationcrm.com/Articles/CRM-News/Daily-News/Nine-Myths-of-e-Community-Building-46079.aspx>

A future study, which includes multiple data sources, gathered by using different methods (for example adding a field phase) can shed more light onto the question whether these limitations influence the conclusions of this research.

LIST OF REFERENCES

Books

- Babbie, E. (2007). *The practice of social research* (11th ed.). Belmont: Thomson Wadsworth
- Walonick, D. S. (1997). *Survival statistics*. Bloomington: Statpac Inc.
- Brace, N., Kemp, R. & Snelgar, R. (2009). *SPSS for psychologists* (4th ed.). Hampshire: Plagrove MacMillan

Articles

- Kannan, P. K., Chang, A., & Whinston, A. B. (2000). Electronic communities in E-Business: Their role and issues. *Information System Frontiers*, 1(4), 415-426.
- Preece, J. (2001). Sociability and usability: Twenty years of chatting online. *Behavior and Information Technology Journal*, 20(5), 347-356.
- Constantinides, E. (2002). The 4S web-marketing mix model. *E-Commerce Research and Applications*, 1 (1), 57-76.
- Magretta, J. (2002). Why business models matter. *Harvard Business review*
- Wirtz, B. W., & Lihotzky, N. (2003). Customer retention management in the B2C electronic business. *Long Range Planning*, 35(6), 517-523.
- Bughin, J., & Hogel, J. (2000). The operational performance of virtual communities: towards a successful business model?. *Electronic Markets*, 10(4), 237-243.
- Macaulay, L., Keeling, K., Mcgoldrick, P., Dafoulas, G., Kalaitzakis, E., & Keeling, D. (2007). Co-evolving e-tail and on-line communities: conceptual framework. *International Journal of Electronic Commerce*, 11(4), 53-77.
- Lin, H. (2008). Determinants of successful virtual communities: Contributions from system characteristics and social factors. *Information & Management*, 45(8), 522-527.
- Leimeister, J. M., Sidiras, P., & Krcmar, H. (2006). Exploring success factors of virtual communities: the perspectives of members and operators. *Journal of Organizational Computing and Electronic Commerce*, 16(3), 279-300.
- Kim, S. H., Yang, K. H., & Kim, J. K. (2009). Finding critical success factors for virtual community marketing. *Service Business*, 3(2), 149-171.
- Andrews, D., Preece, J., & Turoff, M. (2001). A conceptual framework for demographic groups resistant to online community interaction. *International Journal of Electronic Commerce*, 6(3), 9-24.
- Schoberth, T., Preece, J., & Heinzl, A. (2003). Online communities: a longitudinal analysis of communication activities. *Proceedings of the 36th Hawaii International Conference on System Sciences*, 10-20.
- Dwyer, P. (2007). Measuring the value of electronic word of mouth and its impact in consumer communities. *Journal of Interactive Marketing*, 21(2), 63-79.
- de Valck, K., van Bruggen, G. H., & Wierenga, B. (2009). Virtual communities: a marketing perspective. *Decision support systems*, 47(3), 185-203
- Vleerbos, R. G. J. (2007). Online publisher: competing in the digital market of the print industry. *University of Twente Student Theses*

Websites

(Factor analysis literature)

<http://faculty.chass.ncsu.edu/garson/PA765/factor.htm>

<http://evolutionarymedia.com/cgi-bin/wiki.cgi?StatisticalMethods,template.html>

<http://www2.sas.com/proceedings/sugi22/STATS/PAPER268.PDF>

<http://www.mathworks.com/products/demos/statistics/factorandemo.html>

http://en.wikipedia.org/wiki/Factor_analysis

http://en.wikiversity.org/wiki/Exploratory_factor_analysis#Assumptions

http://www.ehow.com/how_5376446_interpret-factor-analysis-results.html

APPENDIX I: ORGANIZATIONAL CHART OF THE XX

APPENDIX II: FIGURES, DIAGRAMS AND TABLES

II.A: RESEARCH FRAMEWORK OF WIRTZ & LIHOTZKY (2003)

	Content	Commerce	Context	Connection
Definition	• Collection, selection, systematisation, compilation, and presentation of content	• Initiation, negotiation, and/or processing of business transactions	• Classification and systematisation of information on the Internet	• Creation of the possibility for information exchange in networks
Objective	• Online provision of user-oriented content	• Supplementing or substituting traditional transaction phases by use of the Internet	• Reduction of complexity • Navigation	• Creation of technological, commercial, or purely communicative connections in networks
Rev. Model	• Indirect revenue models and increasingly also use of direct revenue models	• Transaction-dependent direct and indirect revenue models	• Indirect revenue models	• Direct and indirect revenue models
BM Variants	• E-Information • E-Entertainment • E-Education • E-Infotainment	• E-Attraction • E-Bargaining/-Negotiation • E-Transaction	• E-Search Engines • E-Web Catalogs	• E-Intra-Connection • E-Interconnection
Examples	• Wall Street Journal Online • MP3.com • VU.org	• Amazon • Dell • eBay	• Yahoo! • Lycos • Google	• AOL • Fortunecity • Tiscali • Hotmail

	Trust Building	Community	Convenience	Free Services	Individualization	Contractual Agreements	Technical Integration
Content	×	• Indirect transaction - independent revenues • Entertainment	×	• Entertainment	• Benefit to customer • Overall effectiveness of individualisation for retention	• Increasing use of direct revenues	×
Commerce	• Direct transaction - dependent revenues	×	• Direct transaction - dependent revenues • Transaction / Shopping	×	• Benefit to customer • Overall effectiveness of individualisation for retention	×	×
Context	×	• Indirect transaction - independent revenues • Usage frequency	×	• Customer Volume	• Usage Frequency • Overall effectiveness of individualisation for retention	×	• Customer Volume • Usage Frequency
Connection	×	• Usage Frequency • Usage Duration • Communication	×	• Communication	• Usage Frequency • Communication • Overall effectiveness of individualisation for retention	• Direct revenues • Usage frequency	• Usage Frequency
ANOVA P value	0,026*	0,008**	0,008**	0,035*	0,049*	0,02*	0,001**
*) significant at the 5%-level **) significant at the 1% -level							

II.B: RANKING OF SUCCESS FACTORS (LEIMEISTER ET AL., 2006)

Table 4
Overall Ranking and Means of the Success Factors by Members and Breakdown of the Results to Males and Females

<i>Overall Success Factors Ranking</i>	<i>Overall M</i>	<i>M Females</i>	<i>Ranking Female</i>	<i>M Male</i>	<i>Ranking Males</i>	<i>Deviation Males Versus Females</i>
1 Handling member data sensitively	1.344	1.257	1	1.385	1	.1279
2 Stability of the Website	1.450	1.461	2	1.444	2	.0170
3 Fast reaction time of the Website	1.592	1.485	3	1.640	3	.1549
4 Assistance for new members by experienced members	1.777	1.758	5	1.786	4	.0276
5 Establishing codes of behavior (netiquette/ guidelines) to contain conflict potential	1.781	1.738	4	1.802	5	.0645
6 Offering up-to-date content	1.898	1.874	6	1.910	7	.0366
7 Offering high-quality content	1.907	1.990	7	1.867	6	.1236
8 Encouraging interaction between members	2.047	2.163	10	1.990	8	.1731
9 Evolution of the community according to the ideas of its members	2.068	2.020	8	2.090	9	.0701
10 Building trust among the members	2.092	2.039	9	2.118	10	.0788
11 Sustaining neutrality when presenting and selecting offers	2.250	2.259	11	2.246	12	.0130
12 Intuitive user guidance/ usability	2.255	2.311	12	2.229	11	.0819
13 Constant extension of offerings	2.440	2.487	13	2.418	13	.0688
14 Price efficiency of offered products and services	2.539	2.558	14	2.529	14	.0287
15 Reaching a high number of members within a short period of time	2.738	2.827	20	2.696	15	.1303
16 Personalized page design of the community site according to the preferences of its members	2.781	2.675	16	2.833	19	.1578
17 Integration of the members into the administration of the community	2.790	2.942	22	2.718	16	.2239
18 Arranging regular events	2.796	2.767	19	2.810	18	.0431
19 Increase of market transparency for community members	2.806	2.661	15	2.878	20	.2171
20 Appreciation of contributions of the members by the operators	2.830	2.878	21	2.807	17	.0704

(continued)

Table 4 Continued

<i>Overall Success Factors Ranking</i>	<i>Overall M</i>	<i>M Females</i>	<i>Ranking Female</i>	<i>M Male</i>	<i>Ranking Males</i>	<i>Deviation Males Versus Females</i>
21 Supporting the community by regular real-world meetings	2.839	2.691	17	2.911	21	.2203
22 Offering privileges or bonus programs to members	2.877	2.743	18	2.938	22	.1885
23 Establishing and supporting subgroups within the community	2.998	3.005	23	2.995	23	.0100
24 Special treatment of loyal members	3.043	3.072	25	3.029	24	.0428
25 Personalized product and service offers for community members	3.107	3.006	24	3.157	25	.1512
26 Existence of an offline customer club as a starting advantage	3.502	3.181	26	3.656	26	.4751

Note. Significant deviations between male and female members are shaded.

APPENDIX III: QUESTIONNAIRE

De vragenlijst die u straks zult gaan invullen, is een onderdeel van een onderzoek naar de effecten van e-communities. Een e-community is een virtuele ontmoetingsplaats voor mensen met vergelijkbare behoeften en wensen. Deze virtuele ontmoetingsplaatsen bestaan vaak uit meerdere delen, zoals een nieuwsartikelen gedeelte, een wiki (een online encyclopedie) met uitleg over allerlei termen, een webshop waar leden producten kunnen bestellen, etc. Bekende voorbeelden van e-communities zijn:

- Tweakers.net: een van de grootste ICT-gerelateerde communities
- Geenstijl.nl: focust zich op het verzamelen van 'bizarre' nieuwsverhalen
- iphoneclub.nl: Een community waar iPhone gebruikers kunnen praten over hun ervaringen.

Het doel van dit onderzoek is het vinden van de belangrijkste factoren die het succes van een e-community beïnvloeden. Dit onderzoek is uitgevoerd in opdracht van de Universiteit Twente en is tegelijkertijd een onderdeel van een afstudeeropdracht.

De vragenlijst zal maar enkele minuten van uw tijd in beslag nemen en zijn van cruciaal belang voor het onderzoek. Daarom vragen wij u om de vragenlijst zo compleet en eerlijk mogelijk in te vullen. In verband met tijdslimieten vragen wij u daarnaast om de enquête zo snel vroeg mogelijk terug te sturen.

Alle antwoorden zullen verder anoniem behandeld worden.

Indien u vragen met betrekking tot de inhoud van deze enquête heeft, kunt u deze richten aan:

burak.genc@student.utwente.nl

Indien u een korte samenvatting van de onderzoeksresultaten zou willen ontvangen, dan kunt u dat aan het einde van de vragenlijst aangeven.

Alvast bedankt voor uw deelname!

BASIS VRAGEN

Kiest u alstublieft het antwoord die als beste uw mening vertegenwoordigt

Functie (in bedrijf)/Beroep					
Leeftijd					
Geslacht	Man	Vrouw			
Hoeveel uur per dag bent u gemiddeld online op Het Internet?					
Hoeveel e-communities bent u al lid van?					
Hoeveel uur bent u per dag actief (informatie opzoeken, artikelen lezen, etc.) op een e-community?					
Wat is uw langste lidmaatschapsperiode bij de e-communities waar u lid van bent? (jaren)					
Hoeveel reacties per dag laat u gemiddeld achter in de e-communities?					
Hoe vaak heeft al een product besteld bij een community webshop?					
Wat is, volgens u, het belangrijkste gedeelte van een e-community?	Forum	Nieuws	Reacties	Webshop	Anders:

COMMUNITY WEBSITE DESIGN

De volgende vragen gaan over wat u belangrijk vindt in een community.

Kies het antwoord die als beste uw mening vertegenwoordigt.

	Belangrijkheid				
	Niet	Niet echt	Geen mening	Redelijk	Erg
Een groot aantal leden werven in een korte tijdsperiode					
Vertrouwen tussen de leden					
Community beheerders die de ideeën en suggesties van de leden toepassen op de community					
Aanbieden van de allernieuwste inhoud (bv allerlaatste nieuwsartikelen)					
Aanbieden van inhoud met hoge-kwaliteit					
Waardering van de bijdragen van leden door beheerders (bv een bedankmail voor het geven van een suggestie)					
Begeleiding van nieuwe leden door ervarenere leden					
Opstellen van gedragscodes om conflicten te voorkomen					
Regelmatige real-world ontmoetingen tussen leden organiseren (bv een borrel)					
Zorgvuldig omgaan met gegevens van leden					
Regelmatige evenementen organiseren (bv een community uitje)					
Intuïtieve gebruikersinterface					
Naar eigen wens aan te passen webpagina van de e-community (bv aangepaste kleurenschema's)					
Vorming van subgroepen binnen de e-community toestaan (bv een BMW gedeelte in een auto-community)					
Integratie van de leden in het bestuur van de e-community					
Snelle reactie tijd van de website					
Stabiliteit van de website					
Prijzen van de aangeboden producten en diensten					
Stimuleren van interactie tussen leden (bv off-topic forums, 'polls')					
Professioneel uiterlijk van de website					
Aanbieden van bonussen aan leden (bv speciale titels na een bepaald aantal achtergelaten berichten)					
Speciale behandeling van loyale leden (bv exclusieve uitjes)					
Persoonlijk product en dienst aanbiedingen aan leden (bv BMW onderdelen aanbiedingen aan BMW eigenaren)					
Focussen op een doelgroep (bv een BMW					

community in plaats van allerlei auto's)					
Het e-community bestuur focussen op het bereiken van een zo groot mogelijk aantal website bezoeken					
Het e-community bestuur focussen op het bereiken van een zo groot mogelijke aantal leden					
Het e-community bestuur focussen op het bereiken van een zo hoog mogelijke tevredenheid van leden					
De inkomstenbronnen van de e-community van tevoren bekend maken, zodat leden duidelijk weten hoe de community gefinancierd wordt					
Constance groei van aanbod (bv meer producten, meer nieuwsartikelen, snellere nieuws publicaties, etc)					
Opbouwen van een sterk handelsmerk (bv Geenstijl.nl die algemeen bekend is)					
Een bestaande klantengroep als startervoordeel (bv een folder verspreiden onder BMW-eigenaren over de BMW-community)					
Toename van markt transparantie voor e-community leden (bv een prijsvergelijkmachine opzetten, waardoor de leden makkelijker een keuze kunnen maken voor een webshop)					
Neutraal blijven bij het aanbieden en selecteren van aanbiedingen van webshops aan de leden					

COMMUNITY/WEB-SHOP VRAGEN

Kiest u alstublieft het antwoord die als beste uw mening vertegenwoordigd

	Nee	Niet echt	Geen mening	Redelijk	Ja
Zou u lid worden van de e-community van een webshop?					
Bent u geneigd om een aankoop te herhalen bij een webshop als u tevreden bent over de webshop?					
Is prijs een belangrijke factor bij het selecteren van een webshop?					
Is vertrouwen/betrouwbaarheid een belangrijke factor bij het selecteren van een webshop?					
Vindt u een webshop met belangrijke partners betrouwbaarder dan webshops zonder? (bv thuiswinkel keurmerk, grote bedrijven als referentie, etc.)					
Vindt u dat een e-community als tussenpersoon moet functioneren bij het zoeken van een webshop? (bv het community forum als een ontmoetingsplaats tussen klant en leverancier)					
Vindt u het belangrijk om te weten wie de leverancier is van uw bestelling op Het Internet?					

Vindt u het belangrijk dat u zelf de leverancier voor uw bestelling op kunt uitkiezen op een webshop met meerdere leveranciers?					
Vindt u het belangrijk dat de e-community een prijs vergelijk gedeelte heeft?					
Vindt u het belangrijk dat de e-community een website beoordeling gedeelte heeft?					
Zou u producten/diensten kopen op de eigen webshop van een e-community?					
Zou u de webshop van een bekend e-community eerder overwegen als leverancier dan een willekeurig andere webshop?					
Zou u de eigen webshop van een e-community betrouwbaarder vinden dan een willekeurig andere webshop?					
Zou u eerder geneigd zijn om bij een community webshop te bestellen indien u een actief lid bent op die community?					
Zou u de klantenervaringen met de e-community webshop die achtergelaten zijn op de e-community zelf vertrouwen?					

Bedankt voor uw deelname aan dit onderzoek!

APPENDIX IV: FACTOR ANALYSIS

IV.A: TOTAL VARIANCE EXPLAINED

Total Variance Explained

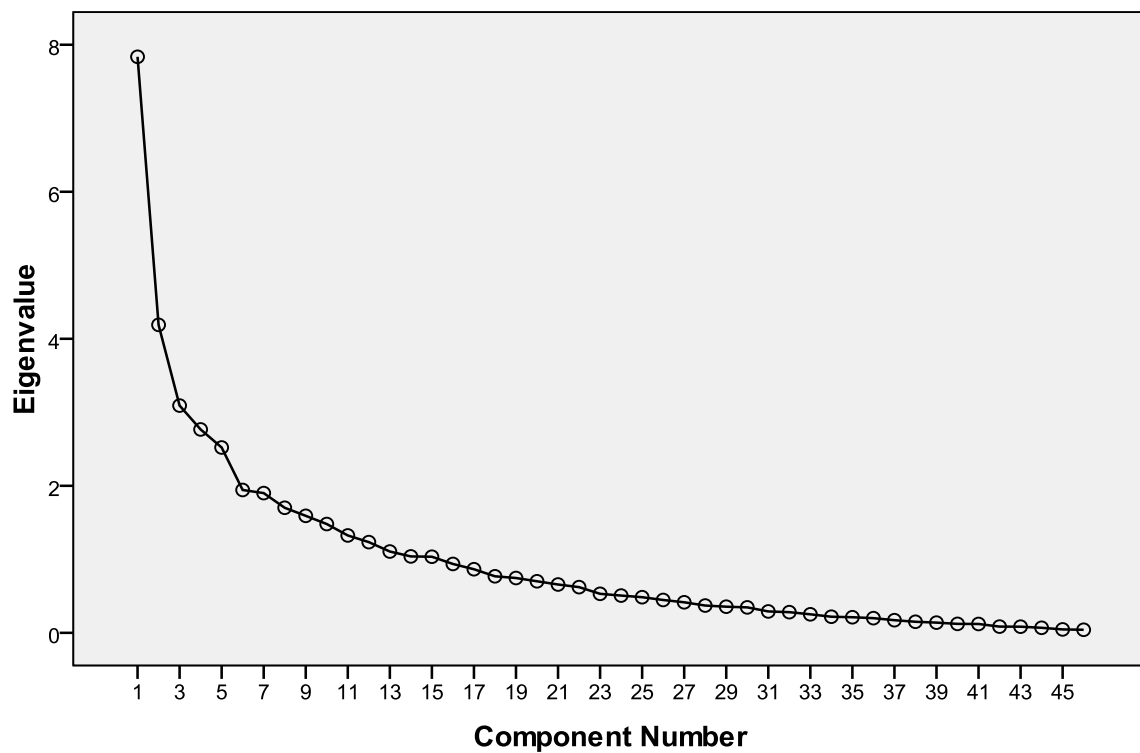
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
				Loadings			Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7,836	17,034	17,034	7,836	17,034	17,034	4,241	9,219	9,219
2	4,190	9,108	26,142	4,190	9,108	26,142	3,505	7,620	16,839
3	3,091	6,720	32,863	3,091	6,720	32,863	3,152	6,852	23,691
4	2,767	6,015	38,878	2,767	6,015	38,878	2,882	6,265	29,957
5	2,521	5,481	44,358	2,521	5,481	44,358	2,534	5,508	35,465
6	1,943	4,224	48,582	1,943	4,224	48,582	2,532	5,503	40,968
7	1,901	4,132	52,715	1,901	4,132	52,715	2,165	4,707	45,676
8	1,701	3,698	56,413	1,701	3,698	56,413	1,881	4,088	49,764
9	1,592	3,460	59,873	1,592	3,460	59,873	1,826	3,970	53,734
10	1,480	3,218	63,091	1,480	3,218	63,091	1,787	3,884	57,619
11	1,325	2,880	65,971	1,325	2,880	65,971	1,778	3,865	61,483
12	1,234	2,683	68,653	1,234	2,683	68,653	1,762	3,831	65,314
13	1,106	2,405	71,058	1,106	2,405	71,058	1,609	3,497	68,812
14	1,039	2,260	73,318	1,039	2,260	73,318	1,604	3,487	72,299
15	1,035	2,250	75,568	1,035	2,250	75,568	1,504	3,269	75,568
16	,937	2,037	77,605						
17	,865	1,881	79,486						
18	,769	1,672	81,158						
19	,746	1,621	82,779						
20	,701	1,524	84,303						
21	,657	1,429	85,732						
22	,622	1,351	87,084						
23	,531	1,154	88,238						
24	,507	1,102	89,340						
25	,485	1,054	90,393						
26	,447	,972	91,365						
27	,415	,903	92,268						
28	,371	,807	93,075						

29	,356	,773	93,848					
30	,346	,753	94,601					
31	,291	,633	95,233					
32	,281	,611	95,844					
33	,252	,548	96,392					
34	,219	,476	96,868					
35	,212	,461	97,330					
36	,200	,434	97,764					
37	,172	,374	98,137					
38	,150	,327	98,465					
39	,139	,302	98,766					
40	,122	,265	99,031					
41	,121	,262	99,293					
42	,085	,184	99,478					
43	,084	,182	99,660					
44	,069	,149	99,809					
45	,046	,101	99,910					
46	,042	,090	100,000					

Extraction Method: Principal Component Analysis.

IV.B: SCREE PLOT

Scree Plot



IV.C: ROTATED COMPONENT MATRIX

Rotated Component Matrix^a

	Component														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
The e-community webshop is more reliable than other webshops	,840														
The e-community webshop is my first choice webshop	,808														
I would like to order from the e-community website	,797														
Being an active e-community members stimulates amount of order from e-community webshop	,768														
Customer experiences on the e-community are reliable	,664														
I would like to be a member of the webshop' e-community	,481														
Striving towards maximum member satisfaction		,774													
Trust		,762													
Price		,680													
Satisfaction		,562													
Encouraging interaction between members		,532													
Professional appearance of the website		,427													
Offering bonuses to members			,828												
Special treatment of loyal members			,786												
Personalized product and services offerings to members			,599												
Building a strong trademark			,589												
Having an existing customer group as a starting advantage			,510												
Increase of market transparency for the members				,833											
Intuitive user-interface				,650											
Sustaining neutrality when selecting and presenting offers to members				,510											
Focusing on one target group			,459	,502											
Continuous growth of offerings				,468											
Arranging regular offline events					,804										
Organizing regular meetings between members					,782										

	Component														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Trust between members					,662										
Striving towards a maximum amount of website visits						,839									
Striving towards a maximum amount of members						,835									
Reaching a high number of members in short time period						,759									
Fast responding website							,830								
Stability of the website							,727								
Knowing who the supplier is								,715							
Importance of webshop partners								,596							
Price-comparison tool								,490			,415				
Defining the sources of revenue									,720						
The e-community as intermediary									,663						
Offering up-to-date content										,865					
Offering high-quality content										,715					
Webshop surveys	,427										,626				
Competitive prices for the offered products and services											,578				
Personalized page design												,666			
Appreciation of the contributions of members by the administrators												,654			
Community administrators who apply ideas and suggestions of the members to the e-community									-			,445			
Allowing the formation of sub-groups within the e-community								,402					,815		
Integrating the members into the e-community administration													,417		
Careful handling of member data														,754	
Establishing codes of behavior in order to contain conflict potential between members															,831

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 47 iterations.