

# Using laddering to understand the social media network Google+

Roediger Voss & Vera Schneider  
University of Applied Sciences Zurich

E-mail of the corresponding author: [roediger.voss@gmail.com](mailto:roediger.voss@gmail.com)

## Abstract

This study seeks to explore why Google+ is utilized by its members, by drawing conclusions to their underlying motives and values. The behavior on this growing and influential, albeit very recent platform has not been investigated throughout at this point of time yet. In this context an exploratory study using the means-end approach was applied to a group of identified heavy users, consisting of 17 male and 14 female respondents. Consequently 31 semi-standardized qualitative one-on-one interviews were conducted by using Google+'s text-based online chat. Some of the main findings of this study have been that members of Google+ are utilizing the network first and foremost for social exchange, with the objective of having fun and enjoying oneself, for example by sharing pictures with friends. The most significant attributes are "chat", "pictures", "mobile application" as well as "circles" and are very closely linked to values such as "fun", "well being" or "hedonism". This approach could make a valuable contribution to business research, as well as help corporations and individuals to improve their social media activities based on the results. The study was the first to successfully apply the laddering technique to the issue of the social media network Google+.

**Keywords:** social media, social networks, expectations, laddering, Google+

## 1.0 Introduction

Innovative data network presents corporations with unprecedented opportunities as well as challenges. Companies today can spread information about their products and services online with massive speed and utilize social media platforms for instance for their marketing, communication and human resource activities. Yet, with the internet being a comparatively recent development, at this point of time there is only a limited body of research available about the effective use of social media platforms in the corporate context. The objective of this study is to make a contribution in closing this gap and investigate about key success factors for social media network usage. The authors hope to find indicators giving deeper insights about the motivations and drivers of social network users, which could translate into guiding principles for the implementation of a social media strategy in the company environment. Due to the large number of social media networks available, the research will have to be limited to a particular one. For the frame of this study, the focus shall in particular be laid on Google+, as no business analysis has been undertaken yet concerning this recent platform. As Google+ is a social media network, which is constantly growing, it can be expected that its relevance for corporate social media strategy will only increase in the years to come.

## 2.0 Literature Review: The social media network Google+

Social media networking sites can be understood as "virtual places that cater to a specific population in which people of similar interest gather to communicate, share, and discuss ideas" (Raacke & Bonds-Raacke, 2008: 169). They might either be intended for work related purposes, such as LinkedIn, for the initiation of romantic relationships, for instance Friendster, or for sharing of general topics and contents of interest, for instance Facebook and others (Ellison, Steinfield & Lampe, 2007). There are an immense number of networking sites available worldwide, yet their specific popularity and usage customs depend highly on culture, age and language of the users. For instance, while Facebook and Twitter are major social networking sites in the US and Europe, they are blocked in entire mainland China, where however local providers, such as Weibo and Renren, are enjoying tremendous success. Also in other markets, like for example Japan, the number of Facebook users is rather small, but a lot of mostly young members are using domestic sites such as Mixi and GREE.

Google+ has been launched in 2011 by the Google Corporation, which is already a dominating global internet company for search and other digital services. As of fall 2012, Google+ had 400 million members, with around 100 million monthly active users, for instance around a tenth as large as Facebook (Schroeder, 2012). One of Google+'s main challenges was its comparatively late arrival on the market. For many users, who are already members of all or some of the above earlier mentioned networks it might be less and less attractive to join yet another service, as they are already occupied with engaging on the other available platforms. In addition, most of

their contacts may already been signed up with the competitors, such as Facebook, which makes a migration to a less populated website even less appealing.

Due to the fact, that the internet and consequently online corporate communication and marketing are comparatively new phenomena, the body of available business research both theoretically and empirically about effective company internet strategy, more specifically for online social networks, is quite limited. The thesis at hand aims to make a contribution to this lack of empirical research and shed light upon the question how and why an online social network is utilized by its members, drawing conclusions to their underlying motives and values. As the online network of choice for this research project Google+ (<https://plus.google.com>) has been selected because behavior on this growing and influential, albeit very recent platform, has not been investigated throughout at this point of time yet. Gaining a deeper understanding of the user behavior and motivations on Google+ might lead to informative insights for the planning, implementation and measurement of future corporate online strategy.

Even though Google+ obviously could become a major social network also for corporate application, at this point of time, there are only a very limited number of studies available, which investigate the user behavior and its implications for corporations. The study at hand aims to make a contribution to close this research gap and take a closer look at the specific objectives, motivations and underlying assumptions of users of Google+, hoping to gain further insights into the question why and how members of the network are using it. As theoretical basis, the means-end chain approach has been selected, which was applied to in-depth interviews with heavy users of Google+. In the following, first the theoretical framework and background of the means end chain approach shall be outlined shortly.

### **3.0 Means end chain approach: a theoretical framework**

The means-end chain approach is a method applied to interviews in order to gain deeper insights about the objectives and motivations of consumers or users of products. The underlying concept of the means-end approach is that consumers have a hierarchical structure of their product knowledge, meaning that specific product attributes lead to a specific value (Gutman, 1997). According to Reynolds and Gutman (1988) the thereby evolving means-end model based on three distinct layers:

- Attributes: Observations or elements of objects, such as product features
- Consequences: Usage components, which are evaluated according to subjective measurements, while however leaving the need satisfaction still not completely resolved
- Values: indirect or direct form of desires and wishes, which can drastically shape deciding making and behavior

“Thus, the more concrete features or characteristics of a product, the attributes (A), are connected to the more abstract ideas about psychological and social consequences of the attributes (C). These psychological consequences or benefits (derived from using the product) are in turn connected to the most abstract element of the three, the values” (Saaka, 2004: 3). For instance, a product with less fat than comparable food stuff could be attractive for the consumers because he or she believes that less fat (A) → less calories (A) → helps stay slim (C) → makes me look attractive (C) → self-esteem (V) (Reynolds & Gutman, 1988). The ladder of the connection can also consist of several layers of attributes or consequences.

#### *3.1 The laddering technique*

The consumer or buyer might himself not be aware of the connections of attributes, consequences and values he is more or less subconsciously associating with certain features and elements. In order to find out the ladders of associations between attributes, consequences and values, the laddering technique is using in-depth interviews to prompt the interviewees to think critically about their mental connections with personal values and goals (Pieters, Baumgartner & Allen, 1995). Therefore the first step for using the laddering technique is finding suitable respondents for the study. As interviewees are asked critically and in depth to reflect about their experiences with a product, they have to be knowledgeable enough about the specific features and functions of the respective brand of the study. In general, at least 20 respondents should be interviewed within a single subgroup, based upon the online laddering guidelines proposed by Gruber et al. (2009). As each respondent might have a different ladder of associations between A, C and V, consisting of several levels, a complex network of layers have to be synthesized to achieve some general trends and tendencies as analysis result.

The laddering analysis itself consists of three stages and is in line with the procedure suggested by Reynolds and

Gutman (1988): A) Elicitation of differences among brands, B) in-depth interviewing and C) data analysis. Usually, step A) of the process demands a distinction of the differences between several brands by the user. In the study at hand however, only one singular product (Google+) is the focus of the research, which is why a distinction of various brands can be omitted. Instead, users have been questioned in depth about their favorite features of choice when utilizing the Google+ platform. After having gathered a sufficient large number of attributes (around 8 – 15), the interviewer will then stop to add further attributes, in order to collect a critical number of responses for a meaningful analysis of the data.

For an in-depth interview in order to be used for a laddering/means-end approach model, there are no “right” or “wrong” answers, which the interviewer should also point out to the respondents (Reynolds & Gutman, 1988). Only if the interviewees feel at ease and believe that they can trust the research conductor, they will open up and honestly talk about their preferences and usage inclinations. At the same time, it is the task of the interviewer to lead and gently steer the interview in the right direction, revealing the ladders from attributes, to consequences over to personal values. In order to do so, Reynolds and Olsen (2001: 20) suggest that the question “why is this important to you?” is critical in to raise the level of dialogue from one level to the next, as it helps the participants to further reflect on their hidden intentions and feelings.

As potential problems, Reynolds and Gutman (1988) bring up the issue of interviewees being incapable of explaining their deeper lying intentions as well as the challenge of participants possibly not wanting to open up about their personal goals and intentions. The first problem might be particularly influential for purchasing decisions, which are made spontaneously, and therefore might be based on mostly subconscious triggers. The second issue of participants not being willing to discuss some of their underlying intentions could be decisively in connection to products or services with a strong link to intimate aspects of life, which respondents are hesitant or embarrassed to talk about, or ethical issues, concerning which respondents might want to display themselves in a better light than their actual actions or intentions would show.

The aggregation and analysis of the collected data however is a critical process, especially an objective definition of the different categories (Gengler, 1995; Voss, 2012). For this purpose, firstly all interview answers are collected, with the subsequent aim of grouping similar statements into similar groups by assigning a specific group code to each statement. According to Reynolds and Gutman (1988) this process allows the transformation of the qualitative laddering results into quantitative data. In a next step all various statements are aggregated in a so called implication matrix depending on the assigned code. This way the respective relations between the answers (attributes, consequences and values) of each interviewee are revealed by summing up the frequency one element leads to another one (Reynolds & Gutman, 1988). In a last step, the results of the implication matrix can be transformed into a so called Hierarchical Value Map (HVM). A HVM represents the actual result of the means-end chain approach and depicts the previous revealed links between the respective attributes, consequences and values in a tree diagram for all interviewees (Reynolds & Gutman, 1988). For a meaningful representation of the HVM it is important to choose a reasonable cut-off level, which corresponds to a minimum frequency a statement has to be mentioned by the interviewees, in order to allow a more meaningful analysis of the most influential connections and ladders (Gengler, Klenosky & Mulvey, 1995). However, the literature does not propose a general cut-off level and therefore it is a trade-off between a possible loss of information and lucidity..

### *3.2 Laddering technique interview example*

As outlined above, the means-end approach is used by conducting ladder technique interviews, which can be utilized in particular in order to find out emotional elements that buyers and consumers care about on a profound level, albeit sometimes unconsciously (Reynolds & Olsen, 2001; Voss, Szmigin & Gruber, 2007). During such an interview, the interviewer will keep on investigating about the “why” of the answer, thereby finding out step by step about the underlying motivations of the interview participants, which they themselves might not be aware of at the time (Reynolds & Gutman, 1988). An abstract of a laddering technique interview might be conducted as follows:

Question1: “When you think about Google+ what comes to your mind first or what do you like the most? for example functions you use quite often or enhancements you could think of for G+ “. Answer1: “major things I like about G+ are: pictures, organizing events and the news wall“ (Attribute: “Photos”). Question 2: “ok, so let’s start with the pics, what do you like about them?” Answer2: “... then I see some cool pics I can share on my wall too” (Consequence: “Sharing”). Question3: “What is important for you about sharing content?” Answer3: “it’s fun when people like my posts or the posts I have shared” (Value: “Fun”).

By discussing the underlying attributes, consequences and finally personal values with the users, it is possible to clearly establish a ladder of motivation, showing what kind of objectives their actions are fundamentally based upon. In this sense, the means end approach and the laddering technique serves as a valuable tool to investigate about the users' psychological motivation.

#### **4.0 Practical approach and research proceeding**

In total 74 people were randomly selected for the study and contacted via Google+, following the interview guide as shown in the appendix. Due to the fact that Google+ is an online social network, all interviews have been conducted online by using Google+'s text-based chat function. This is an obvious difference compared to the initial approach suggested by Reynolds and Gutman (1988). However, according to Hanna et al. (2005), Joinson (2001) and Voss, Gruber & Reppel (2010), online interviews are even advantageous because respondents feel safer due to the anonymity and therefore are more willing to disclose their inner feelings. Therefore, this study conducted semi-structured online one-on-one interviews in line with the procedure proposed by Gruber et al. (2008). Before starting the interview and as suggested by Gruber et al. (2009), all participants got a short explanation as well as additional information about the procedure, while ensuring that all answers are treated absolutely anonymously. Subsequently as starting point, all interviewees were asked which function of Google+ they like the most and what they would improve about Google+. The detailed procedure can be found in the appendix. Based on the respective answers, the questioning continued in order to reveal an extensive means-end structure, until the respondent was no more able to provide reasonable answers or reached the value level (Gruber, Szmigin & Voss, 2009)

In total, n=14 females as well as n=17 males have finally participated in the online interviews, while the main selection criteria has been the minimum usage of Google+ of at least 1 hour per day, which according to the Swiss Federal Office for Statistics defines a heavy user (Schweizer Bundesamt für Statistik 2013). Those users can be expected to have considerable knowledge about and experience with the Google+ platform and functionalities. The random sample included a wide age range, with focus on adults around 30. The oldest participant has been 56 years, the youngest one 18 years old. Therefore, it can be assumed that the study has age wise covered most of the working population and therefore satisfies the validity conditions defined by Riege (2009). As pointed out above, the survey included only heavy users of Google+. However, within the sample, there have been considerable differences in length of use, averaging around 8 hours per week, but reaching up to 21 hours as maximum. Moreover, a considerable difference in number of contacts on Google+ among the survey participants could be observed. While the minimum number of contacts among the participants has been 68 contacts, the maximum number of contacts was 4766. After 31 interviews, no new concepts were brought up, thereby reaching the theoretical saturation level and closing the survey. In total, 7 attributes, 13 consequences and 6 values have been identified. Specifically, Table 1 to 3 provide an explanatory overview of all findings.

The analysis of the qualitative data has been done based on a content analysis, as proposed by Reynolds and Gutman (1988). Additionally, in order to reveal the respective links between the attributes, consequences and values, the software MECAnalyst+ by Zanolé and Naspetti was used. A graphical representation of these relations in the form of a hierarchical value map is discussed in more detail in the following chapter.

#### **5.0 Findings and implications of HVM**

The data sets gathered through the laddering interviews can be interpreted from different angles, depending on the focus of the investigation. In order to identify the most essential findings, in the following the data shall be analyzed based on the strongest ladder relations as well as the values, consequences and attributes respectively according to their relevance for each gender and the interview group in total. Based on the strength of connections between all elements, a HVM chart can be drawn for the total group. Due to the large number of potential relationships, a cut off level of 4 has to be set, which allows focusing exclusively on the most pronounced connections. Therefore, each category only becomes relevant and is displayed in the charts after having been mentioned four times by the specific group. The "n" in the charts refers to the frequency participants mentioned the according attribute (grey), consequence (blue) or value (red). The connections between the elements show the strength of the relationship between two factors, for instance how often one kind of consequence has been linked to a specific value. The thicker the connection, the more often the according association has been made. In such a way, the for the participants most important or most often mentioned

factors are clearly displayed and allow conclusions about the relevance of attributes, consequences and values for the respondents. The HVM has been drawn for the complete sample.

The laddering map after cut-off for all participants depicts the relations between 7 attributes, 13 consequences and 6 values. At first glance, Figure 1 clearly suggests the importance of chat, pictures, circles and mobile application by comparing the frequency respondents mentioned these functionalities. The first three attributes are an obvious indication that users of Google+ primarily like the social exchange between members, for example by using the chat function or by posting pictures. The nature of these attributes mentioned by the interview group are not surprising, as they are in line with the generally assumed usage of social media networks by industry experts like Dressler (2010).

Table 1: Overview of attributes

Attributes		
Item	Description	Example
Chat	Electronic communication between people in real time, e.g. through online social networks like Google+	"I probably only use chats, hangouts and of course my wall"
Circles	Google+ tool that allows to put contacts into separated and user-created categories called "circles". This allows full control for visibility of posted content	"In my circles I have divided my friends into several groups, depending on from where I know them"
Giving a Plus	Function of adding a "plus" at ones post or picture, by clicking the +1 Button, in order to show appreciation	"if I give a + it means that I either like the stuff or just like the person"
Hangout	Video chat of Google+ with up to 9 person	"I have to think about that one, but I definitely use hangouts, cause they are fun to use"
Mobile Application	Accessing the Google+ network via the mobile app for Android or iPhone	"but mostly I use my mobile to log in and therefore I am online just for a short period, but in return many times over the day"
Pictures	Pictures in form of posts on Google+	"somekind it gives me a good feeling and it makes fun post some more pics"
Profile	Editable view of personal information like profile picture, credo, hobbies, education, work, relationship etc.	"absolutely, for me it is important that I have a cool profile and I mean today it is normal that everybody has his profile on such networks"

Table 2: Overview of consequences

Consequences		
Item	Description	Example
Being Informed	Receiving information about social relationship related themes like birthdays, relationship status and latest news	"to be informed about the things going on in my friends life for example if my friends getting married I would like to know or if something special happened I would like to tell them too"
Browsing	Looking around by watching profiles, posts and pictures	"mostly I brows around and look at profiles from other guys"
Business Opportunities	To get the chance of a job opportunity for example or to improve the possibilities for a business transaction	"actually yes, because if I have a lot of contacts in my network, especially e.g. from work, it might help me in the business world, for example getting to know people of another department"
Feedback	Getting feedback from contacts for posts by receiving a plus or comments	"this way the community can give me simply a feedback what they think about it and often this is very useful, because another point of view is always good"
Giving Pleasure	Distributing joy by posting funny stuff	"I rejoice in people that think my posts are funny"
Inspiration	Getting inspired for work and personal life by having access to all kinds of different information i.e photographs, informal essays	"I like to see vacation pics from friends to gain impressions for my own trips"
Meet new People	Meeting up with new contacts through Google+ by chatting, adding interesting contacts, video chatting or joining circles	"Yes I do because I like to get to know new people... it is always exciting talking with different kind of persons from all over the world"
Personalization	To edit and individualize a profile by adding personal information, but also to post personalized content which creates an personalized online appearance	"that's exactly why I want to differentiate my profile from others, because it should be as unique as I am"
Receiving a Plus	Receiving a plus from someone on a post at ones personal wall to get appreciation and attention	"someone writes on my wall and tells me or gives me a plus its like feeling flattered after getting a compliment"
Sharing	Sharing content like pictures, informal stuff or funny stuff	"then I see some cool pics I can share on my wall too"
Stay in Contact with Friends	Having frequent contact with peers	"actually I am quite happy with the functions, but I opened a G+ account only to stay in contact with my friends of my exchange semester I did in California"
Time Saving	To be able to save time for other activities in life by using Google+ functions like chat	"it is cheaper than SMS and eg when I see that one of my friends has birthday I can directly wish him a happy bday, so it saves me a lot of time and I don't forget to compliment"
Usability	Having a user-friendly environment	"totally, I really enjoy this because it makes much more fun if things are easy to use"

Table 3: Overview of values

Values		
Item	Description	Example
Affiliation	To be related to a social group like peer groups, friends or family	"...it's kind of a good feeling to be a part of them"
Fun	Having fun	"that depends on the situation but it's fun to get in touch with peers from my college"
Hedonism	A feeling of pure pleasure and joy in life	"like a warm and nice feeling... just feeling very happy"
Individual Fulfillment	The opportunity to have the freedom to do the things in life which really make an individual happy and are important, in contrast to the goals of society	"my aim is to go into business for myself and of course it won't be easy, but sometimes you just have to follow your dreams"
Security	Feeling of control and assurance	"it is very important for me... this way I feel safe"
Well Being	Feeling good and carefree	"it gives me a good feeling & i have fun going out with my friends"

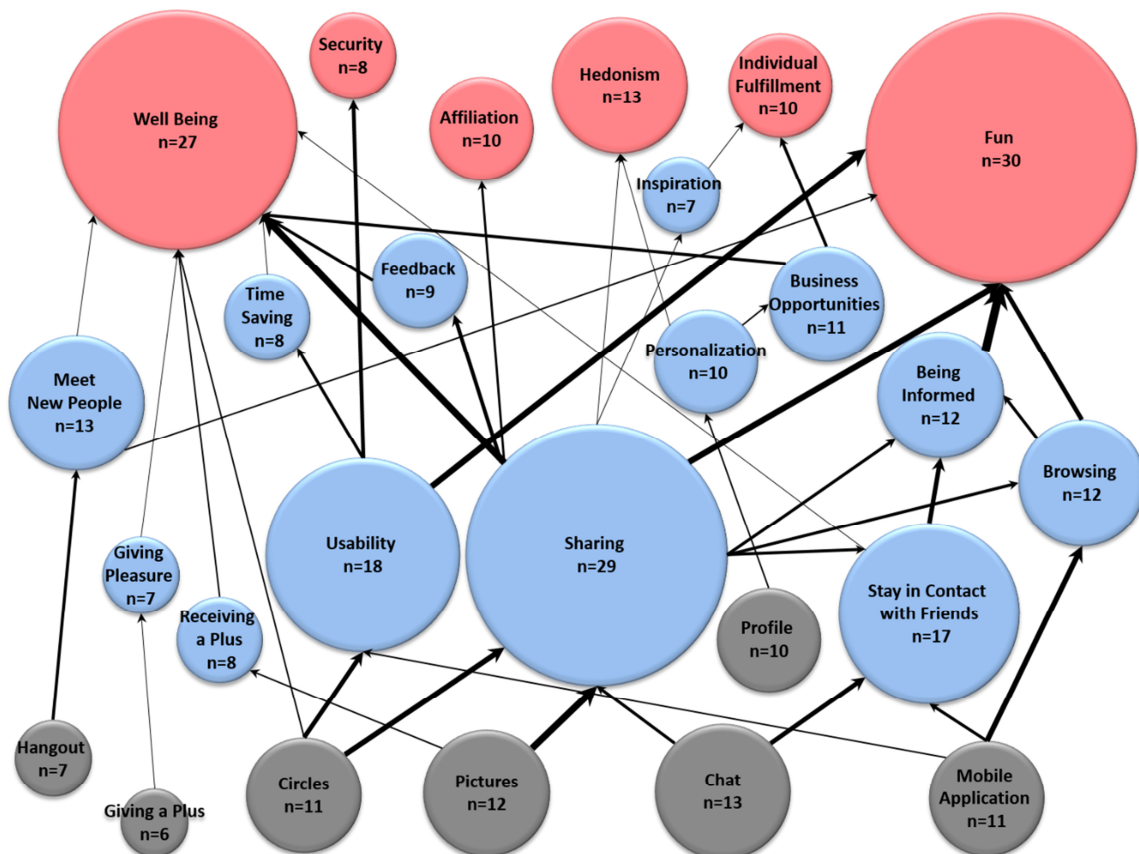


Figure 1: HVM all, cut off level 4

Another advantage of Google+ seems to be the possibility to structure contacts in specific circles that allows a clearly arranged contact list. Additionally, today's users appreciate to have access to the network from

everywhere and anytime through the mobile application, allowing a flexible and versatile use of Google+, supporting the findings of Patterson (2012).

Combining these results with the width of the line in the ladder map allows a first interpretation of the strength of the relation between attributes and consequences. In this context, Figure 1 reveals that sharing, usability, stay in contact with friends, meet new people, browsing and being informed are the most important consequences among participants and that they are strongly associated with the before mentioned attributes. Due to the high importance of social exchange on Google+, the far most essential consequence for all respondents is sharing, which for example includes sharing pictures with friends or posting information in the different circles. This is also in line with the considerably high rating of staying in contact with friends, which shows that people use online networks to cultivate their friendships, supporting the findings of Jung and Kang (2010) as well as Dressler (2010). Furthermore, the significant trend of sharing information on Google+ is very closely linked to another important consequence often neglected in other studies, namely browsing. That means users like to look through other profiles or pictures, but mostly not because they search specific information, but rather just to spy. Patterson summarizes this phenomenon even as “cyber stalking” (2012: 531). In this context, it is not surprising that being informed is also one of the most mentioned consequences among the interviewees. However, two aspects are remarkable and are so far not covered in the prevailing literature. On the one hand side, usability has ranked as the second most influential consequence, which could translate into the fact that Google+ is perceived as easier to use than other comparable social media networks. Secondly, an insightful finding is furthermore that the aspect of sharing is not only of great relevance for personal connections, but also for professional ones, as indicated by the consequence business opportunities. This means that users are also willing to share private information, like for example their educational background, in the hope of any business related advantages, for example a job offer. This is informative insofar, as the large majority of the other connections are pointing mostly towards an entertainment-focused usage.

The HVM further provides an overview about the different values of the respondents. In this context, the most connected element constituted fun, followed by well-being and hedonism. This suggests that in general, the aspect of entertainment and enjoyment are the major underlying motivations for the usage of Google+, affirming the findings of Voss and Schär (2012) for Facebook. However, security is a value that so far in previous research studies was not significant, but for Google+ users it seems an important aspect. A reason for this result can be found by analyzing the relations in Figure 1, specifically circles → usability → security. It indicates that due to the possibility to group all contacts in different circles, users are able to adjust the privacy settings of their profile for each circle and therefore can easily control what other users can see. Moreover, since Google+ is also used for business opportunities, users feel secure about what personal information is available to others.

Based upon this analysis one of the most pronounced ladders is that of pictures → sharing → well-being, pictures → sharing → fun as well as chat → stay in contact with friends → being informed → fun, highlighting again the primary focus of social exchange and enjoyment. Apart of the above, an insightful finding is the very pronounced connection between mobile application → browsing → being informed → fun. An increasing number of users are accessing Google+ not from standard home computers or laptops, but rather mobile devices. There could exist a great number of potential reasons for this behavior, ranging from pure practicability, higher productivity on the road, over to better use in the business context until finally entertainment aspects. The finding of the strong connection between mobile application and fun indicates that Google+ is accessed from portable devices most of all due to it being entertaining for the participants and allowing diversion on the go. An additional motivation for the high significance of sharing, but less pronounced in comparison to fun or well-being, are the values of hedonism and individual fulfillment. This allows the conclusion that the act of sharing is perceived as enjoyable and gives the users satisfaction.

## 6.0 Conclusion and future outlook

As the above theoretical and empirical investigations have illustrated, the internet and social media networks in particular, are opening up new opportunities as well as challenges to adjust their strategies for corporations. It has become evident that there exists no standard approach to successfully communicate with users on online platforms, but that rather user preferences might vary greatly depending on the target group and therefore, corporate approaches will have to be adjusted accordingly in order to achieve the best effects and outcomes (Kietzmann et al., 2011). For the limited frame of this study, some of the main findings have been that members of Google+ are utilizing the network first and foremost for social exchange, with the objective of having fun and enjoying oneself.



Considering that the Google+ network is constantly growing, it can be assumed that its relevance for corporations and their social media strategy in the years to come will only be increasing. Certainly, Google+ will only be one of the major social media network sites available on the internet, yet due to its linkage with other popular products, especially the Google search engine, one may expect that it will develop into a major player on the market. In order for corporations to integrate Google+ successfully in their online strategy, both business research and practitioners are demanded to investigate the possibilities of this internet platform and experiment with methods that might resonate with the target audiences.

Unfortunately, the frame of the thesis at hand and its means-end approach interview group have been quite limited in number and scope. Therefore, the research results should only be understood as a first indicator about potential online behavior of Google+ members, rather than a representative insight. It would be desirable to expand this research further in the future, adding a larger number of participants from various geographic and socio-cultural backgrounds in order to gain a deeper understanding about the objectives and drivers of users. Furthermore, usage behavior might differ depending on the investigated network. Therefore, undertaking further studies and research about other social media networks, both major ones such as Facebook, YouTube, Twitter Xing, LinkedIn and less dominating niche platforms, could help gain further insights for specific online strategy applications. Managers and business practitioners in corporations should start educating themselves about the various expectations of the social media users. This study offers a first insight into the expectations of the Google+ heavy users.

## References

- Dressler, M. (2010). *Krankenkassenmarketing in Online-Communities: Eine Feasibility-Studie am Beispiel von studiVZ*. Wiesbaden: Gabler Verlag.
- Ellison, N. B.; Steinfield, C. and Lampe, C. (2007). The Benefits of Facebook Friends: Social Capital and College Students' use of Online Social Network Sites. *Journal of Computer-Mediated Communication*, 12(4): 1143–1168.
- Gengler, C. E.; Klenosky, D. B. & Mulvey, M. S. (1995). Improving the graphic representation of means-end results. *International Journal of Research in Marketing*, 12(3): 245-256.
- Gruber, T.; Szmigin, I.; Reppel, A.E. & Voss, R. (2008). Designing and conducting online interviews to investigate interesting consumer phenomena. *Qualitative Market Research: An International Journal*, 11(3): 256-274.
- Gruber, T.; Szmigin, I. & Voss, R. (2009). Handling customer complaints effectively: A comparison of the value maps of female and male complainants. In: *Managing Service Quality*, 19(6): 636-656.
- Gruber, T.; Voss, R.; Balderjahn, I. & Reppel, A. (2009). Online-Laddering. In: Holz Müller, H.H.; Buber, R. (Ed.): *Qualitative Marktforschung – Theorie, Methode, Analyse*. Wiesbaden: Gabler Verlag, 569-581.
- Gutman, J. (1997). Means–end chains as goal hierarchies. *Journal of Psychology & Marketing*, 14(6): 545-560.
- Hanna, R.C.; Weinberg, B.; Rajiv, P.D & Berger, P.D. (2005). Do Internet-Based Surveys Increase Personal Self-Disclosure? *Database Marketing & Customer Strategy Management*, 12(4): 342-56.
- Joinson, A. (2001). Self-disclosure in computer-mediated communication: The role of self-awareness and visual anonymity. *European Journal of Social Psychology*, 31(2): 177-192.
- Jung, Y. & Kang, H. (2010). User goals in social virtual worlds: A means-end chain approach. *Computers in Human Behavior*, 26(2): 218-225.
- Kietzmann, J.H.; Hermkens, K.; McCarthy, I. P. & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, 54(3): 241-251.
- Patterson, A. (2012). Social-networkers of the world, unite and take over: A meta introspective perspective on the Facebook brand. *Journal of Business Research*, 65(1): 527-534.
- Pieters, R.; Baumgartner, H. & Allen, D. (1995). A means-end chain approach to consumer goal structures. *International Journal of Research in Marketing*, 12(3): 227-244.
- Raacke, J. & Bonds-Raacke, J. (2008). MySpace and Facebook: Applying the Uses and Gratifications Theory to Exploring Friend-Networking Sites. *Cyberpsychology & Behavior*, 11(2): 169-174.
- Reynolds, T.J. & Gutman, J. (1988). Laddering Theory, Method, Analysis, and Interpretation. *Journal of*

Advertising Research, 28(3): 11-31.

Reynolds, T.J. & Olsen J.C. (2001). Understanding Consumer Decision PR: A Means End Approach to Marketing and Advertising Strategy, Lawrence Erlbaum Assoc Inc, New Jersey.

Riege, A. (2009). Gültigkeit und Zuverlässigkeit von Fallstudien. In: Holzmüller, H.H.; Buber, R. (Ed.): Qualitative Marktforschung – Theorie, Methode, Analyse. Wiesbaden: Gabler Verlag, 285-296.

Saaka, A.; Sidon, C. & Blake, B.F. (2004). Laddering: A How to do it manual – with a note of caution. Research Reports in Consumer Behavior, Methodology Series, Cleveland State University, Cleveland.

Schroeder, S. (2012). Google+ has 400 million members. Mashable Social Media, Sept. 18th 2012, <http://mashable.com/2012/09/18/google-has-400-million-members/>, checked on Nov. 8th 2012.

Schweizer Bundesamt für Statistik (2013). Haushalte und Bevölkerung – Internet-nutzung. Weiterführende Informationen: Definitionen.

[http://www.bfs.admin.ch/bfs/portal/de/index/themen/16/04/key/approche\\_globale.informations.30106.301.html](http://www.bfs.admin.ch/bfs/portal/de/index/themen/16/04/key/approche_globale.informations.30106.301.html), checked on Dec. 21st 2012.

Voss, R. (2012). Qualitative empirische Befunde zu Erwartungen von Studierenden an ihre Dozenten. Bildungsforschung, 9(1): 163-183.

Voss, R. & Schär, A. (2012). Ansprüche und Werte von Facebook-Usern – Anforderungen an Funktionen und dahinter stehende Werte. Planung & Analyse, 39(4): 32-35.

Voss, R.; Szmigin, I. & Gruber, T. (2007). Service Quality in Higher Education: The role of student expectations. Journal of Business Research, 60(9):949-959.

Voss, R.; Gruber, T. & Reppel, A. (2010). Which classroom service encounters make students happy or unhappy? Insights from an online CIT study. International Journal of Educational Management, 24(7): 615-636