

## UNIVERSITY OF PÉCS FACULTY OF BUSINESS AND ECONOMICS DOCTORAL SCHOOL IN BUSINESS ADMINISTRATION

# Analyzing the factors expediting commercial value for companies in online social networks using Electronic Word-Of-Mouth

### Thesis summary

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### **Preface**

The idea to research the online social networks was a result of a long process that started many years ago with the rise of the internet and the many different changes that it brought to our life. During the following years, it became apparent that the internet changed a lot in the theoretical background both in the business school of thought and in other areas.

The researcher started to look into the different angles that can be further explored within the marketing area in the internet, while another big phenomenon has started to raise, the online social networks. Although it started as just another web-based communication tool, the amazingly growing demand showed that this is going to be something that can also shake some of the existing best practices in the marketing world. Still, in the early days, there were people that were skeptical regarding the size and importance of the new phenomenon, but the researcher thought otherwise and decided to research this exciting area.

As a marketing executive in the industry during these years, the researcher was exposed to the first attempts to leverage the new promising landscape of the social network for commercial benefits. These attempts were done using the traditional approaches companies were fluent in, such as: advertisement, direct mailing and others. These attempts were not only disappointing in the results and the return on the investment, but they actually created damage and frustration to both social network users and the companies. Looking at the less conventional marketing ways brought the researcher into the belief that there might be a way in generating commercial value to companies and in the same way have the users gain something out of that.

The first advanced attempts that were done in the first years, looked at the win-win interaction between companies and users in the social network as something that has to be monetary-oriented, meaning that the only thing that can drive the social network users to assist companies, if anything, will directly money or specific financial benefits.

The researcher was very interested in this interaction, and with having relationship marketing, word of mouth, viral marketing and other innovative concepts in mind, was eager to look into the ways that are not financial related, but can still generate tremendous value for both users and companies.

During the following four years, the researcher analyzed the social networks and questioned hundreds of users, and together with its business experience tried to create some more knowledge that can benefit business executives in pursuing the online social network potential.

## <u>Chapter 1 – Introduction - Background for the research</u>

Online social networks, like Facebook, Twitter, MySpace and others, have become the most popular websites in 2009-2012. Facebook, as the largest social networking site in the world, is the 4th most popular website in the US (ComScore, 2011). Facebook has more than 800 million active users and 50% growth in the 12 months before July 2011. If Facebook was a country, it would be the world's third largest country (based on the number of inhabitant), after China and India. Looking at the distribution of the Facebook users globally: 28% of the Facebook population is in Europe, 23% is in Asia, 22% is in North-America (USA and Canada), 18% is in Latin-America (Mexico, Central and South America) and 5% is in Africa (InternetWorldStats, 2012).

Facebook is a very active network with more than 375 million users entering the network at least once a day (Facebook Statistics, 2011). Although Facebook is considered to be a tool for young people, 38% of its users are above 35 years old (InsideFacebook, 2011). The average user in Facebook has 130 friends and he spends 31 minutes

and creates 3 pieces of content on a daily basis in Facebook. More than 30 billion items of content (photos, messages, etc.) are uploaded each month to Facebook (Facebook Statistics, 2011).

The majority of the consumers' community, for most companies, is now accessible in Facebook. With the latest technological developments, Facebook is now accessible via smart-phones, has open interface to other sites and applications (Facebook-Connect) and is supported by monetary applications (Facebook Payments and others).

The popularity of Facebook and its recent enhancements have created a very attractive commercial infrastructure. In a recent survey done by SocialMedia with 3,342 participants that answered an online survey published on Twitter, Facebook and LinkedIn as well as sent by email (Marketing Charts, 2011), an overwhelming majority (92%) of marketers said that they are now using Facebook as a marketing tool, following by other social media tools such as Twitter (84%), LinkedIn (71%) and blogs (68%). About half of the marketers using Facebook, started to do it in the last year, and most of the Facebook marketers would like to know more about its capabilities.

Companies in all sizes are attracted to the social media. Still there is a difference between companies with large marketing budgets that are using the social media in combination with traditional marketing tools (such as advertisement, public relations and sales promotion tools), and companies with smaller marketing budgets that are using the social media as their primary marketing tool.

Effective marketing within a social network for both big and smaller companies is a very challenging task. Most of the current efforts have not yet yielded the desired ROI for the majority of the companies. These efforts are done by using traditional marketing approaches such as advertisement and mass marketing (sending messages within the network), an approach that is disregarding the main asset of the social network. This asset is the fact that people are "connected" with other people they know (at least to a certain

degree) and can transfer information to one another, information that will probably be regarded as less intrusive and more credible than "vendor-polluted" messages.

In addition to that, most social networks provide an opportunity for companies and brands to maintain a "social network" entity. This entity can help the company keep ongoing "social" relationships with the social network users. Marketing in the network should leverage these capabilities in order to maintain a much more conversational, bi-directional or even multidirectional communication between the companies and the network members. Building these social connections might change the marketing approach to be one that is based on building relationships, rapport and trust between the company and the consumers and as a result creates a much more transparent relationships (from both the company and potential/existing customers perspectives).

These trust-based relationships can not only improve the attitude towards the company or brand but can probably also influence the willingness of the social networkers to use the network more often and share more information (Goldsmith, Bridges and Freiden, 2001).

From the other end, although the concept of relationship marketing and the development of long-term relationships with loyal customers have been very popular in the last two decades, the need for reaching out to other prospective customers that might not be within the network of the company's loyal customer base is also very important, and might yield to better financial results (Werner and Kumar, 2000).

Looking at it from a more general marketing-mix point of view, one of the main reasons traditional marketing and advertisement approaches are becoming less effective in recent years (inside and outside the social networks) is the loss of consumers trust in what companies are saying (Calfee and Ringold, 1994). This lack of trust is an ongoing effect of deceptive advertising consumers are exposed to and is influencing their level of trust towards advertisement in general (Darke and Ritchie, 2008)

In order to develop a better approach for both companies and the Facebook users, this research analyzed the routes of getting into consumers' conversations in a way that will benefit both sides. Getting into these conversations is very important today in order to get into the consumers' consideration set, because of the shrinking effect of traditional advertisement.

Looking at it from a different perspective, most of the Facebook users (and the other social networks) are connecting to others in order to share ideas, thoughts and content (mainly photos and music). Making this sharing process, the Electronic Word-of-mouth (electronic word of mouth), valuable for commercial use, is the heart of this dissertation. Word of Mouth (both traditional and electronic) is very critical in the decision making of consumers. According to AC Nielsen (2007), "consumer recommendations are the most credible form of advertising among 78% of the study's respondents". In another survey that was done by the Kelsey Group (The Kelsey Group, 2007) "review users noted that reviews generated by fellow consumers had a greater influence than those generated by professionals". In a comparison done between word-of-mouth within online social networks and the traditional marketing approach, referrals done by word-of-mouth were far more effective than activities using traditional marketing activities (Trusov, Bucklin and Pauwels, 2009).

To that there is a need to add the issue of influencers that is becoming much wider in an online social network. It's no longer just the "expert" that can influence the consumers, but it's also other influencers such as the best networker (with a large social network), the most attractive blogger and others.

In this dissertation the researcher analyzed the main factors that expedite commercial word of mouth in the online social networks (preliminary Facebook) and figured out how companies can leverage the real potential commercial value of the network. Although word of mouth is more critical for service companies, compared with product companies (Friedman and Smith, 1993), this research was not focused only on services companies. The researcher analyzed the

online networkers' desires and needs in order to realize what it is that they want in return for sharing commercial information with their peers.

In order to analyze the main factors for commercial word of mouth in the social network, the technology acceptance model (TAM) and the theory of reasoned action (TRA) were used, in the context of the social networks. In addition to that, since the social networks are mainly global, the Hofstede's cultural dimensions were measured in order to evaluate the cultural effect on the model variables. In addition to that the researcher conducted four preliminary researches in order to better understand some of the aspects of this research. The first preliminary research was a real-life experiment done in order to evaluate the real value of viral word of mouth information sharing in the social network. The second preliminary research was done in order to understand the characteristics of the Facebook user both within the network, and in the real world. This dual-life phenomenon is specifically important for commercial entities that also appear both in the real world and in the social network. The third preliminary research was done in order to evaluate whether the friends group of a Facebook user is really a group in his perception. The answer to this question is critical before examining the factors that make the user share information with his group of friends. If this group is not really a group, the whole sharing process might fall apart. The forth preliminary research was done in order to evaluate the attractiveness of monetary "deals" that are offered to users of the social networks. This research was done since there is a belief that all the social network users want to get out of the commercial entities within the social networks is only monetary rewards.

The results of the four preliminary researches together with the main model of this research and the other information analyzed as a part of the main research were provided some additional insights into the fascinating world of social networks and some really useful aspects for companies using Facebook as a marketing platform.

### **Chapter 2 – The research method**

#### 2.1 Introduction

This research was held among Facebook users that are a part of the extended network of friends of the researcher. As such this sample has to be considered as a convenience sample rather than random sample. The reason for this method of sampling was the convenience of the researcher that used the strength of the virality of messages in the social network for the sake of collecting the information for this research. Although the first messages that asked responders to fill the questionnaire were sent to the researcher's first circle of friends, but these friends distribute the message to their friends, that distribute it to their friends and so on and so forth. In some cases the messages were sent to friends of friends via emails. This viral distribution created a sample that is very diverse and can be a representative sample of the research population, which is the social networks' users.

### 2.2 The research population

The population of this research is the overall social networks users' population. It includes everyone that is registered to at least one social network around the globe, no matter how active he is in using the network.

#### 2.3 The research sample

The sample population for this research involved 156 participants, out of them 6 participants were not registered to any social network, and didn't answer the rest of the questionnaire (except the first filtering question). These 6 participants were taken off the sample population. Out of the other valid 150 participants there were 90 female (60%) and 58 male (38.7%). 2 participants (1.3%) had missing gender information.

All valid participants were Israeli adults aged 18 to 56, who have an active account on a social network. The average age of the sample participants was 32.36. The participants were all either members of the researcher's Facebook friends group, or friends of friends in different social circles. All participants agreed to take a part in the research without any benefit. As stated above, the sample in this research was a convenience sample.

### 2.4 Variables and symbols

#### Dependent variables:

- READ Reading of information (passively)
- SHARE Sharing of commercial information (actively)

#### Mediator variables:

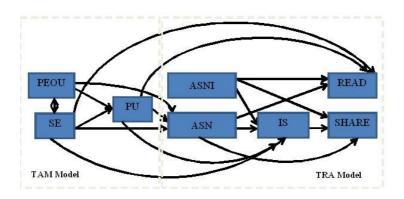
- PU Perceived Usefulness
- IS Intention to Share commercial information

#### Independent variables:

- PEOU Perceived Ease of Use
- SE Self-Expressiveness
- ASNI Attitude towards the Social Network commercial Information
- ASN Attitude towards the Social Network

Hofstede culture dimensions: Power distance index (PDI), Uncertainty avoidance index (UAI), Masculinity (MAS) index, Individualism (IDV) index

#### 2.5 Research model



### **Chapter 3 – The research findings**

## 3.1 Sample Composition – General Characteristics

There were a total of 156 participants in the sample. 6 participants said that they are not registered to any social network, and they were taken off the sample. Out of the other 150 participants there were 90 female (60%) and 58 male (38.7%). 2 participants (1.3%) had missing gender information. Participants were between 18 and 56 years old, with an average of 32.36 and standard deviation of 7.341.

## 3.2 Drivers for commercial information sharing

Table 3.1 shows the possible influence of different factors on the willingness of the participants to read and share more commercial information in their social network. It shows the average score and standard deviation on a 5-point Likert scale.

Table 3.1 - average score and standard deviation given to the influence of different factors on the willingness to read and share commercial information in the social network

Factor	Read information		Share i	nformation
	Average	Standard Deviation	Average	Standard Deviation
High Level security	3.57	1.223	3.59	1.322
Product satisfaction			3.72	1.189
Rewards	3.48	1.322	3.37	1.297
Information relevance	4.08	0.93		

As shown in the table, all four factors, that were identified in a preliminary research, were higher than average in their influence on the willingness of the participants to both read and share information. Surprisingly, the most influencing factor is the information relevance (4.08) and the least influencing factor is rewards (3.43 in average). The most influencing factor to sharing commercial information is satisfaction with the product or service (3.72), following with high level security (3.59).

Although rewards were not rated very high as a factor that can influence commercial information sharing, table 3.2 shows the possible influence of different rewards on the willingness of the participants to share commercial information in their social network. It shows the average score and standard deviation on a 5-point Likert scale.

Table 3.2 - average score and standard deviation given to the influence of different rewards on the willingness to share commercial information in the social network

Type of reward	Average	Standard Deviation
Monetary rewards (money)	3.71	1.41
Attractive deals	3.53	1.35
Gifts	3.64	1.358
Entertainment content (e.g. humor)	2.52	1.273
Information (e.g. comparison tables)	2.90	1.286
Personalized content	3.18	1.377

As expected, money (3.71), gifts (3.64) and attractive deals (3.53) were all on the top of the participants list as the best rewards they ask for, in return for sharing commercial information with others in their social network. Both entertainment content (2.52) and information in general (2.90) were rated below the average. Personalized content (3.18) was rated above average, but was still lower in its effect compared to the "real" rewards.

Table 3.3 shows the industries in which participants are more willing to share commercial information with their friends in the social network. It shows the average score and standard deviation on a 7-point Likert scale.

Table 3.3 - average score and standard deviation given to the willingness to share commercial information in the social network for products and services in each industry

Industry	Average	Standard Deviation
Fashion	3.74	1.974
Airlines	3.76	1.947
Tourism	4.24	1.853
Electronics	4.16	1.913
Restaurants	4.70	1.865
Websites	4.30	1.883

Food	4.03	2.012
Books	4.47	1.879
Films	4.72	1.784

The table shows medium levels of willingness to share commercial information. The average (4.24) equals to 3.16 on a 5-point Likert scale, which is just a little bit above the middle answer. The industries in which participants will be more willing to share commercial information are films (4.72), restaurants (4.70) and books (4.47). Fashion (3.74) and airlines (3.76) were rated below the middle answer in the scale.

In general, most participants (63.3%) rate the information that they get on the social network as similar in its value to the information they get from people they trust outside the social network. Additional 18.7% of the participants see it as more valuable than the other sources. This shows that word of mouth information in the social network has very high credibility.

Table 3.4 shows the possible reasons for exchanging information with commercial entities, such as companies and brands, within the social network. It shows the average score and standard deviation on a 5-point Likert scale for each reason.

Table 3.4 - average score and standard deviation given to the possible reasons for exchanging information with commercial entities within the social network

Reason for exchanging information	Average	Standard Deviation
Updated information	2.75	1.311
Attractive offers	3.16	1.313
Answers to questions	3.42	1.242
Direct contact	3.17	1.331

As shown in the table, aside from the updated information, all other three reasons that were identified in a preliminary research were rated higher than the average. The most influencing reason is getting answers to questions (3.42) and the second reason is direct contact with the company (3.17). Attractive offers were only rated third (3.16) as a reason for direct contact with companies in the social network. In two other related questions, participants rated below the average (2.94 and 2.65) statements saying that they don't exchange information with commercial entities in the social network, and that they see no value in it.

Table 3.5 shows participants attitude towards commercial advertisement in the social network. It shows the average score and standard deviation on a 5-point Likert scale given to different attitudes regarding advertisement.

Table 3.5 - average score and standard deviation given to different attitude statements regarding advertisement within the social network

Attitude regarding advertisement	Average	Standard Deviation
I never really paid attention to it	3.22	1.269
I fully ignore it	3.26	1.335
It makes me less willing to use this network	2.68	1.266
It's very boring	3.19	1.172
It's a necessary evil for funding the social network	3.19	1.219
It adds value to my use if the network	2.01	1.017
If done correctly, it can be very positive	3.19	1.189

The average score of the advertisement attitude index is 2.918 (standard deviation of 0.5142) which is below the average answer. As

shown in the table, the majority of the participants either ignores advertisement (3.26), don't pay attention to it (3.22) or think it's boring (3.19), although they see little damage in advertisement to their willingness to use the social network (2.68). On the positive side, there is low perceived value of advertisement (2.01) but participants believe it's a necessary evil (3.19) and believe is can be positive, if done correctly (3.19).

#### 3.3 Hofstede's cultural dimensions

Table 3.6 shows the Hofstede dimensions results captured in this research, based on what participants perceive as their cultural characteristics. Participants were guided to estimate their culture's characteristics, even if they personally don't agree with it. The results show the average score and standard deviation on a 5-point Likert scale, as well as the converted score on a 100-point scale, for comparison purposes with the Hofstede's Israeli published results, that also appear in the table.

Table 3.6 - average score and standard deviation of the four Hofstede's dimension indexes, the converted score to a 100-point scale and the Hofstede's published score for Israel

Hofstede's dimension	Average	Standard Deviation	100-point scale score	Hofstede's Israel results
Power distance (PDI)	3.131	0.61277	53.28	13
Uncertainty avoidance (UAI)	3.0446	0.53308	51.12	81
Masculinity (MAS)	3.2036	0.91289	55.09	47
Individualism (IDV)	3.5949	0.57474	64.87	54

As shown in the table, there are major differences between the measured results in this research and the published results in the Hofstede's website (Hofstede website, 2011). The biggest differences appear in the power distance (PDI) index and in the uncertainty avoidance (UAI) index. These difference might be a result of the self-opinion method that was used in this research.

### 3.4 Model analysis results

There were 5 participants out of the 150 participants in this research (registered in a social network) that did not have valid scores in all the model variables. These 5 participants were not included in the theoretical model calculations.

Table 3.7 displays the averages and standard deviations of the model's variables.

Table 3.7 - averages and standard deviations of the model's variables

Variable	Average	<b>Standard Deviation</b>
ASN	3.88	0.821
PU	3.2637	1.01547
PEOU	3.7705	0.69205
SE	3.0228	0.73190
READ	3.7501	0.69675
ASNI	2.7677	0.78758
SHARE	2.4000	1.28236
IS	3.3828	1.23746

The proposed theoretical research model was tested using the AMOS Structural Equation Modeling (SEM) software, version 19.0. Note that this model is somewhat different than the one presented in chapter 7.9. The modification that is introduced is a correlation between the SE

(Self-Expressiveness) variable and the ASNI (Attitude towards the Social Network commercial Information) variable (r= 0.422, p < .01). This modification was suggested by the modification command of AMOS 19 so as to improve a somewhat inadequate model fit ( $\chi^2_{[11]}$  = 41.074, p<.01,  $\chi^2/df$  =3.734, NFI = 0.901, CFI = 0.922, RMSEA = 0.138). With this modification, however, the CFA model fit the data well ( $\chi^2_{[10]}$  = 20.395, p<.05,  $\chi^2/df$  =2.04, NFI = 0.951, CFI = 0.973, RMSEA = 0.085). Since the sample was relatively large, chi square was significant, despite other indices pointing to adequate model fit.

Figure 3.1 depicts the structural model of this study.

PEOU 162\*\*\* ASNI 311\*\*\* READ

.429\*\*\* ASNI 311\*\*\* READ

.429\*\*\* IS

.597\*\*\* ASN .411\*\* SHARE

.256\*\* .15

Figure 3.1 - structural model

Note: \*:  $p \le .001$ , \*\*:  $p \le .01$ , \*\*\*:  $p \le .05$ . ns: Not Significant

## 3.5 Examination of the research hypotheses Cultural-effect hypotheses

## H1: Negative correlation is expected between Hofstede's power distance index (PDI) and the number of friends in the social network

A significant positive correlation of 0.211 (p<0.05) between Hofstede's power distance index (PDI) and the number of friends in

the social network was found. Thus, Hypothesis H1 was not supported.

## H2: Negative correlation is expected between Hofstede's masculine index (MAS) and information sharing (SHARE)

A significant negative correlation of -0.168 (p<0.05) between Hofstede's masculine index (MAS) and the information sharing (SHARE) in the social network was found. Thus, Hypothesis H2 was supported.

## H3: Negative correlation is expected between Hofstede's masculine index (MAS) and Attitude towards the Social Network commercial Information (ASNI)

A significant negative correlation of -0.192 (p<0.05) between Hofstede's masculine index (MAS) and the attitude towards the social network commercial information (ASNI) was found. Thus, Hypothesis H3 was supported.

## H4: Positive correlation is expected between Hofstede's uncertainty avoidance index (UAI) and information reading (READ)

No significant correlation (p<.05) was found between Hofstede's uncertainty avoidance index (UAI) and information reading (READ). Thus, Hypothesis H4 was not supported.

## H5: Positive correlation is expected between Hofstede's uncertainty avoidance index (UAI) and Attitude towards the Social Network commercial Information (ASNI)

A significant negative correlation of -0.190 (p<0.05) between Hofstede's uncertainty avoidance index (UAI) and the attitude towards the social network commercial information (ASNI) was found. Thus, Hypothesis H5 was not supported.

## H6: Negative correlation is expected between Hofstede's individualism index (IDV) and the perceived usefulness of the social network (PU)

A significant negative correlation of -0.180 (p<0.05) between Hofstede's individualism index (IDV) and the perceived usefulness (PU) of the social network was found. Thus, Hypothesis H6 was supported.

#### Intra TAM-model (Technology Acceptance Model) hypotheses

## H7: Perceived Ease of Use (PEOU) positively affects Perceived Usefulness (PU)

The findings of table number 4.2.21 indicate that there is no significant effect of the Perceived Ease of Use (PEOU) on the Perceived Usefulness (PU). Thus, hypothesis H7 was not supported.

### H8: Self-Expressiveness (SE) positively affects Perceived Usefulness (PU)

The findings of table number 4.2.21 indicate that there is a significant positive effect of 0.597 (p<0.05) of Self-Expressiveness (SE) on Perceived Usefulness (PU). Thus, hypothesis H8 was supported.

## H9: Positive correlation between Perceived Ease of Use (PEOU) and Self-Expressiveness (SE)

The findings of table number 4.2.21 indicate that there is a significant positive correlation of 0.429 (p<0.05) of the Perceived Ease of Use (PEOU) and Self-Expressiveness (SE). Thus, hypothesis H9 was supported.

#### **Intra TRA-model (Theory of Reasoned Action) hypotheses**

### H10: Attitude towards the Social Network (ASN) positively affects Intention to Share commercial information (IS)

The findings of table number 4.2.21 indicate that there is no significant effect of the Attitude towards the Social Network (ASN) on the Intention to Share commercial information (IS). Thus, hypothesis H10 was not supported.

## H11: Attitude towards the Social Network (ASN) positively affects Reading of information (READ)

The findings of table number 4.2.21 indicate that there is no significant effect of the Attitude towards the Social Network (ASN) on the Reading of information (READ). Thus, hypothesis H11 was not supported.

## H12: Intention to Share commercial information (IS) positively affects Sharing of commercial information (SHARE)

The findings of table number 4.2.21 indicate that there is a significant positive effect of 0.411 (p<0.05) of the Intention to Share commercial information (IS) on the actual Sharing of commercial information (SHARE). Thus, hypothesis H12 was supported.

## H13: Attitude towards the Social Network commercial Information (ASNI) positively affects Intention to Share commercial information (IS)

The findings of table number 4.2.21 indicate that there is a significant positive effect of 0.411 (p<0.05) of the Attitude towards the Social Network commercial Information (ASNI) on the Intention to Share commercial information (IS). Thus, hypothesis H13 was supported.

## H14: Attitude towards the Social Network commercial Information (ASNI) positively affects Reading of information (READ)

The findings of table number 4.2.21 indicate that there is no significant effect of the Attitude towards the Social Network commercial Information (ASNI) on the Reading of information (READ). Thus, hypothesis H14 was not supported.

### H15: Attitude towards the Social Network (ASN) positively affects Sharing of commercial information (SHARE)

The findings of table number 4.2.21 indicate that there is no significant effect of the Attitude towards the Social Network (ASN) on Sharing of commercial information (SHARE). Thus, hypothesis H15 was not supported.

## H16: Attitude towards the Social Network commercial Information (ASNI) positively affects Sharing of commercial information (SHARE)

The findings of table number 4.2.21 indicate that there is a significant positive effect of 0.311 (p<0.05) of Attitude towards the Social Network commercial Information (ASNI) on Sharing of commercial information (SHARE). Thus, hypothesis H16 was supported.

#### **Cross TAM-TRA models hypotheses**

### H17: Perceived Ease of Use (PEOU) positively affects Attitude towards the Social Network (ASN)

The findings of table number 4.2.21 indicate that there is a significant positive effect of 0.162 (p<0.05) of the Perceived Ease of Use (PEOU) on the Attitude towards the Social Network (ASN). Thus, hypothesis H17 was supported.

## H18: Self-Expressiveness (SE) positively affects Reading of information (READ)

The findings of table number 4.2.21 indicate that there is a significant positive effect of 0.359 (p<0.05) of Self-Expressiveness (SE) on the Reading of information (READ). Thus, hypothesis H18 was supported.

### H19: Self-Expressiveness (SE) positively affects Intention to Share commercial information (IS)

The findings of table number 4.2.21 indicate that there is no significant effect of Self-Expressiveness (SE) on the Intention to Share commercial information (IS). Thus, hypothesis H19 was not supported.

### H20: Perceived Usefulness (PU) positively affects Reading of information (READ)

The findings of table number 4.2.21 indicate that there is a significant positive effect of 0.414 (p<0.05) of Perceived Usefulness (PU) on the Reading of information (READ). Thus, hypothesis H20 was supported.

### H21: Perceived Usefulness (PU) positively affects Intention to Share commercial information (IS)

The findings of table number 4.2.21 indicate that there is no significant effect of Perceived Usefulness (PU) on the Intention to Share commercial information (IS). Thus, hypothesis H21 was not supported.

### H22: Self Expressiveness (SE) positively affects Attitude towards the Social Network (ASN)

The findings of table number 4.2.21 indicate that there is a significant positive effect of 0.256 (p<0.05) of Self-Expressiveness (SE) on the Attitude towards the Social Network (ASN). Thus, hypothesis H22 was supported.

## H23: Perceived Usefulness (PU) positively affects Attitude towards the Social Network (ASN)

The findings of table number 4.2.21 indicate that there is no significant effect of the Perceived Usefulness (PU) on the Attitude towards the Social Network (ASN). Thus, hypothesis H23 was not supported.

In addition to these hypothesizes, there was one hypothesis that was suggested by the Amos 19 software. The findings of table number 8-21 indicate that there is a significant positive correlation of 0.338 (p<0.05) between the Self-Expressiveness (SE) variable and the Attitude towards the Social Network commercial Information (ASNI). Thus, this suggested hypothesis was supported.

### **Chapter 4 – Discussion – The Model**

This research tried to investigate the main factors that expedite commercial word of mouth in Facebook, as a way of increasing the value social networks can provide to commercial entities, rather than using the traditional push strategies, that are less effective in the social networks world.

The Technology Acceptance Model (TAM), that is based on the theory of reasoned action (TRA) model of Ajzen and Fishbein's (Ajzen and Fishbein, 1980) was used in this research, with an adaptation to the Facebook commercial information sharing process.

In this research model there are three main factors that are influencing the attitude towards the social network, the attitude towards the commercial information in the social network, the intention to share information, the information sharing activity and the information reading activity. The three factors are perceived ease of use, perceived usefulness and self-expressiveness.

Perceived ease-of-use, the first factor, was predicted to affect the perceived usefulness and the attitude toward the social network. In addition, it was predicted to have a correlation with self-expressiveness. As shown in figure 3.1, perceived ease-of-use is significantly influencing the attitude towards the social network, but has no significance influence on the perceived usefulness. In addition there is a strong significant bi-directional correlation with self-expressiveness.

The significant effect of perceived ease of use on the attitude towards the social network was supported in this research, as in many other researches testing the TAM model (Adams, Nelson and Todd, 1992; Pedersen and Nysveen, 2003 and others).

The strong significant correlation of perceived ease of use and self-expressiveness can be explained by the fact that an ability to use the social network enable users to experience self-expressiveness, and difficulties in using the social network will prevent this option. Correlation between these variables was found in other researches in the social network already (Lee et al., 2011).

The non-significant effect of the perceived ease of use on perceived usefulness can be explained by the fact that Facebook is a very easy-to-use application. Ease-of-use was scored as one of the highest with an average of 3.7705 on a 5-point scale and a relatively small standard deviation of 0.69205 (as indicated in table 3.7).

Perceived usefulness, the second factor, was predicted to affect the attitude toward the social network, the information sharing intention and the reading activity. As shown in figure 3.1, perceived usefulness is significantly influencing the reading activity, but has no significance influence on the attitude toward the social network and the sharing intention. The significant effect of perceived usefulness on the reading activity, which is the passive activity each user is doing when getting into Facebook, was found in the Davis's early research (1993), although in this case this makes even more

sense, as there is no real behavior intention in the passive reading action, the same way it appears in the sharing activity.

The effect of perceived usefulness on the attitude towards the social network was non-significant but was not far from being significant (p=0.087). The other factors that influenced the attitude towards the social network seem to have more significant effect on the attitude.

The non-significant effect of perceived usefulness on the sharing intentions shows that in social networks even if users perceive the network as useful for them, they might use it for passive reading purposes but it does not affect the active commercial information sharing. Similar results were also found in other researches in technologies usage such as internet banking (Chen, 2011).

The effect of perceived usefulness and perceived ease of use was tested in many researches and there were contradicting results. For instance, Davis (1993) found that usefulness had stronger influence compared to ease of use, but Adams, Nelson and Todd (1992) from the other end found that ease of use is more influential than usefulness. Agarwal and Prasad (1999) showed roughly equivalent influence of both factors on behavioral intentions.

In this research, both factors had small influence on the attitude towards the social network, and the effect of perceived usefulness was not even significant. From the other end, perceived usefulness had a strong influence on the information reading. One explanation for the small effect of ease of use on the attitude towards the social network might be the explanation suggested by Gefen and Straub (2000) on the influence of ease of use in electronic commerce. According to this explanation ease of use will have stronger effect over the attitude towards an E-commerce website, when the website itself is directly associated with intrinsic characteristics of the product or service. In Facebook, the commercial information published by the users about a certain product or service is not connected to the Facebook social network and to its characteristics,

which can probably explain why ease of use is not a major predictor of attitude, behavior intention and the behavior itself.

Self-expressiveness, the third factor, was predicted to affect perceived usefulness, the attitude toward the social network, the information sharing intention and the reading activity. In addition, it was predicted to have a correlation with perceived ease-of-use, as discussed already, and with the attitude towards the social network commercial information, as suggested by the modification command of AMOS 19. As shown in figure 3.1, self-expressiveness is significantly influencing perceived usefulness, the attitude toward the social network and the reading activity, but has no significance influence on the information sharing intention. In addition there is a strong significant bi-directional correlation with perceived ease-of-use and with the attitude towards the social network commercial information.

The effect of self-expressiveness in technology-mediated communication was tested in many recent researches, and was found to be a significant independent construct that is influencing technology usage (Bozionelos, 2001). The effect of self-expressiveness on the perceived usefulness was also supported in many researches (Pedersen and Nysveen, 2003; Pedersen, Nysveen and Thorbjørnsen, 2003).

The effect of self-expressiveness on the attitude toward the action, on the other end, had contradicting results. In some cases this direct effect was found to be insignificant (Pedersen and Nysveen, 2003) but in other cases it was found to be significant (Pedersen, Nysveen and Thorbjørnsen, 2003). The strong significant effect in this research leads us to understand the importance of self-expressiveness in a social environment like Facebook, to the degree that the attitude towards the whole Facebook network is strongly influenced by it.

The direct significant effect of self-expressiveness on the activity itself is usually not tested, and in most cases the direct effect that is

tested is the intention to act. As indicated before, in the model tested in this research the intention to the passive action of information reading was eliminated, as it is almost an automatic action when getting into the network, and there is no intention needed there. As a result, the direct significant effect of self-expressiveness on the reading behavior is not surprising, as it can be treated as an intention to act, in more active actions, effect that was found in many researches before (Pedersen and Nysveen, 2003; Pedersen, Nysveen and Thorbjørnsen, 2003).

The non-significant influence of self-expressiveness on the commercial information sharing intention can be explained by the fact that sharing of commercial information is something Facebook users are willing to do in "return" for some benefits that will be discussed later. The actual self-expressiveness might influence the willingness to share private information, but is not enough for sharing commercial information with others.

The strong significant correlation of self-expressiveness and perceived ease of use was explained earlier already.

The strong significant bi-directional correlation of self-expressiveness and the attitude towards the social network commercial information is somehow surprising. Still, it might be explained by the fact that people that feel the social network is a positive place for sharing information and express their selves (high self-expressiveness levels) are positive regarding sharing all types of information, including commercial information.

As one can see, self-expressiveness is one of the major significant effecting factors in this model. This is not a surprise as Facebook and the other social networks become an infrastructure for people to express their selves, and this is one of the main benefits the network provides (Livingstone, 2008). This is specifically important for the users as Facebook is becoming a replacement platform for the friendship infrastructure for many people (Kraut et al., 1998). The second preliminary research looked into the characteristics of the

Facebook users and specifically into the value they users get from Facebook as a social infrastructure.

Attitude towards the social network, the forth variable in this research, was predicted to be affected by the perceived ease-of-use, perceived usefulness and self-expressiveness and affect the information sharing intention and the reading activity and the sharing of commercial information.

As already discussed both the perceived ease-of-use and self-expressiveness were significantly affecting attitude towards the social network and perceived usefulness was close to have significant effect, as well. Self-expressiveness had the highest effect out of these three factors (0.256).

On the other end, as shown in figure 3.1, all three variables that were predicted to be affected by the attitude towards the social network were found to be insignificant, although the effect on the information sharing intention was close to be significant (p=0.058).

In the majority of the literature that tested the TAM model, the activity variables were not included, and the farthest the models go was the intention to act (for instance: Pedersen and Nysveen, 2003), the reason for that it probably the challenge in measuring actual activity in many areas. Even in this research the activity variables were calculated based on the research participants' responses, and there was no actual data gathering from the social network itself. In the researches that did include actual usage in the model (Pedersen, Nysveen and Thorbjørnsen, 2003; Moon and Kim, 2001), the only predictor of the actual activity was the intention to act, as suggested by the theory of reasoned action (TRA) of Ajzen and Fishbein's (1980).

Although in this research there was an attempt to predict the actual activities directly from the attitude towards the network, based on the literature it is not a surprise that the two activities variables,

reading activity and the sharing of commercial information, were not significantly affected by the attitude towards the social network.

As already stated, attitude towards the network was insignificant also in predicting information sharing intention, although it was not far from being significant. Similar results appear in other researchers, where the attitude-intention to act relationships is not significant (Pedersen, Nysveen and Thorbjørnsen, 2003) or where the attitude variable is omitted all together, and the three preliminary factors (Perceived ease-of-use, perceived usefulness and self-expressiveness) are directly connected to the intention to act (Chen, 2011). In addition to that, it is very much possible that the positive attitude towards the social network is not enough for making people willing to share commercial information, as will be discussed later on, when looking at the significant effect of the attitude towards the commercial information in the social network on the willingness to share information.

Attitude towards the Social Network commercial Information, the fifth variable, was predicted to affect the information sharing intention, the reading activity and the sharing of commercial information. In addition, it was predicted to have a correlation with self-expressiveness, as suggested by the modification command of AMOS 19.

The strong significant bi-directional correlation of the attitude towards the social network commercial information and self-expressiveness was already discussed earlier.

As shown in figure 3.1, attitude towards the social network commercial information is significantly influencing the information sharing intention and the sharing of commercial information, but has no significant influence on the reading activity. Both significant effects on information sharing intention (0.411) and the sharing of commercial information (0.311) are relatively high, although, as expected, the attitude is a better predictor of the intention to share information, compared with the actual sharing.

The strong effects of the attitude towards the social network commercial information on both the sharing intention and sharing activity is in the heart of this research, and it shows that users that believe that the commercial information in the social network is valuable and have positive attitude towards it, will be much more willing to share commercial information with others, and will actually also share more commercial information with others.

The insignificant effect of attitude towards the social network commercial information on the reading activity can be explained by the fact that the reading information variable was measure against all types of information in the social network (updates, statuses, photos and others) and this behavior has little to do with the attitude towards the commercial information. As already discussed the reading activity can be better predicted by the other factors that are more generic in nature, and that are related to the whole information within the social network.

Intention to share commercial information, the sixth variable, was predicted to be affected by the perceived usefulness, self-expressiveness, attitude towards the social network and attitude towards the social network commercial information. It was predicted to affect the sharing of commercial information.

As discussed already, the only variable the is significantly affecting the intention to share commercial information is the attitude towards the social network commercial information, although the effect of the attitude towards the social network was close to be significant, as well (p=0.058). Both perceived usefulness and self-expressiveness had non-significant effects on the intention to share commercial information.

As shown in figure 3.1, the effect of the intention to share commercial information on the sharing of commercial information was found to be significant. The strong effect (0.411) of the intention to share on the actual sharing was found in other researches that inserted the activity into the model (Pedersen,

Nysveen and Thorbjørnsen, 2003; Moon and Kim, 2001). As already discussed, in this research the actual sharing was measured by the participants' reports, which increase the chances for finding a correlation between the two variables.

Sharing of commercial information, the seventh variable, was predicted to be affected by the attitude towards the social network, the attitude towards the social network commercial information and the intention to share commercial information. As already discussed, both the attitude towards the social network commercial information and the intention to share commercial information are significantly affecting the sharing of commercial information. From the other end, the attitude towards the social network effect on the sharing of commercial information was found to be non-significant.

As mentioned before, this is the key of the model that shows that the main thing that is important for driving Facebook users to share commercial information is that they will have positive attitude on the commercial information within Facebook, and as a result will be willing to share this information.

Raban (2011) found out that customer satisfaction is the result of social interaction, in information-intensive services, but it is also a key driver for the continuance of social interaction. This cyclic relationships suggest that it might be that it's not only that high attitude towards the social network information that predict information sharing, but it's also the information sharing the might later on improve the attitude towards the social network information.

Reading of information, the eight variable, was predicted to be affected by the perceived usefulness, self-expressiveness, attitude towards the social network and attitude towards the social network commercial information.

As already discussed, perceived usefulness and self-expressiveness were significantly affecting the reading of information, while the attitude towards the social network and the attitude towards the social network commercial information effect was found to be non-significant. As mentioned already, these effects can be explained by the passive characteristic of the information reading in Facebook, and the automatism of this action. As a result, attitudes are not important, and as mentioned already behavior intention is also no important, and was omitted from the model. The things that are important are the usefulness of the social network and the self-expression one can feel within the network. Without these, people would not use the social network that often.

In addition to the 17 hypotheses supported the main model in this research, there were additional 6 hypotheses that were built around Hofstede's cultural dimensions and the variables of the model.

As discussed in chapter 3.5, hypothesis H1 was rejected as there was a significant positive correlation between Hofstede's power distance index (PDI) and the number of friends in the social network. This can be explained by the loose friendships in Facebook. The large number of friends each Facebook user has leads us to the conclusion that was also verified in the literature, that the Facebook "friends" are far less attached to each other that what we normally called friends, and the it can better be described as loose relationships (Lewis and West, 2009). As a result, it might make sense that in cultures were there are major differences between people with different power-levels, there are still many people that are have equal power, and can be connected in the network.

In addition, it is important to mention, that as table 3.6 indicate, the average power distance dimension measured in this research was very far from the Hofstede's published results, which leads the researcher to believe that there might be difficulties with the validity of the captured data of this dimension.

As discussed in chapter 3.5, hypothesis H2 was supported, as a significant negative correlation of -0.168 (p<0.05) between

Hofstede's masculine index (MAS) and the information sharing (SHARE) in the social network was found. As already discussed, these results are expected, since masculine cultures are usually more open to information exchange between people. It is important to mention, that as table 3.6 indicate, the average masculine dimension measured in this research was very close to the Hofstede's published results, which is also supporting the data collected in this research for this dimension.

As discussed in chapter 3.5, hypothesis H3 was supported, as a significant negative correlation of -0.192 (p<0.05) between Hofstede's masculine index (MAS) and the attitude towards the social network commercial information (ASNI) was found. As already discussed, these results are expected, since masculine cultures are also usually more open to receive information from other people. Again, it is important to mention the high validity of the masculine dimension data in this research.

As discussed in chapter 3.5, hypothesis H4 was not supported, as there was no significant correlation (p<.05) that was found between Hofstede's uncertainty avoidance index (UAI) and information reading (READ). This can be explained by the type of information that is published in Facebook, and is not information that has more social context than anything else. Social information of that sort might have minimal, if any, value to the reduction of uncertainty.

In addition, it is important to mention, that as table 3.6 indicate, the average uncertainty avoidance dimension measured in this research was very far from the Hofstede's published results, which leads the researcher to believe that there might be difficulties with the validity of the captured data of this dimension.

As discussed in chapter 3.5, hypothesis H5 was not supported, as a significant negative correlation of -0.190 (p<0.05) between Hofstede's uncertainty avoidance index (UAI) and the attitude towards the social network commercial information (ASNI) was found. This can be explained by the exposure sharing information

on the social network might have to the social network user. Cultures that have high uncertainty avoidance might be unwilling to share information with other people, as it might be risky and exposed.

In addition, it is important to mention again the validity problem of the measure data for the uncertainty avoidance dimension in this research.

As discussed in chapter 3.5, hypothesis H6 was supported, as a significant negative correlation of -0.180 (p<0.05) between Hofstede's individualism index (IDV) and the perceived usefulness (PU) of the social network was found. As already discussed, these results are expected, since individual cultures were expected to value the social network less than collective cultures. It is important to mention, that as table 3.6 indicate, the average individualism dimension measured in this research was very close to the Hofstede's published results, which is also supporting the data collected in this research for this dimension.

In general, Gaspay, Dardan and Legorreta (2008) looked into many IT-related researches that involved the Hofstede's cultural dimensions. They found that in some cases the cultural prediction was found to be significant in the researches, but in other cases it was rejected. For instance, the researchers suggest that even the TAM model is not applicable all over the globe, and specified Japan as a place where it is not applicable.

In addition to the 23 hypotheses, there are some other interesting findings in this research.

First of all, 92.3% of the participants claimed that Facebook is their preferred network and answered the rest of the questionnaire based on this information. Since Facebook's market share is 64.5% if we take YouTube into account, but if we only take social networks in the context of this research, Facebook has something between 85%-90% market share, and the next social network, is Twitter with

around 2% market share (Marketing charts market share, 2011). Although it might be more accurate to say that this research is very much focused on Facebook, it looks like Facebook today can represent the whole social network market.

Looking at the Facebook usage habits of the users, it looks like there are high significant correlations (p<0.01) between the usage frequency and the time spent in the social network (0.725), as well as between the activity level of the users and the number of their friends (0.475). Still there are different profiles of users that can be identifies and approached. In the activity habits, there are users among the active users that use the social network few times a day but spend only few minutes every time, and there are the active users that access it few times a day but spend a lot of time each time. On the friendship habits, there are users that in the different average friends' group sizes access the network very seldom and actually use it to get updates once in a while, and there are users with the same group sizes that have very active friends group, use the network very often, and spend a lot of time in it.

Identifying the characteristics of each of these groups can provide important information for marketers that would like to use the social network wisely.

Looking at the drivers that can influence commercial information reading and sharing, as indicated in table 3.1, there are different reasons that are driving Facebook users to read and share commercial information, but the relevance of the information is the most influencing factor for reading information, and product satisfaction if the most influencing factor for sharing information. Rewards were the least influencing factor in both categories.

Still, as indicated in table 3.2, among the rewards, money, gifts and attractive deals were the most influencing rewards. The forth preliminary research looked into the category of attractive deals and found out that restaurants and bars are the vertical markets that attractive deals can be the most beneficial in.

As indicated in table 3.3, restaurants were also rated very high on willingness list of the social network users to share commercial information. Films and books were also graded high on this list.

In general 82% of the social network users perceive the information they get in the social network as either equal or better than the information they get from people they trust in the real world. This can show the strength of word of mouth in the online social networks, and the trust levels of the social network participants.

The first preliminary research showed the strength of this word of mouth and the tremendous virality of message in the social network when transferred via word of mouth.

Regarding direct contact with vendors within the social network, as indicated in table 3.4, users see the direct contact with the vendor and the possibility to get answers to their questions, as the best value of this contact.

Looking at traditional push marketing strategies, such as advertisement, as indicated in table 3.5, the social network users are not big fans of these approaches and the majority of them either ignores advertisement, don't pay attention to it or think it's boring (3.19). Still they see little damage in advertisement to their willingness to use the social network.

## <u>Chapter 5 – Conclusion and implications</u>

## 5.1 Operational conclusions

The unique contribution of this study is in the usage of the technology acceptance model (TAM) and the theory of reasoned action (TRA) in an analysis of the decision process of social network users regarding

commercial word of mouth spread. As already stated, the main conclusions out of the analysis of the research model are:

- Perceived ease of use of the social network is an important factor that affects the attitude towards the social network, and is also highly correlated with the feeling of selfexpressiveness in the social network. Social network websites and companies that create their appearance in the social network should maximize the ease of use of their users.
- 2) Feeling of self-expressiveness in the social network users is one the most important affecting factors that Influence the perceived usefulness and the attitude towards the social network, as well as the activity of information reading in the social network. It is also highly correlated to the perceived ease-of-use and to the attitude towards the social network commercial information. Enabling and enhancing the options for self-expressiveness is a key then in increasing users' satisfaction and activity levels.
- 3) Perceived usefulness of the social network is another factor that is influenced by the feelings of self-expressiveness and is influencing the activity of information reading in the social network. As already stated, the effect of perceived usefulness on the attitude towards the social network was close to be significant, as well. Making the social network useful in the users' perception is important, as well, for increasing their social network usage. It is important to note that factors for usefulness should be adapted according to the users' needs.
- 4) The attitude towards the social network is influenced both by the perceived ease-of-use of the network and the self-expressiveness of its users. As already mentioned the effect of perceived usefulness on the attitude and the attitude's effect on the intention to share commercial information were close to be significant. Although the general attitude towards the social network was expected to be a key factor in this research's model, according to the findings, the other

- variables play a more significant role in driving word of mouth in the social network.
- Information is highly correlated with the self-expressiveness of the social network's users, and is affecting both the intention to share and the actual sharing of commercial information. This attitude was found to be much more meaningful in promoting commercial word of mouth compared to the attitude towards the social network in general. As a result, it is recommended to track this attitude both in the general social network perspective and in the specific vendor/brand's perspective.
- 6) The intention of the social network users to share commercial information with others is affected by the attitude towards the social network commercial Information and is affecting the actual sharing of commercial information. As already stated, the effect of the attitude towards the social network in general on the intention to share information was close to being significant. With the high effect of the intention to share on the actual sharing in this model, the intention is a key goal companies should take care of.
- 7) The activity of information reading is affected by the self-expressiveness of the social network users and perceived usefulness of the network. As already stated, since information reading in the social network is an almost automatic activity once getting into the network, there was no intention stage measured in this research. Encouraging usage of the social network and encouraging information reading is a key mission in order to increase the effect of the commercial information that is shared. Without people that read the commercial information, there is obviously no value for the companies out of the information sharing itself. Thus, enhancing information reading is also a key goal for vendors that would like to enhance commercial word of mouth transfer.

8) The activity of sharing of commercial information is affected by the attitude towards the social network commercial information and by the intention to share commercial information. This activity is the heart of this research, and as expected it is affected by the intention to share information and by the value users see in the commercial information in the social network. The better the word of mouth information is, the more people will want to take a part in it, both passively and actively.

In addition to the direct conclusions of the model, there were few conclusions that were based on the cultural dimensions analysis of the model variables (conclusions in cultural dimension cannot be generalized due to small subsamples):

- Commercial information sharing in the social network was found to be higher in cultures that are low in their Hofstede's masculine index (feminine cultures) such as Sweden, Norway and the Netherlands (Hofstede website, 2011).
- 2) The attitude towards the commercial information published within the social network was also found to be higher in cultures that are low in their Hofstede's masculine index (feminine cultures) and lower in cultures that are high in their Hofstede's masculine index (masculine cultures) such as Slovakia, Japan and Hungary (Hofstede website, 2011).
- 3) The perceived usefulness of the social network was found to be higher in cultures that are low in their Hofstede's individualism index (collective cultures) such as Ecuador, Panama and Venezuela (Hofstede website, 2011).

Additional conclusions that can be drawn from this research are:

1) As expected, Facebook is by far (market share that is higher than 90%) the most popular social network today.

- 2) There are high correlations between the usage frequency, the time spent in the social network and the number of friends in the social network. There are different profiles of users, given these three parameters that can be used for segmentation purposes.
- 3) Relevance of the commercial information was found to be the most influencing factor in driving reading of commercial information. Product satisfaction was found to be the most influencing factor for sharing commercial information. Rewards were found to be the least influencing factor in both categories.
- 4) Among the rewards people want in return for sharing commercial information, money, gifts and attractive deals were the most influencing rewards.
- 5) Restaurants, films and books were rated very high on the list of products and services that users will be willing to share commercial information about.
- 6) The vast majority of the social network users perceive the information they get in the social network as either equal or better than the information they get from people they trust in the real world.
- 7) Users see the direct contact with vendors and the possibility to get answers to their questions from the vendor, as the best value out of this contact.
- 8) Social network users are not big fans of the traditional push marketing strategies, such as advertisement. The majority of them either ignores advertisement, don't pay attention to it or think it's boring, but it doesn't hurt their willingness to use the social network.

The main conclusions drawn as a part of the four preliminary researches that were done in this research are:

- The virality of word of mouth communication within the group of social network friends was demonstrated. 80 new members were added to a restaurant page virally within a month, and the network included four branches of seven members each, which is showing the healthiness of the group, that is not based on a single track of friends.
- 2) The value of the social network interaction is optimal for people with medium levels of social connections in the "real" world, since this group probably has the time, motivation and energy required for massive social networking activities.
- 3) Women use social networking more than men and they appreciate much more the opportunity for social exposure and communication (quality) rather than the size of the network and its strength (quantity).
- 4) Facebook users perceive their friends group as a group and treat it as such. This feeling of entitativity is growing as their collective self-esteem of this group is higher. Young users feel this group feeling better than the older ones.
- 5) Restaurants and bars were found to be the vertical markets that attractive deals can be the most beneficial in. The offering entity reputation (the social network, in this case) that is offering the attractive deal has also a strong effect on it success.

## 5.2 Summary of conclusions

The central model of this research supported the technology acceptance model (TAM) and the theory of reasoned action (TRA) in the case of commercial information sharing through word of mouth. It shows that self-expressiveness, perceived ease of use and perceived usefulness are influencing social network users' attitudes towards the social network and towards the commercial information within the social network. Self-expressiveness seems to be the most influencing factor that affects the perceived usefulness, the attitude towards the

social network and the information reading activity, and is highly correlated with both the perceived ease of use and the attitude towards the commercial information shared in the social network. Perceived ease of use is affecting the attitude towards the social network and is highly correlated with the self-expressiveness. Perceived usefulness is only affecting the information reading activity but it was close to be significant also in affecting the attitude towards the social network.

The attitude towards the social network was close to be significant in affecting the commercial information sharing intention. The attitude towards the shared commercial information affects both the commercial information sharing intention and the actual sharing activity. It is also correlated with the self-expressiveness factor. The commercial information sharing intention is affecting the actual sharing activity.

Out of the two measured activities, the information reading activity is affected by self-expressiveness and the perceived usefulness, and the commercial information sharing is affected by the attitude towards the shared commercial information and by the intention to share commercial information

On the effect of cultural dimensions on the model variables, both attitude towards the shared commercial information and the actual commercial information sharing were found to be higher in feminine cultures. The perceived usefulness of the social network was found to be higher in collective cultures.

In addition to the model, Facebook was found to be by far the most popular social network today. There were high correlations that were found between the usage frequency, the time spent in the social network and the number of friends in the social network.

The relevance of the commercial information was found to be the most influencing factor in driving reading of commercial information. Product satisfaction was found to be the most influencing factor for

sharing commercial information. Rewards were found to be the least influencing factor in both categories, but still among the different rewards people want in return for sharing commercial information, money, gifts and attractive deals were the most influencing rewards. Restaurants, films and books were the products/services users are the most willing to share commercial information about. In the preliminary research it was also found that restaurants and bars were found to be the vertical markets that attractive deals can be the most beneficial in.

Most of the social network users perceive the information they get in the social network as equal or as better than the information they get from people they trust in the real world.

Users see the direct contact with vendors and the possibility to get answers to their questions from the vendor, as the best value out of this contact. Still, traditional push marketing strategies, such as advertisement, are mainly ignored.

In the preliminary researches done prior to this research the virality of word of mouth communication within the group of social network friends was demonstrated with 80 new members that were added to a restaurant page virally within a month. It was also found that the value of the social network interaction is optimal for people with medium levels of social connections in the outer world. It was also found that women use social networking more than men and they appreciate much more the quality of their network rather than its size.

The preliminary research also found that Facebook users perceive their friends group as a group and treat it as such, and the younger the users are the stronger this phenomenon is.

## <u>Chapter 6 – References</u>

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