The Social Media Participation Framework

Robin Effing

THE SOCIAL MEDIA PARTICIPATION FRAMEWORK: STUDYING THE EFFECTS OF SOCIAL MEDIA ON NONPROFIT COMMUNITIES

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Preface

> *"We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run."*
> (Roy Amara, Institute for the Future)

When I started my Ph.D. research in 2010 many people asked me whether social media would still exist in four years time. I was already convinced that social media would last longer because it serves a basic social need. People like to be connected with each other and share personal information about their lives. They can now keep in touch 24/7 regardless of geographical and social boundaries. Social media still seemed quite new in 2010. Actually, the label of "social media" only became mainstream around 2008, which illustrates its novelty at the time of my Ph.D. research. However, a closer look at the phenomenon of social media makes it clear that the web already had many social applications at that time. They were previously addressed with different terms such as social network sites, blogging, chat and Web 2.0. I was, and still am, fascinated by the web and its social capabilities. Platforms come and go but we continue to use these social networking functions. I can still remember having my first ICQ conversations in the 1990s. In the last decades, I have personally been witness to the transformation of the web into a more social place. It seems like the web is one of the main drivers in radically redefining ways of communication. The participatory opportunities of web-based platforms such as Google, Facebook and Twitter are endless. However, technology - such as social media - does not change the world. People do. And our relationships do. Every time new technology lands on our doorstep we become afraid of its potential transformative power. We tend to overestimate the effect of the technology in the short run. Due to little understanding of the impact of technology we either become afraid or exaggerate its power. The bubble has to burst before we can come to a real assessment of a new technology. Maybe this is also the case of social media. Social media does not deliver miracles by itself. As we have seen with the web, solely having a website does not guarantee its success. The same is true for successful use of social media. There is a difference between being present on social media and using it effectively to reach goals.

Many organizations, politicians, and religious groups have jumped on the bandwagon of social media. However, organizations still have to find out how to most effectively join the online conversation. Some organizations will use it successfully. Others will fail. The people and organizations using social media could make a difference to our society. We are entering a stage of maturity for social media. Increasingly, our society is relying on digital communication. Maybe the labels will change, but we cannot neglect that social media has become an important part of our lives. The future will teach us whether we learn to use social media in a beneficial way. We tend to underestimate the effects in the long run. We have possibly only scraped the tip of the iceberg.

1. Introduction

1.1. Background and relevance

In the year 2014, the web has become a commodity in most parts of the world. While the average access rate in the world is 34%, Western countries show substantial adoption rates as high as 94% for the Netherlands (Van der Veer, Buitinga & Duchateau, 2013) and 85% in the United States according to the PEW project (Brenner & Smith, 2013). The introduction of the World Wide Web in the 1990s transformed the world by increasing capability to share information and communicate with each other regardless of time and place. It helped organizations to share information more easily. Tim Berners-Lee, the inventor of the web, had a personal vision of the web as a powerful driver for social change (Berners-Lee & Fischetti, 1999). His web would help both individuals and organizations to connect and work together:

> *"The web is more a social creation than a technical one. I designed it for a social effect – to help people work together – and not as a technical toy."*
> (Tim Berners-Lee, The inventor of the web, 1999)

In the last decade, 2004-2014, we have seen the web evolve into a more social platform (Ausserhofer & Maireder, 2013). People have conversations with each other all the time now via web technology. They increasingly converse via the web with others and share opinions, news, knowledge, pictures, audio and video. In the last ten years we have seen a shift from mass media, institutions and organizations, as the dominant contributors to the web, towards a more personal and social use of the web. (Ausserhofer & Maireder, 2013). This shift became apparent in 2006. Time Magazine recognized this shift and placed a mirror on the cover of its magazine. For the first time in the history of the magazine it printed "You" on the cover of the magazine as its person of the year. From that time on it started to become clear that anyone participating on the web could make a difference. This new phase of the web, labelled by the industry in 2005 as Web 2.0, was "a new way of approaching the development of Web applications that focused on participation of users in connection with one another rather than on the consumption of content compiled by experts or professional cultural producers" (Cocciolo, 2010, p.304). A leading example of this shift towards more user participation was the growing popularity of social network sites. Many people started using social network sites where they could create a personal

profile, articulate a list of relationships, and share content. In 2004, MySpace became the most popular social network site because it provided users more freedom to produce and share content than competitors with stricter policies such as Friendster (Boyd & Ellison, 2007). Over the years the web has evolved from an information platform towards a social platform (Ausserhofer & Maireder, 2013; Shirky, 2011). There is an on-going conversation between individuals who are connected by networks and communities online. "As the communications landscape gets denser, more complex, and more participatory, the networked population is gaining greater access to information, more opportunities to engage in public speech, and an enhanced ability to undertake collective action." (Shirky, 2011, p.2).

Since 2008, the label Web 2.0 has - to a large extent - been replaced with a new label called Social Media (Kaplan & Haenlein 2010). "Social Media is a group of Internet-based applications that builds on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content" according to Kaplan and Haenlein (2010, p. 61). This definition helps us to understand social media as an evolution from earlier developments of the web instead of a completely new generation of technology.
Social media became a key part of the web landscape of 2013. Three-quarters of those who had access to the internet were using social media (Van der Veer et al., 2013; Nielsen, 2012). In most areas of the world we have seen people adopting social media (Goode, 2013). The time spent on social media increased by 21% from July 2011 to July 2012 (Nielsen, 2012).

Social media channels such as Facebook, YouTube, Blogs, LinkedIn and Twitter are, at the time of writing, dominating the web landscape (ComScore, 2011; Nielsen, 2012). 75% of the world's population who access the web use one or more social media channel (Forrester, 2008; Nielsen, 2012; Van der Veer et al., 2013). People can use these social media channels to produce and share their own so-called User Generated Content (Kaplan & Haenlein, 2010). This underpins the idea that the web has continued to grow and evolve over the years towards a platform that fulfils the need of people and organizations to be socially connected with each other. The rise of mobile internet access via smartphones and tablets contributed to this rise of social media. In the US in 2013, mobile devices accounted for a vast 37% share of total internet traffic (ComScore, 2013a). One-third of the time spent on these mobile devices was on social media apps (Nielsen, 2012). Social media is, however, not solely something for the tech savvy youth (ComScore, 2011). All age groups are well represented on social media, but younger people still represent a larger share. Women tend to be more active than men on social networking sites. 76% of

women, who have access to the web, have made social network profiles versus 70% of men. For every three minutes men spend on social networking sites, women spend four (Denti et al., 2012; Nielsen, 2012).

What kinds of social media exist at the time of writing? Based on analysis of the reports from PEW (Brenner & Smith, 2013), Nielsen (2011; 2012), ComScore (Goode, 2013; Lipsman & Aquino, 2013a, 2013b) and Newcom (Van der Veer et al., 2013), four categories were shown as the most dominant social media categories between 2011 and 2013. These four are: social network sites, weblogs (blogs), micro-blogs, and content communities for sharing videos and pictures. The categories, description and related channels are displayed in Table 1.

Category	Description	Channels
Social network sites (SNS)	"Web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system" (Boyd & Ellison, 2008, p.211)	Facebook LinkedIn Google + Myspace
Weblogs (Blogs)	"Weblog-building technologies (or blogging tools) bring new capabilities, such as web publication and communication, to average people, especially those non-technical users. They are designed to facilitate simple and fast creation of web content without much technical or programming skill." (Du & Wagner, 2006, p. 789)	Blogger Wordpress Tumblr
Micro-blogs	Micro-blogging "refers to the activity that users broadcast brief text updates about small little things happening in their daily life and work activities such as what they are reading, thinking, and experiencing" (Zhao & Rosson, 2009, p.243)	Twitter Weibo
Content communities (Picture & video sharing)	"The main objective of content communities is the sharing of media content between users. Content communities exist for a wide range of different media types" (Kaplan & Haenlein, 2010, p. 63)	YouTube Instagram Pinterest

Table 1. Social Media Categories

Figure 1 shows the adoption rates for various popular social media channels providing us with an approximation of how many people use social media. The overview in Figure 1 is based on multiple reports. Data was mainly taken from the United States (Nielsen, 2012) and The Netherlands by NewCom (Van der Veer et al., 2013). A full analysis is included in Appendix 1. The popular Chinese micro-blogging services Weibo was also included in Figure 1 to show the relevance of social media in China. These services developed to acquire massive reach numbers (Chen, Zhang, Lin & Shuanghuan, 2011). While there were numerous other social media channels active at the time of this research, the chart (Figure 1) concentrates on the most popular social media channels according to market researchers in that period. The Figure comprises of statistics based on their availability in the reports of Nielsen (2012), NewCom (Van der Veer, 2013), Pew Research Brenner & Smith, (2013) and CNNIC (2011). When a bar is missing it means that the source did not have any information regarding the mentioned channels. The vertical axis shows adoption percentages. The horizontal axis shows the names of the most important social media channels.

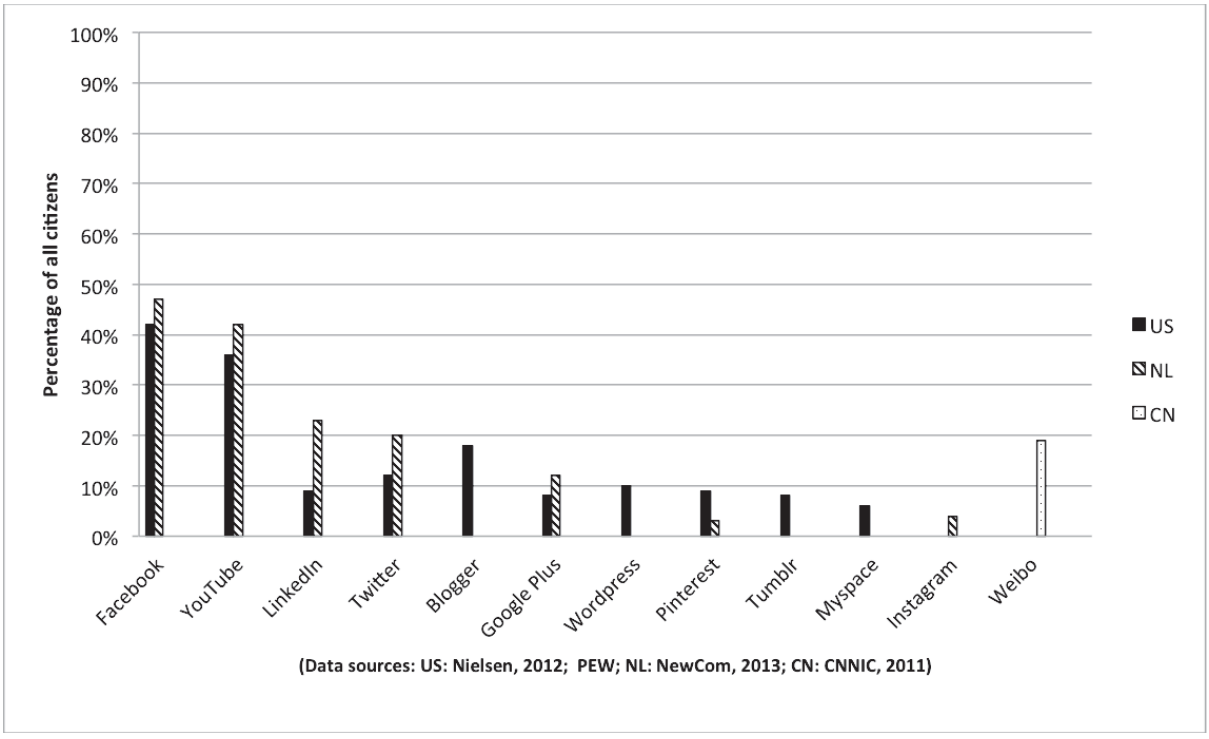

Figure 1. Social media adoption percentage per channel

In 2013, Facebook had become the most important social media channel in the world. With its more than 1 billion users, Facebook became the No.1 place for social networking (Nielsen, 2013). In the United States, Facebook ranked first in overall user engagement on the web. It took an 11% share of the total amount of minutes spent on the web, even more than the search engine Google (Lipsman & Aquino, 2013b). The American network site Facebook is also very popular in Latin America and Europe, in terms of the total time spent in comparison with other websites (Goode, 2013). Facebook is also the most popular smartphone app. It has a reach of 76% of the devices in the US (Lipsman & Aquino, 2013b). Social networking has also become very popular among professional audiences. In the time of this research, LinkedIn was the most popular professional social network site. It has become an important place for networking in business.

YouTube became the No.1 content community for video content. In 2013, every month the massive number of 15 billion video-streams have been watched (Nielsen, 2013). The YouTube app reaches 47% of all smartphones (Lipsman & Aquino, 2013b).

Another important category of social media is micro-blogging. The micro-blogging service Twitter – with short messages of 140 characters or less - appeals greatly to both the political and the entertainment field. Twitter announced in 2014 that it had grown to a monthly user base of 245 million active accounts over the world (Twitter, 2014). Some countries are more actively using Twitter than others. For example, in the Netherlands Twitter is very popular with 10% of people reading and sending Tweets every day (Van der Veer et al., 2013).

Since Twitter was blocked in China, the Chinese have massively adopted both Sina Weibo and Tencent Weibo for similar functionality. According the China Internet Network Information Center, the reach of Sina Weibo increased from 200 million users in 2009 to 420 million in 2011 (Chen et al., 2011).

Although this overview of social media does not strive for completeness, it clearly shows that social media has become a major part of people's lives.

While there has been an increased use of social media, we could have reached the 'boiling point' of social media adoption. Social media is not completely new anymore and the growth of the user base is stabilizing (Backer, 2012). Not all social network sites showed the same positive trend during the writing of this dissertation. The rise and fall of the cases of social network site MySpace, the virtual social world Second Life, and the closing down of the Dutch social network site Hyves, illustrate that the social media landscape is far from static. Social media channels can quickly rise or disappear from the social media landscape. Some researchers at Princeton predict

the fall of Facebook based on epidemiological models (Cannarella & Spechler, 2014). But of course the reality is far more complex than portrayed in the models given in that paper. Social media has become more mature (Backer, 2012). However, it is difficult to predict whether attention to social media will continue to grow or if that interest will be lost.

One the key drivers of social media is the participatory engagement of users (Kaplan & Haenlein, 2010). The shift towards more participatory use of the web provides new opportunities for organizations to organize the participation of their members. Traditionally, nonprofit organizations have relied heavily on active user participation. They rely, to a large extent, on the voluntary contributions of members because they support the core beliefs of the organization. Voluntary participation is of great importance to nonprofits to sustain their communities and reach their goals. However, various kinds of nonprofit communities have showed difficulties in terms of sustaining the participation rates of their members. Nonprofit participation is, for most members of these types of communities, not a fulltime job. Most members have other responsibilities as well. This puts a continuous strain on engagement and participation. Participation in these communities became less common because of social change such as increases in modernization, transportation, individualism, secularism and urbanization. (Francis, Giles-Corti, Wood & Knuiman, 2012; Putnam, 1995; Macionis, 2012) As a result of the industrial revolution the social fabric of family, community and tradition has been weakened (Francis et al., 2012; Macionis, 2012;). This also affects the extent to which people would like to participate in nonprofit communities.

The nonprofit sector consists of many subsectors. "The Association of Fundraising Professionals classifies the nonprofit sector into six subsectors: arts and humanities, education, healthcare, human services, public/society benefit, and religion" (Waters et al., 2009, p.103). Within the broad nonprofit sector, this study is interested in the role that social media plays in the member-based communities from normative organizations. This type of organizations runs, for a large part, on voluntary participation. Normative organizations pursue some goals they think are morally worthwhile. Both religious communities and political parties are examples of normative organizations (Macionis, 2012). Since nonprofit communities such as churches and political parties struggle with sustaining levels of participation, this study focuses on these types of nonprofit organizations.

Nonprofit communities such as political parties and church communities face difficulties in sustaining their communities. In the last few decades, political participation is in decline (Coleman 1999; Eliasoph 1998; Hibberd, 2003; Shah, Schmierbach, Hawkins, Espino & Donavan, 2002) especially, among young people (Baumgartner & Morris, 2010; Livingstone, Bober & Helsper, 2005). Traditional church membership is also in decline (National Council of Churches, 2011; Webb, 2012). The number of active churchgoers has been in decline for decades. As a result, the pool of people that would like to play an active voluntary role in church communities is getting smaller. In Western societies citizens are more hesitant in making long-term commitments to political parties or church communities.

In the last five years (2009 – 2014), the members of nonprofit communities - such as church communities and political parties - started adopting social media. The expectations of social media have risen within these communities. Nonprofit communities often see social media as new means to communicate with their members (Curtis et al., 2010; Waters, Burnett, Lamm & Lucas, 2009). Furthermore, they hope for new interest and stronger relationships in their communities by engaging in online social media. However, there is still no clear evidence whether these expectations hold true (Baumgartner & Morris, 2010; Kanter & Paine, 2012; Waters et al.., 2009; Zavattaro & Sementelli, 2014).
Considering the voluntary structure of nonprofit communities, such as church communities and political communities, it is relevant to find out if social media can help to sustain participation within these communities. Furthermore, "practitioners working for nonprofit organizations can benefit from adopting social media due to their often-limited monetary resources" (Curtis et al., 2010, p. 90).
Nonprofit communities could benefit from knowing whether or not social media could have effects on the participation of current and future members.

The following two observations strengthen the assumption that social media can influence the offline participation of members within nonprofit communities.

1. Early Experiences

First, early experiences in politics, church and charities have indicated that social media influences participation. These experiences often highlight the benefits from social media for political, charity and church use.

The Obama story

Presidential candidate Barack Obama was able to reach and mobilize many citizens in his YouBama presidential campaigns both in 2008 and 2012. Some even argue that Barack Obama's social media campaign, with many participatory elements, was one of the key success factors in his election (Montero, 2009; Ren & Meister, 2010). "Linking the online community from myobama.com with offline actions such as making phone calls and organizing events, the campaign harnessed the full potential and user initiative of the online community. It made volunteer participation in the campaign easy – people could participate from their homes; they could participate with nothing but their mobile phones." (Ren & Meister, 2010, p. 18)

The Arab Spring

The Arab spring between 2010 and 2011 suggests that social media contributed to giving a voice to people who were not able to speak publicly before. The capability to communicate can be an enormous power in times of suppression. However, it is difficult to assess exactly how important social media was to the revolution and whether there would have been other results without social media. There are examples with less revolutionary outcomes such as the June 2009 uprising of the Green Movement in Iran (Shirky, 2011). Despite the use of every technological coordination tool available to organize protest, it did not lead to the fall of the regime (Shirky, 2011).

The Pope

Jorge Bergoglio, since 2013 better known as Pope Francis, is connected to more than 2 million catholic followers via Twitter. He is able to speak directly to his followers now, without the delays and distortion caused by internal bureaucracy or the mass media. According to Pope Francis the Church should engage in "environments created by new technologies, into social networks, in such a way as to reveal a presence that listens, converses, and encourages" (Radio Vaticana, 2013).

The Red Cross

A study regarding the American Red Cross indicated that social media "can be harnessed to build stronger relationships with publics such as volunteers, the media, and the community" (Briones, Kuch, Liu & Jin, 2011). The Red Cross had deployed social media within a two-way dialogue strategy. They were not merely broadcasting information but were joining the public conversation. Social media helped to notify people about important events. Furthermore, they used social media that could establish a direct relationship with mass media and monitor their presence in it. A joint initiative via social media by the Red Cross together with the U.S. department of state and Mobile Accord helped to raise more than $41 million for Haitian earthquake relief in 2010 (Auer, 2011).

When social media experiences indicate that social media use may have an impact on politics, church and charitable communities at a national scale, it is expected to have a certain impact on more local political and church communities as well.
However, there are also examples that indicate that social media does not deliver miracles in politics and the church. Social media campaigns can have disappointing results.

The CDU Campaign

Social media does not always result in high reach within political audiences. The CDU campaign in Germany in 2009 illustrates this (Jungherr, 2012). While the largest German party invested time and effort in Twitter, it did not result in the desired high reach of people (Jungherr, 2012).

Prime Minister Gordon Brown

The YouTube attempt by Prime Minister Gordon Brown in the United Kingdom in April 2009 to address the expenses controversy was also disastrous. It resulted in negative sentiments and it "served as a warning to other leaders that these tools must be handled with care" (Ren & Meister, 2010, p.13).

And while the example of Obama is appealing, it is also somehow related to his personal media skills: "Not all leaders appear as telegenic as Obama, not all have the same charisma or speaking skills and this as well should be a factor when they consider adapting Obama's public engagement strategies." (Ren & Meister, p. 27)
Moreover, the democratic and community capabilities of social media in transforming politics are not well understood yet. They sometimes even have disappointing effects on democracy. In

the end, the people who engage in online forms of democracy still mirror existing social structures (Papacharissi, 2010). Also the dialogue capabilities can be argued, because "public exchanges on Twitter take place predominantly among users with similar viewpoints" (Barberá, 2013, p.1). These considerations and biases are limiting the democratic effects of social media.

2. Augmenting capabilities for existing communities

Secondly, we assume that the use of online social media in online communities augments and to some extent enriches the offline communities behind them. Social capital "refers to features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit" (Putnam, 1995, p.65). Social capital is like the glue that holds the members of communities together. Social media can contribute to social capital as the following example shows: In an online school community, the members of the online community had significantly higher levels of social capital than the members who were not part of it. Both the bridging and bonding parts of the social capital were higher for members of the online community although the intensity of use was not correlated with higher bonding social capital (Tomai et al., 2009). By using social network sites such as Facebook, one of the currently most important categories of social media, people communicate with others. These others are in most cases not strangers but people from already existing relationship networks (family, friends, colleagues, acquaintances) in the offline world (Boyd & Ellison, 2007). In that sense, the social network sites augment the possibility to keep a conversation going with people who are already part of known networks. Online friendships do frequently lead to mix-mode friendships with potentially the same quality as offline friendships (Antheunis, 2009). Consequently, we assume that the use of social media by members of existing communities can have an augmenting effect on the offline relationship networks within these communities.

1.2. Problem Statement

Social media provides nonprofit communities - such as church and political communities - with the opportunity to organize communication with their members in new and innovative ways. This could have major consequences because the potential reach to these types of communities is massive. In 2010 there were 2.2 billion Christians around the world. That is a 32% share of the world's population according to the PewResearch project (Hackett et al., 2012). Only a small amount of people in the world (16%) has no affiliation at all to a religious group or community. And the political process has consequences for each and all of us. Therefore, more knowledge of the potential for social media to benefit these nonprofit communities is valuable. Still, little is known of how their social media practices affect current (offline) communities. Furthermore, it can be important to create new theories to understand the relationship between social media and nonprofit community participation. More knowledge is necessary to analyse, measure and compare the influence of social media in and between nonprofit communities. This will help to assess the real value of social media for nonprofit organizations such as churches and political parties. This is of great importance for this type of nonprofit because an important part of their existence is relying upon the voluntary participation of their members. Evaluation of the organizational value of social media is in the year of writing still in its infancy. Currently, only a very limited number of studies have been carried out regarding the community effects of social media in this domain.

The return on investment (ROI) of social media – specifically in terms of the effect on the community - is difficult to assess. Merely counting views, 'likes' and 'retweets' does not say much about the added value to organizations. Yet it is difficult to evaluate the community members' activity on social media. Gartner has predicted that over 70% of IT-dominated social media initiatives would fail through 2012 due to lack of methods and lack of relevant and universally employed metrics (Cooper, Martin & Kiernan, 2010). As a result, organizations have difficulty in evaluating the effectiveness of their social media practices.

It seems that most work carried out so far has concentrated on adoption or reach numbers and neglected the – measurement of – interaction and effects on the organization (as shown in Chapter 2). Figures for how many people and organizations are using social media are relevant to show that the topic cannot be neglected (See 1.1).

However, these descriptive statistics about the existing number of profiles say very little about the results and effectiveness of social media practices.

There is a lack of understanding of how the use of social media by members of nonprofit communities impacts their offline participation. Offline participation is defined here as the extent to which a member feels part of the community and takes part in the communities' offline activities. When these members participate in online forms of social media, the effects on their offline levels of participation are not well understood. Gaining more knowledge in this regard could potentially have a large impact on the nonprofit sector. The political communities take part in activities that affect all of us and religious communities are still very important groups in people's lives. There is little knowledge whether or not social media can help to sustain the offline participation in these communities. Furthermore, there is still a lack of standardized methods for measuring the effects of social media on offline participation in communities. Therefore, the following research questions can be raised to address the problem statement.

1.3. Research Questions

Main question: How does the use of social media by members of nonprofit communities affect their offline participation?

RQ1: To what extent is social media of added value in sustaining the offline participation of members from nonprofit communities?
RQ2: What are the key factors that determine the effectiveness of social media practices in relation to sustaining offline participation within these communities?
RQ3: How to develop a theoretical framework which is capable of serving as an empirical lens in evaluating the effects of social media on offline participation within nonprofit communities?
RQ4: How to best measure and compare social media influence levels of members of nonprofit communities?

Nonprofit communities are addressed here by focusing on two specific kinds of traditional, member-based communities that rely, to a large extent, on voluntary participation: religious communities such as churches and political communities such as (local) political parties. Sustaining the offline participation of members can be accomplished by either increasing or maintaining member participation, enhancing the density of the community ties, and by contributing to the general Sense of Community. Participation is a concept that will be defined more specifically further on in the section where the theoretical framework is presented. There are many ways to think about and use social media. Therefore, it is important to discover the key factors under which nonprofit communities can benefit most from social media.

The following activities provide an overview of how the research questions will be approached in this dissertation:

RQ1: To what extent is social media of added value in sustaining the offline participation of members from nonprofit communities?

- Increase understanding of the sustaining value of social media by exploring the underlying plans, purposes, motivations, strategies and expectations of members behind the social media practices.
- Evaluate the choices that were made to implement social media.
- Explore the effects of social media on offline communities.

RQ2: What are the key factors that determine the effectiveness of social media practices in relation to sustaining offline participation within these communities?

- Identify the key factors that could determine whether social media is used effectively for the benefit of the community.
- Develop and revise a theory that comprises the aspects of the above for understanding and evaluating the effect on the community from social media.

RQ3: How to develop a theoretical framework which is capable of serving as an empirical lens in evaluating the effects of social media on offline participation within nonprofit communities?

- Identify key concepts and knowledge gaps based on literature review.
- Select and translate constructs into a theoretical framework.
- Evaluate a theoretical framework aimed to measure, compare and evaluate the use, impact and influence of social media over time within and between the communities.
- Test the feasibility of statistically comparing social media use scores to sense of the community scores of individual members of communities.
- Relate social media participation to nonprofit community participation.

RQ4: How to best measure and compare social media influence levels from individual members of nonprofit communities?

- Create an instrument for capturing the social media influence levels of individual members within communities.
- Test a revised version of such an instrument.
- Identify the limitations of such an instrument.

1.4. Scope and expected contribution

The following angles could have been relevant for the research but have been eliminated to keep the focus on the effects on the core of the communities:

- Public participation is not included, the effects of nonprofit communities on their environment has been left out of the research; Citizens or passive churchgoers are not the main subjects of the research. The focus is on the part of the community that consists of members who are already engaged.
- The focus is on the community and the relationships within (these communities). There is some attention given to relationships with stakeholders outside the community; however, the focus is on the key community members that are already engaged in community tasks. This relates to the bonding aspect of social capital and to the extent to which social media affect the strength of the relationships between members. The bridging capabilities of social media, to connect to people and stakeholders outside the community are not a primary focus of this study.

Now that it has become clear what the scope of this dissertation is, it is possible to indicate how this research contributes to the existing body of knowledge.

This research in this dissertation aims to contribute to both practitioners and scholars.

Firstly, the research is multi-disciplined and can potentially be relevant to various fields of research. The list of included fields consists of but is not limited to: Management of Information Systems, Business Information Systems, Management & Governance, Leadership, Change Management, Computer Science, Computer Mediated Communication, Network Sociology, Political Sciences and Practical Theology. Since social media is blurring the lines between personal and professional lives (Dutta 2010; Klang & Nolin, 2011), the traditional management-of-ICT approach is considered to be too limited to capture the richness of the social media phenomenon. In the end, this research should contribute to science by providing more comprehensive and standardized theory to measure and evaluate the community effects of social media, deliver specific assessment of the impact of social media on nonprofit communities and insights in the key factors for effective use.

Secondly, the research aims to contribute to practitioners. By providing more knowledge of existing cases of social media in the nonprofit sector, practitioners can learn from these practices. Nonprofit communities can learn more about how to audit and control the risks of social media while levering the opportunities.

1.5. Dissertation outline

The contents of this dissertation are structured as displayed in Table 2.

In Chapter 2, the outcome of a systematic literature review is presented. In the novel field of social media it is of major importance to review earlier findings in literature from a multi-disciplined perspective. A systematic review, as opposed to a regular literature review, provides not only a thorough overview of existing relevant concepts but also various kinds of meta-information from the retrieved set of literature such as dominant fields, research maturity, the increase of the topic over the years and research-gaps. For example, key concepts were taken from the field of e-Participation, which has been an influential movement in published literature about participatory use of the Internet and social media.

Chapter 3 introduces the Social Media Participation Framework that underpins the case studies that follow. The framework relates social media participation to community participation. We argue that existing theories, frameworks, models, and measurement instruments are insufficient to adequately study the effects of social media in communities. The theoretical framework is backed up by existing theories from multiple disciplines. The theoretical framework comprises of four constructs: Social Media Choice, Social Media Use, Community Engagement and Sense of Community (McMillan & Chavis, 1986). The motivation and details of the framework are discussed in more detail in the third chapter.

Chapter 4 makes clear which research methods were used for the case studies. The design of the multi-method case studies (Eisenhardt, 1987; Yin, 2009) is elaborated upon and justified. It will show the details of the selection process, measurement intervals, data collection methods, methodological considerations, and analysis methods. The chapter will show how the Social Media Participation Framework is deployed in this research and its cases. Furthermore, it will show details of specific instruments of inquiry, scales and software tools, such as the revised Sense of Community Index-2 (Chavis, Lee & Acosta, 2008) the metrics of the Social Media Indicator, and social network analysis (SNA).

In Chapter 5 the results of the Enschede council case study are presented. The council of the municipality of Enschede with its members of the political parties were the subject of this case study. Most of the members were already using social media when the case study started. More background information will be provided to understand how members of the council form a political community. Since the council members were eager to adopt social media, the municipality wonders what the effects of this use of social media were. Results from this case study are presented following the constructs of the Social Media Participation Framework.

In Chapter 6 another case study is presented from a church community. A large church community from the Roman Catholic Church being the subject of this case study. In this case the religious leaders and volunteers, who have an active role in the community, were investigated. They did not have any experience of social media when the case study started. They wondered if social media could help them to sustain the church community because, in recent years, they have seen participation in their community decline.

Chapter 7 presents the third and final case study of this dissertation. The subject of this case study is a local community from the Dutch Apostolic Society Community: Apostolisch Genootschap. This non-Christian church-like community has implemented new social media strategies during the case study to try to sustain the relationships within the community and to bridge relationships between the younger and the more senior members. The results of the case study are presented in this chapter. As in the previous two cases, this case is also based on the Social Media Participation Framework.

Chapter 8 provides a cross-case analysis and evaluation of the theoretical framework. Similarities, patterns, paradoxes and differences are systematically extracted from the findings of the case studies. The three nonprofit communities in this study are very distinct from each other. While there are parallels in the way they form a community with members, results cannot be easily generalized. The cases serve primarily to evaluate the strong and weak points of the theoretical framework. In this chapter it is possible to argue how to improve the theory. As a result, a list of key factors is derived from the analysis for future effective application of social media within the nonprofit domain.

Chapter 9 presents the revised version of the Social Media Participation Framework. The constructs are revisited and improved. The Social Media Indicator-2 is a measurement instrument to measure one of the constructs of the Social Media Participation Framework, the Social Media Use by individual members. It also presents the construct of Social Media Strategies as a more refined way to address the decision making process behind social media campaigns.

The 10th and final chapter contains the overall conclusion of this dissertation. After a discussion section, the overall conclusions will be presented. There is also some attention given to the limitations of this study. The chapter ends with the evaluation of the contribution, directions for future research and management implications.

Order	Title	Summary of Contents
Chapter 1	Introduction	- Relevance - Problem Statement - Research questions - Scope - Aimed contribution - Dissertation outline
Chapter 2	Systematic Literature Review	- Clarification of Systematic Literature Review method - Theoretical context - Meta-analysis
Chapter 3	Introducing the Social Media Participation Framework	- Theoretical backgrounds - Social Media Participation - Social Media Choice - Social Media Use - Community Participation - Community Engagement - Sense of Community
Chapter 4	Case study design and methodology	- Multi-method case studies - Motivation of the instruments - Case selection - Description of the cases - Data analysis methods
Chapter 5	Case study: The Enschede Council and its political parties	- Introduction - Context - Case results - Analysis
Chapter 6	Case study: A Roman Catholic Church Parish	- Introduction - Context - Case results - Analysis

Order	Title	Summary of Contents
Chapter 7	Case study: Apostolic Society Community	- Introduction - Context - Case results - Analysis
Chapter 8	Cross-Case Analysis and framework evaluation	- General outcomes - Cross-case analysis - Framework evaluation
Chapter 9	The Revised Social Media Participation Framework	- Relevance - The Revised Framework - The Social Media Indicator-2 - Social Media Strategies - Sense of (Virtual) Community - Limitations
Chapter 10	Conclusion	- Addressing the research questions - Value of the theoretical framework - Limitations - Scientific contribution - Contribution to practice - Management implications - Future research recommendations

Table 2. Dissertation contents per chapter outline

In recent years, social media has provided new opportunities for the nonprofit domain. Since members of nonprofit communities started using social media channels for both personal as professional purposes, they cannot be neglected anymore. Yet little is known about how to measure and understand the organizational effects of social media within nonprofit communities. This dissertation contributes to developing theory that makes it possible to reveal the community effects of social media. This will also help to shed some light on the actual capabilities of social media.

2. Systematic Literature Review Social Media and Participation For Nonprofit Communities

2.1. Introduction

In 2014, the phenomenon of social media is clearly an emerging field of research. As we have discussed in the first chapter, social media has in the last ten years (2004 – 2014) become a dominant part of the web landscape. In recent years scholars have paid an increasing amount of attention to this subject. A smaller portion of the work carried out so far is about the participatory value of social media in nonprofit communities. Nevertheless, a thorough exploration of concepts and theories in existing literature is important. It provides us with a theoretical context and an assessment of the relevance of the central research topic in this dissertation. The aim of this chapter is to systematically review literature to derive and underpin the key contribution of this dissertation to the existing body of knowledge.

Considering the novelty of the topic and the multi-disciplinary nature of social media we decided to conduct a systematic literature review based on the following objectives (Webster & Watson, 2002; Wolfswinkel, Furtmueller & Wilderom, 2012):

1. Reviewing and revisiting current insights from the body of knowledge in respect to key topics in this dissertation;
2. Outlining past research to provide a background;
3. Assessing the quantity of research and the level of maturity in this field;
4. Finding established theories, useful methods, measurement standards and models that could be extended or revisited to include in the research;
5. Combining the insights from a number of fields based on an interdisciplinary approach;
6. Finding the knowledge gaps related to the research problem;
7. Finding out what the key contribution of the study will be.

This chapter is based on: Effing, R., Van Hillegersberg, J., & Huibers, T. (2011). Social media and political participation: Are Facebook, Twitter and YouTube democratizing our political systems? In *Electronic Participation: Proceedings of the Third IFIP WG 8.5 International Conference ePart 2011*, Delft, The Netherlands, (Vol. 6847, pp.25-35), Springer.

Given these reasons we decided to include the method of systematic literature review in the approach.

It is now clear why the literature review is part of this study. The objective was not to include all social media research. The focus is on those studies that were related to the topic of participation. For nonprofit communities it is important to find out how they can foster participation of their members through social media channels. The remaining part of this chapter will present the method and outcomes of a systematic literature review regarding social media and participation. The outcomes of the literature review are further subdivided in participation, electronic participation and social media.

2.2. Method of systematic literature review

In this section the method of systematic literature review will be elaborated upon. Following strict rules for the retrieval, selection and analysis of literature helps to provide us with a justified overview of the current body of knowledge. The method, as explained here, is largely based on the work of Webster and Watson (2002) and Wolfswinkel, Furtmueller and Wilderom (2012).

The following process was used:

1. Systematic Search (Queries and databases, broad access, interdisciplinary).
2. Rules for Selection.
3. Systematic Analysis.
4. Identifying relevant theoretical concepts and drawing conclusions.
5. Iteration to include knowledge from recent years.

The review was conducted in 2010 and 2011 and was updated in December 2013 to include recent insights from literature and to be sure that the insights remain up to date. Since social media is an emerging topic in literature it is important to have iteration in the process of literature review.

The systematic literature review was based on desk research using electronic scientific literature databases to which access is provided by academic library services. The databases were selected by their ability to retrieve articles from various academic sources and across various disciplines. This broad, multidisciplinary, database selection included ISI Web of Science, Picarta, Scopus, EBSCO INSPEC and EBSCO Business Source Elite. As well as having a broad scope, the

selected databases cover almost all of the papers in the discipline of information systems and information management. Schwartz and Russo (2004) show that by using EBSCO Business Source Elite, ISI Web of Science and Scopus all of the top 25 journals from the field of IS are included.
This leads us to the construction of search queries. To get a broad view of articles in various disciplines we avoided using search terms that were too specific.

Various keywords were used to search the selected databases. The first keyword that was selected was “Social Media”. The second keyword was “Participation”. We also used the following related terms for the concept of Social media: “Social Internet”, “Social Web”, “Social Network Site(s)”, “User Generated Content”, “Web 2.0” and “Crowdsourcing”. An overview of the keywords is presented in Table 3.

Search query
"Social Media" AND "Participation"
"Social Internet" AND "Participation"
"Social Web" AND "Participation"
"Social Network Site(s)" AND "Participation"
"User Generated Content" AND "Participation"
"Web 2.0" AND "Participation"
"Crowdsourcing" AND "Participation"
“e-Participation”

Table 3. Search queries

During the first phase of article retrieval, one search query was added to the list of keywords because many of the retrieved articles included the keyword: “e-Participation". Related terms of participation such as “Engagement”, “Involvement” and “Commitment” did not deliver additional results. Therefore, the decision was made to exclude these words from the list of search queries and include “e-Participation”. The next step was selecting the relevant papers from the search results by analysing abstracts from retrieved records. We used a-priori selection criteria; for example, articles about user participation in information system design were excluded.

2.3. Meta analysis of the systematic literature review

In total, 127 relevant articles were retrieved. 93 of them are published in journals. The keywords Web 2.0 and e-participation contributed especially to a number of relevant articles compared to the original set retrieved with the keyword "Social media". The articles that have been selected are not equally distributed over various disciplines. The journals that most frequently appeared in the article selection (containing at least two items of the set) are presented in table 4.

Journal name	Number of items	Discipline
Journal of Computer-Mediated Communication	9	Social sciences
Social Science Computer Review	4	Social sciences
New Media & Society	4	Social sciences
Computers in Human Behavior	2	Social sciences
Information Polity	5	Business and governance
Government Information Quarterly	4	Business and governance
Environment and Planning	2	Business and governance
IEEE Intelligent Systems	2	Information and communication
Decision Support Systems	2	Information and communication
Communication	2	Information and communication
Communications of the ACM	2	Information and communication
Journal of Medical Internet Research	2	Medics

Table 4. Overview of journals, number of items and fields

Some research disciplines turned up more frequently in search results than others. The social sciences discipline contributes considerably to Social media research. Also, a large selection of the articles in the result set originated from information and communication sciences. Business and governance scientists frequently publish material regarding this topic as well.
Table 5 shows the distribution of the topics within the result set. The topic list was created after careful reading and analysis of the abstracts, keywords and content of all the selected articles.

Topic category	Number of articles	Percentage
Citizen participation	46	36 %
Use and social behaviour	23	18 %
Politics and democracy	18	14 %
Online community design	15	12 %
Education	8	6 %
Civic engagement	7	6 %
Tools and technology	3	2 %
Organizational participation	2	2 %
Healthcare	2	2 %
Religion	2	2 %
Journalism	1	1 %

Table 5. Publications differentiated by categories based on contents

Most of the publications relate to the topic of citizen participation, especially focusing on local government, such as the municipality. A few studies were carried out at the local (community) level of electronic participation (Borge, Colombo & Welp, 2009; Mambrey, 2008). Only 14% of all articles of the selected set are specifically about politics and democracy.

The analysis indicates that there is a knowledge gap regarding social media and community participation within religious organizations like churches and religious movements (2%). Only two nonprofit related research papers were selected in the systematic literature review about religion (Hutchings, 2010; Sterling and Zimmerman, 2007).

Almost all of the effort in researching the participatory use of social media in non-profit organizations is focused on local government practice and social behaviour.

Because the non-profit sector is much larger than government services, future research could extend its focus towards non-government organizations with a strong focus on member participation, such as church communities and political parties. Based on the count of the articles in the retrieved set, this indicates a knowledge gap.

The following section of this chapter highlights the relevant findings from the contents of the selected publications and these findings are divided into three main topics. Firstly attention will be given to the concept of participation. The second part is based on existing knowledge

regarding the specific electronic forms of participation and related theories. The third part is about relevant concepts and definitions regarding social media.

2.4. Participation

The previous section paid attention to the outcomes of the literature review from a descriptive quantitative perspective. This and upcoming sections will present the findings of the qualitative review of the contents of the selected literature from the systematic literature review. The first concept from the literature is participation. The literature shows various ways of addressing the concept of participation. Grönlund (2009, p.12) defines participation as "the specific activity of doing things together". Xie and Jaeger (2008, p.3) define political participation as "behaviours aimed at shaping governmental policy, either by influencing the selection of government personnel or by affecting their choices".
Sherry Anstein (1969) provided a theoretical background (see Figure 2) for the general participation levels of the public from manipulation to complete citizen control.

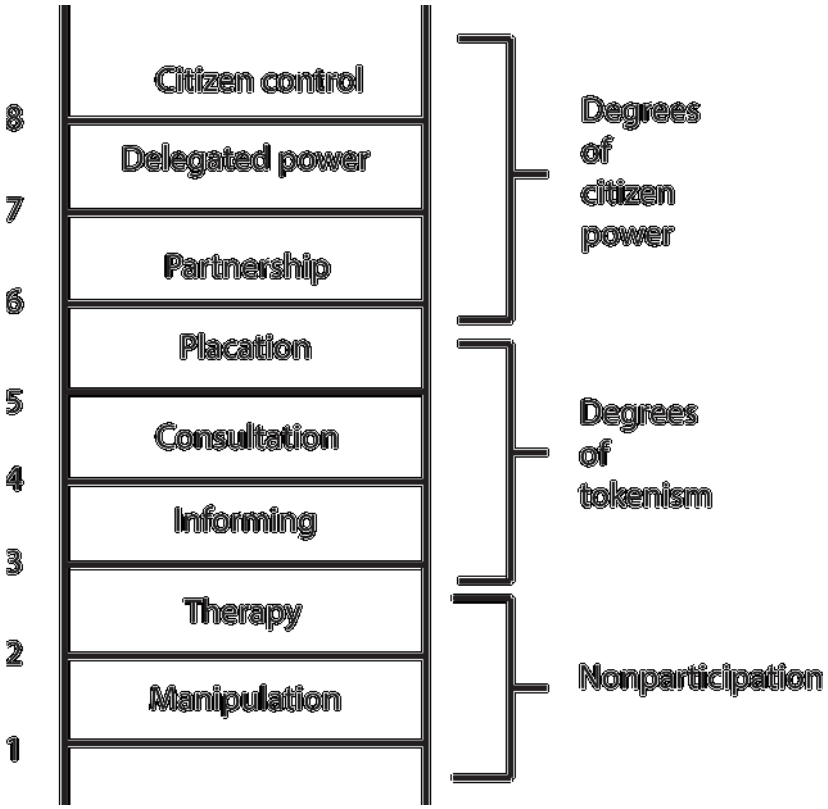

Figure 2. Example of a participation ladder from Arnstein (1969)

2.5. Electronic Participation

The second topic that was considered as one of the key concepts is electronic participation. Previous efforts in practice to enhance public participation with electronic web tools did not meet expectations (Anadiotis et al., 2010; Roeder et al., 2005; Stern, Gudes & Svoray, 2009). There has been little success with web tools such as online discussion forums, chat and online surveys. For example, in Coleman and Gøtze's analysis of case studies in twelve different countries, they observed that e-participation initiatives are frustrated because of two recurring problems: "Too few people know about them and governments fail to integrate them into the policy process or respond to them effectively" (Roeder et al., 2005, p. 49). Also Roeder et al. (2005) describe the challenges of a public budget dialogue in Esslingen in Germany. "Similar to other public internet forums the first attempts were not accepted by the public and lacked participants and contributions" (Roeder et al., 2005, p.50). In this public dialogue case arranging the involvement of political groups was complicated.

In general, participation ladders are theoretical models or frameworks to define and categorize various levels of user participation. Many authors address the issue of defining and measuring e-participation (Anadiotis et al., 2010; Conroy & Evans-Cowley, 2006; French, Insua & Ruggeri, 2007; Grönlund, 2009; Hansen & Reinau, 2006; Rose & Sæbø, 2010; Sæbø, Rose & Molka-Danielsen, 2010; Medaglia, 2007; Sommer & Cullen, 2009; Loukis & Xenakis, 2008; Lourenço & Costa, 2007; Koh, Kim, Butler & Bock, 2007). From the literature selection, no less than 13 different participation ladders are available and no consensus exists within them. An overview of the participation ladders that were found is displayed in Table 6.

Model / framework	Participation stages (steps of the democratic ladder)	Description and status of the ladder	References
Arnstein	1. Manipulation 2. Therapy 3. Informing 4. Consultation 5. Placation 6. Partnership 7. Delegated Power 8. Citizen Control	Foundation theory, not specifically for e-participation. Frequently cited. As Grönlund (2009, p. 14) claims, "many ladder models are derived, if not always explicitly, from the 'mother model' of Arnstein (1969)".	Arnstein (1969); Grönlund (2009); Medaglia (2007);
Anadiotis	1. eConsultation 2. ePetition 3. eDeliberation	Specific application of a participation ladder for the purpose of defining the stages in electronic participation initiatives based on web 2.0 use Patterns.	Anadiotis et al. (2010)
Conroy	1. information tools 2. interaction tools	Broad distinction in tools for either information diffusion or for interaction (two-way communication).	Conroy and Evans-Cowley (2006)

Model / framework	Participation stages (steps of the democratic ladder)	Description and status of the ladder	References
French	1. e-voting 2. e-deliberation	Broad distinction between democratic voting and more intensive forms of democratic electronic initiatives.	French, Insua and Ruggeri, (2007)
IAP2	1. Informing. 2. Consulting 3. Involving 4. Collaborating 5. Empowerment.	The International Association for Public Participation (IAP2) defined this participation ladder. It can be used to classify a broad spectrum of participatory initiatives (both online and offline).	Grönlund, (2009); Sæbø, Rose and Molka-danielsen (2010)
Jackson	1. Informing 2. Education 3. Collaborative decision making	This participation ladder draws into focus the importance of education before collaboration.	Hansen and Reinau (2006)
Koh	1. Viewing 2. Posting	Very basic way of looking at virtual participation by users based on two categories of behaviour.	Koh, Kim, Butler and Bock (2007)

Model / framework	Participation stages (steps of the democratic ladder)	Description and status of the ladder	References
Lukens-meyer	1. Communication 2. Consultation 3. Engagement 4. Collaboration	Another general high level theoretical ladder to classify steps in participation.	Lukensmeyer and Torres (2006)
Macintosh	1. e-Enabling 2. e-Engaging 3. e-Empowering	Macintosh's model was made specifically for evaluation of electronic initiatives and others in this discipline have used this model.	Grönlund (2009); Medaglia (2007); Sommer and Cullen (2009)
Medaglia	1. Information 2. Consultation 3. Participation	In this ladder, participation is the highest stage of the participation ladder, but that is arguably redundant.	Medaglia (2007)
OECD	1. Information 2. Consultation 3. Active participation	The OECD accepted this model as a distinction between lower and higher forms of participation of governments in the countries that are part of OECD.	Grönlund (2009); Medaglia (2007); Sommer and Cullen (2009); Loukis and Xenakis (2008)

Model / framework	Participation stages (steps of the democratic ladder)	Description and status of the ladder	References
Preece and Scheider-man	1. Reader 2. Contributor 3. Collaborator 4. Leader	This is a specific model for social media participation. The perspective is from the standpoint of the user having various roles.	Chun and Cho (2012)
Tambouris	1. e-informing 2. e-consulting 3. e-involvement 4. e-collaboration 5. e-empowerment	Another variant of a participation ladder that mirrors the IAP2 ladder applied for electronic forms of participation. Accepted and used by the authority of the European Union.	Sæbø, Rose and Molka-danielsen (2010)

Table 6. Overview of theoretical participation ladders

Because of the inconsistent and various ways of defining and measuring participation (as Table 6 shows) in the literature, it is difficult to measure and compare levels of e-participation. "A problem with existing eParticipation models is that central concepts are not clearly defined and measurement scales are, consequently, not clear and often confuse different measures" (Grönlund, 2009, p.13). In general the evaluation of e-participation is not well developed (Sanford & Rose, 2007; Loukis & Xenakis, 2008). "The evaluation of both off-line and on-line participation 'is still a new and emerging area', which needs much more further research" according to Macintosh and White (Loukis & Xenakis, 2008, p. 806).
Moreover, the precise effects of using social media are not addressed well by these participation ladders (Dylko & McCluskey, 2013).

Macintosh (Grönlund, 2009 ; Medaglia, 2007; Sommer & Cullen, 2009) created a participation ladder with three stages of online participation, which is useful in explaining the Social media phenomenon. Macintosh's model seems most suitable for describing Social media participation levels. The borders between the steps on the ladder are relatively clear in comparison to other models and it is capable of distinguishing the levels for various stages of participation within electronic tools. Firstly, there is e-Enabling. This is mainly about giving access and information to members, citizens or users. The second stage is e-Engaging. During this stage, people can interact with the organization and start a dialogue. People being consulted for certain projects, decisions or activities for instance with forums and polls. The third stage is e-Empowering. This stage is about working together with users, members or citizens. Empowering them with responsibilities, tasks and options to allow them to collaborate with the organization.

2.6. Social media

The third key topic from the review is social media. One of the first and currently most cited definitions of Social media, published in scientific literature, comes from Kaplan and Haenlein (2010, p.61): "Social media is a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content". This definition makes it clear that social media is not a completely new generation of internet tools. Social media relies heavily on the concept of Web 2.0. "Web 2.0 is a term that was first used in 2004 to describe a new way in which software developers and end-users started to utilize the World Wide Web; that is, as a platform whereby content and applications are no longer created and published by individuals, but instead are continuously modified by all users in a participatory and collaborative fashion" (Kaplan & Haenlein, p.60). Hence, it can be argued that the term Social media is mainly a new label for an existing technology. Social media is the next step after Web 2.0 (Bonson, Torres & Royo, 2012; Kaplan & Haenlein, 2010). Kaplan and Haenlein (2010) emphasize, in their definition, that users can participate more actively in the processes of organizations by using web technology.

Participation seems to be the key concept that explains the difference between 'old' web and 'new' social media, although basic tools of interaction such as chat and forum were available in the early days of the World Wide Web. A remarkable example, showing the capability of user participation, is that of Barack Obama during his first presidential campaign in 2008. Obama's followers were actively participating in the campaign by creating and sharing their own Obama related campaign video clips via YouTube (Ren & Meister, 2010). It is argued here that Kaplan

and Haenlein definition neglects to include the importance of the underlying social friend networks that are linked by personal profiles. Previous work from Boyd and Ellison (2008), for example, pays more attention to these infrastructures in friend networks. The creation of Web 2.0 meant a shift towards the more participatory qualities of the web. Ordinary users were presented with the opportunity to engage more actively on the web by fostering their knowledge and helping a collective intelligence to develop (Fredericks & Foth, 2013). Web 2.0 came with the introduction of new engaging and empowering tools that were expected to significantly contribute to new means of user participation. However, newer forms of social media do not deliver great miracles enabling participation by just jumping on the bandwagon. Gustafsson (2013, p.1111) says that: "using social network sites alone does not drive previously inactive respondents to political participation".

At the time of writing, to our knowledge, only a few theories and standards exist for understanding the levels of participation within or through social media. Preece and Schneiderman (Chun & Cho, 2012) present a model of how participation evolves, called Reader-to-Leader Framework. The framework suggests four phases of evolution in social media participants: Reader – Contributor – Collaborator – Leader). This framework was not yet available when the first iteration took place. Furthermore, the framework is rather one-sided because it is from the perspective of the user and gives little attention to the other side (the organization).

With the changing Internet environment, there are opportunities to involve and empower people in non-profit campaigns and the work of representatives and government. This so called Crowdsourcing is a major challenge, which needs to take a different perspective on members of non-profit communities. For example, social media tools could provide opportunities for government to involve citizens in plan making (Fredericks & Foth, 2013). Therefore, it is necessary to change the perspective from content consumers to content producers (prosumers) (Wei & Yan, 2010; Rebillard & Touboul, 2010; Brabham, 2009; Flew & Wilson, 2010; Dylko & McCluskey, 2013). In most cases, this transition is difficult. It requires an additional level of trust in the members of the community. It turns out that only a minor group of users is responsible for almost all contributions. So called super contributors (Flew & Wilson, 2010). Moreover, this may result in creating a new 'web' elite instead of an equal representation of the communities.

A concept strongly related to social media, as indicated in literature, is the concept of digital divide. Online political participation is not equally representing all groups in society. Certain people are more interested and there are challenges in mobilizing young people politically

(Bridges, Appel & Grossklags, 2012). According to various authors, those politically active on the web are well-educated males with relatively high incomes and even relatively high age (Lilleker, Pack & Johnson, 2010; Hibberd, 2003; Moreira, Möller, Gerhardt & Ladner, 2009). However, there is a trend that the younger they are, the more active they are in contributing and participating (Wei & Yan, 2010; Saglie & Vabo, 2009; Bridges, Apple & Grossklags, 2012). In many cases politically interested people online, are similar to the politically interested people offline (Gustafsson, 2012). There is some evidence available to show that this divide is reducing, levering political engagement with an increased participation of women and younger people (Holt, Shehata & Stromback, 2013; Schuster, 2013).

Next to political and citizen participation, studies are available relating to societal use and social behaviour that are related to the phenomenon of social media. The concept of social capital plays a key role in this (Brandtzæg & Heim, 2009; Ellison, 2007; Karahasanović et al., 2009; Tomai et al., 2010; Valenzuela, Park & Kee, 2009; Vergeer, 2009). For instance, there is some evidence for the idea that the use of Social media increases social capital for political participation (Zhang, Johnson, Seltzer & Bichard, 2010). As the participation research field is much broader than citizen participation, more research should be carried out with regard to political parties, their members and elections.
With the rise of social media, non-profit communities could create opportunities for participation: enabling, engaging and empowering members and followers creating various benefits.

2.7. Discussion

Social media and participation is an emerging field of research. The literature review and its analysis have revealed the following research gaps. Firstly, almost no studies in published literature so far address the participatory value of social media within religious communities, such as churches. Moreover, these studies provide us with limited theory for addressing the effects on participation. Secondly, while there is some attention to the subject of citizen participation and democracy, specific attention to the development of frameworks, theory and measurement of effects of social media within political parties is rather limited.

The literature provides some theoretical concepts that are of value for this thesis. Firstly, there are participation ladders available to help us understand differences in levels of participations. However, these ladders are not yet made specifically for classifying social media practices.

Second, from literature we can derive that social media cannot be seen as a completely new toolset. Social media as a concept is, to a large extent, only a new label for existing technologies. It evolved from Web 2.0 and uses the same key principles for user participation. The user is not only a consumer but a producer as well. As the literature study revealed, there is an already established group of academics that form a research community around the subject of e-participation. These theoretical insights from the participation ladders will underpin the constructs of the social media participation model to be introduced in the next chapter. More specifically, the framework of Macintosh offers the best fit with the measurement of social media participation levels because of its clear structure and its application by others.

The literature study also indicates the importance of studies that focus more on the organizational effects of social media and on more sophisticated measurement methods and specific attributes to measure results.

There are also a few limitations regarding the literature review as presented in this chapter. The literature review only covers items that were retrievable via electronic subscription services. Only English language material was used. Moreover, the literature review was not aimed to give a complete overview but had an exploratory goal to find existing methods, theories and standards to evaluate social media effects within the nonprofit field. Other keyword combinations could have delivered other insights. It did not try to cover all the relevant theories for this study because it focused on the participatory value of social media and how to evaluate and measure effects. Therefore, other specific literature studies were carried out in other phases of this study. For example more knowledge was necessary from literature to understand the choice and decision making process behind social media campaigns. Another example is the state of the social media strategies field. In the following chapters it will become clear how that knowledge was acquired from literature as well. The findings of those studies are integrated into the following chapters.

The literature review identified relevant theoretical backgrounds that could underpin this study. In the next chapter the Social Media Participation Framework will be developed from these theoretical backgrounds. Additionally, the next chapter presents more theoretical backgrounds to underpin the concepts and constructs of the framework.

3. Defining the Social Media Participation Framework for Nonprofit Communities

3.1. Introduction

Latour (2005) claims that the products of a new technology have an impact on society. This could also be the case with social media. People are more connected to each other, regardless of time or place because of new social media technologies. Traditional forms of communication are increasingly replaced or augmented by media networks (Van Dijk, 2006). "Being wired" has the potential to encourage community building (Shah et al., 2002). Since people have increasingly adopted social media, measuring the effects of social media participation on community participation has become more important. However, currently, we lack effective evaluation methods. The systematic literature review that was presented in Chapter 2 revealed that there is a lack of specific theories, frameworks and measurement instruments to capture the effects of social media on nonprofit communities. Furthermore, our review indicated that existing instruments such as participation ladders from the e-participation field are not directly suitable for evaluating the effects of social media. Finally, the literature review revealed that the available instruments in literature primarily focused on previous web tools such as forums, chat and online surveys instead of social media (Phang & Kankanhalli, 2008; Roeder et al., 2005; Stern, Gudes & Svoray, 2009).

In this chapter a theoretical framework is developed that aims to underpin studies regarding the effects of social media on a community. The development of such a theoretical framework can guide both researchers and practitioners towards more precise insights and more effective social media practices.

This chapter is based on: Effing, R., Van Hillegersberg, J., & Huibers, T. W. C. (2012). Measuring the effects of social media participation on political party communities. In C. G. Reddick & S. K. Aikins (Eds.), *Web 2.0 Technologies and Democratic Governance* (Vol. 1, pp. 201–217). Springer.

Therefore, the research question addressed in this chapter is:

RQ3 How to develop a theoretical framework which is capable of serving as an empirical lens in evaluating the effects of social media on offline participation within nonprofit communities?

To analyse the effects of social media participation on nonprofit communities two concepts are key: Social Media Participation and Offline Community Participation.

Drawing on these concepts, the aim is to discover to what extent participation in social media affects the offline participation of community members. This means it is assumed that there is a causal relationship between the concepts of Social Media Participation and Community Participation.

We assume that a causal relationship exists between the two concepts. Our grounds for assuming this are threefold:

1. The number of relationships between people tends to increase when people use social network sites, because these sites reveal relationships by making them visible (Boyd & Ellison, 2008). Consequently, people connect more easily with each other. For example, a study of Tomai et al. (2010) showed that members of the virtual community in a school had significantly higher levels of bridging social capital. "Bridging social capital arises when people from various backgrounds make connections entering social networks that are 'inclusive' and therefore favour participation of individuals who differ on many crucial variables such as income, political orientation, ethnic origin, religious affiliation, etc." (Tomai et al., 2010, p. 265).

2. Online behaviour changes offline behaviour. For instance, the use of social media can reduce the transaction costs of communication (Ren & Meister, 2010). Consequently, this can lead to other choices in communication channels for certain tasks. While online communication can replace certain forms of offline communication, studies show that online relationships do not replace offline relationships, but augment them (Vergeer & Pelzer, 2009).

3. If people are connected online, this is believed to contribute to a general feeling of attachment to the community: the Sense of Community. People are confronted with their connection to the community in other places and at other times, which makes them more frequently aware of their existing relationships. Consequently, this can increase their feeling of being part of the community in general (Tomai et al., 2010).

However, while the direction and causality of the assumed relationship are presented here in a straightforward way, the reality can be more complex. There are studies available that hypothesize that the connection between social media and having many connections should be the opposite (Hage, Van Offenbeek & Boonstra, 2014). In the case of reversed causality, a rich social life in the offline world will stimulate someone to make more connections with others via social media channels (Hage et al., 2014).
We should be aware that an already high level of Sense of Community could influence the willingness to use social media to meet other community members. In that case, offline relationships may be mirrored in online relationships (Shah et al., 2002). Also, it could be that the two concepts influence each other in cycles. It could be that a high level of Sense of Community leads to higher Social Media Participation because of more incentives to follow community members. And that could lead again to higher levels of a Sense of Community.
Given the reasons above, Social Media Participation is assumed to have a causal influence on Community Participation over time. The case studies, presented further on in this dissertation, will shed some light on the empirical evidence for this assumption.

The remainder of this chapter is structured as follows. In the next section, Social Media Participation will be defined in more detail by operationalizing this concept. In the third section, the same process will be carried out for the concept of Community Participation. In the final section, the theoretical framework is presented and discussed.

3.2. Social Media Participation

In this section, the term Social Media Participation is further subdivided into two constructs (Figure 3). This section provides an operationalization for the constructs of Social Media Use and Social Media Choice.

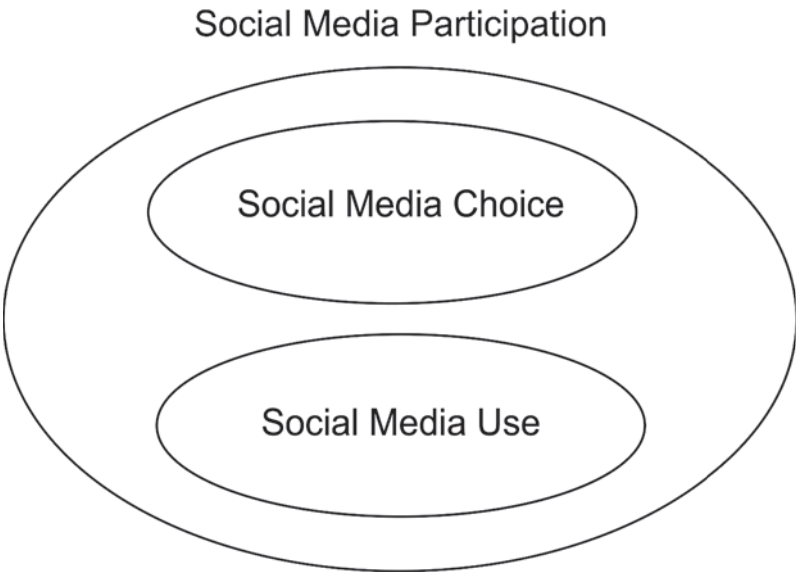

Figure 3. Constructs of Social Media Participation

3.2.1. Social Media Choice

"Nothing impacts the success of a social media effort more than the choice of its purpose." (Bradley & McDonald, 2011) Social media channels are not effective for everything. For some politicians, participating in social media seems to be a goal in itself. Not all communication by social media is appropriate for all communication strategies. According to Te'eni (2001, p.1), "current technology can affect not only how we communicate but also what we communicate." Therefore, the choice and appropriateness of social media has to be taken into account when determining variations in the impact on the dependent concept of Community Participation. This part is illustrated in the bottom construct of Figure 3. According to Rice (1993, p.453), media appropriateness is "a good match between the characteristics of a medium and one's communication activities".

From our open interviews with Dutch political parties in 2010, we learned that one of the explanatory factors for possible influences were the underlying communication strategies (Effing, Van Hillegersberg & Huibers, 2011). Furthermore, in the cases of Obama, Dean and

Royal, all of them thoroughly thought about both choice of and strategy for using various social media for different purposes and target groups (Christakis & Fowler, 2009; Citron, 2010; Greengard, 2009; Lilleker, Pack & Jackson, 2010; Montero, 2009; Talbot, 2008; Ren & Meister, 2010; Zhang, Johnson, Seltzer & Bichard, 2010). The combination of our earlier studies and the experiences of Obama, Dean and Royal make a strong case for us to include social media choice aspects in the conceptual framework.

An extensive body of literature is available from the fields of communication and information systems, focusing on the choice, capacities, strategies and appropriateness of media. After a literature analysis, based on the relevance and frequency of citations, the theories of Social Presence (Short, Williams & Christie, 1976) and Media Appropriateness (Daft & Lengel, 1986; Rice, 1993) were selected as related theories for this construct of Social Media Choice. Although all of those theories have certain shortcomings, they provide a helpful theoretical background for understanding differences in the appropriateness of social media. The theories of Social Presence and Media Appropriateness should not be applied too strictly, because users effectively learn to cope with the limitations of digital communication and they invent ways to transmit social cues through these media (Morris & Ogan, 1996; Kim, 2010; Lowenthal, 2010).
In the selected theories, various communication strategies are presented.

For example, Short, Williams and Christie (1976) present the following communication activities:

- Exchanging information.
- Problem solving and making decisions.
- Exchanging opinions.
- Generating ideas.
- Persuasion.
- Getting the other on one's side of an argument.
- Resolving disagreements or conflicts.
- Maintaining friendly relations / staying in touch.
- Bargaining.
- Getting to know someone.

Media differ in terms of their efficiency and capability of reaching the desired outcome of communication strategies. According to Short, Williams and Christie (1976), media vary in Social

Presence, which is "the degree to which a medium is perceived as conveying the presence of the communicating participants". Social media differ in terms of their capacity to transfer Social Presence. However, "whether it is a mediated environment or not and whether the medium is rich or poor, social presence can be perceived differently by individuals" (Kim, 2011, p.764). As a result, social presence through various media is not completely dependent on the capacity of the selected medium. Furthermore, researchers stated that computer mediated communication was inherently impersonal because non-verbal and relational cues, that are common in face-to-face communication, are filtered out most of the time (Lowentahl, 2010; Walther & Parks, 2002).

Apart from Social Presence, media can also differ in terms of the level of interaction. In regards to different forms of media, differences exist in their capacity to handle immediate feedback from the communicating participants and differences in the way social cues are shared can be part of the communication. According to Daft and Lengel (1986, p.560), "media vary in capacity to process rich information". Information richness is defined as: "the ability of information to change understanding within a time interval" (Daft & Lengel, 1986, p.560). In that sense, the amount of time required for a medium to provide understanding is also considered an important element when considering the richness of a medium.

Rice (1993) was one of the first to apply the theories of Social Presence and Media Richness to new media. Based on the empirical evaluation of Rice (1993), people perceive the following hierarchy of Short, Williams and Christie in the appropriateness of media for communication activities:

1. Face to face (most appropriate for eight out of ten activities)
2. Phone (most appropriate for time-sensitive information)
3. Meeting (scheduling/organizing, temporal and physical obstacles)
4. Desktop video
5. Vmail
6. Text
7. E-Mail / (New media) (appropriate for exchanging information and time-sensitive information, asking questions, staying in touch)

Types of social media, as specific forms of new media, have different levels of appropriateness for different communication strategies (Kaplan & Haenlein, 2010; Kietzmann et al., 2011). Social media channels differ in the potential time it takes to receive feedback.

Social Presence mediated by social media is potentially lower than, for example, face-to-face conversations. However, video conferencing with a high-speed connection via Skype can be perceived as a form of higher Social Presence. This is because social cues are made visible through webcam-video and voice-transmission. Twitter, being mainly a text message micro-blogging system, is assumed to have a lower maximum of Social Presence than, for example, a personal YouTube web video, but followers have the ability to feedback immediately. Therefore, micro blogging is classified as an example of higher interactivity. Nevertheless, this feedback level is lower than in face-to-face or telephone communication. Social Network Sites, such as Facebook, offer opportunities to generate a certain level of Social Presence. Social Presence is increased due to the creation of personal profiles with interests, maintaining networks of relationships and sharing personal content, such as pictures and videos.

Kaplan & Haenlein (2010) provide an overview of social media types and their expected levels of social presence and media richness. This overview is displayed in Table 7.

Social Presence / Media Richness	Social Media Channel Type
Low	Blogs Collaborative projects
Medium	Social Networking Sites (e.g. Facebook) Content Communities (e.g. YouTube)

Table 7. Levels of social presence and media richness (Kaplan & Haenlein, 2010)

There are many considerations to be taken into account in nonprofit communities when selecting certain social media channels and neglecting others. The theories described here are helpful in assessing the appropriateness and capacities of various social media channels. Hence, the construct of Social Media Choice addresses the selection motives for social media channels, including considerations regarding its appropriateness.

3.2.2. Social Media Use

Effective measurement instruments - for the goals of this study - must be able to produce detailed data to evaluate and compare the use of social media by individuals. As the literature review in chapter 2 made clear, there is a lack of methods, theories and frameworks for this means. Therefore we developed our own instrument to operationalize the construct of Social Media Use.

The Social Media Indicator (SMI) described in this section is an instrument that we created for measuring the use of social media by individuals. It was specifically developed to provide a more comprehensive way of measuring and comparing the use of social media by individuals. Others who have investigated use levels of social media have focused on single social media channels, like Twitter, or have used more abstract indicators (e.g. Jungherr, 2012). The SMI divides the intensity of use of social media into two aspects: Contribution (sending information and content) and Interaction (discussion, dialogue). The instrument and its two aspects are based on the theory of Macintosh's participation ladder (Grönlund, 2009; Medaglia, 2007; Sommer & Cullen, 2009). Ann Macintosh created a three-step participation ladder, which is useful in describing the participation levels of the social media phenomenon at a high-level. Other e-participation ladders from literature were also evaluated (OECD, IAP2 and others in Chapter 2), but the model from Macintosh was considered to be most suitable for social media.

The participatory forms of communication related to social media fit well with the steps given in the ladder. Furthermore, the ladder's boundaries are better defined than in other theories. The first step on this ladder is e-Enabling. In this step, party members provide access and information to citizens. The second step is e-Engaging. During this stage, party members give opportunities to citizens to interact with them and start a dialogue. Citizens are frequently consulted on certain projects, decisions or activities, for instance through forums and polls. The third step is e-Empowering. This step is about members working together with citizens, empowering them with responsibilities, tasks and opportunities to collaborate with the party's community. Previous efforts in trying to empower citizens often failed (Phang & Kankanhalli, 2008; Roeder et al., 2005; Stern, Gudes & Svoray, 2009). This was due to immature technology and low user adoption rates. As social media matures, the challenge remains to discover how social media can accomplish e-Empowering. However, e-Empowering is not directly distinguishable from the SMI data without additional content inquiry. For this reason, we argue that Social Media Choice aspects should also be part of the analysis of Social Media Participation.

The Social Media Indicator comprises of a set of standardized questions that will deliver scores indicating the extent to which individuals are using social media. The scores can be used to indicate adoption levels of social media, but can also be used to assess both levels of contribution (e-Enabling) and interaction (e-Engagement). Therefore, in addition to total SMI scores, the instrument provides scores for Contribution and Interaction. Currently, the instrument measures the use of the following social media channels: Weblog (Blog), Facebook (Social Network Site), YouTube (Content Community), Twitter (Micro-Blogging) and LinkedIn (Social Network Site) because these are current channels in the social media landscape with large audiences. Over time, the instrument can be extended to include other relevant social media channels.

The questions the Social Media Indicator asks are presented in Table 8.

Contribution (e-Enabling)
In the case of a Blog, how many Blog Posts?
In the case of a personal Facebook account, how many friends?
How many videos are posted on a personal YouTube channel?
Based on all videos from this YouTube channel, how many times have they been viewed?
Based on this YouTube channel, how many subscribers?
In the case of a personal Twitter account, how many tweets?
In the case of a personal Twitter account, how many followers?
In the case of a personal LinkedIn account, how many connections?
Calculate sub score for contribution: Sum of the above.
Interaction (e-Engagement)
In the case of a Blog, how many replies?
In the case of a personal Twitter account, how many following?
In the case of a personal Facebook account, how many likes?
Based on all videos on YouTube, how many comments?
Based on latest 200 tweets of Twitter, how many retweets?
Based on latest 200 tweets, how many replies?
In the case of a personal LinkedIn account, how many recommendations?
Calculate sub score for interaction: Sum of the above.
SMI Score (Per member) = Sub score Contribution + Sub score Interaction

Table 8. Social Media Indicator (SMI)

After investigating the SMI questions and acquiring the data, it is possible to calculate and compare the personal SMI scores for each member of a community. All the questions represent some key indicators of use and impact. The contribution scores also takes into account the reach in terms of network size. However, we did not strive for completeness in the included social media channels. Furthermore, the list of indicators was limited to those metrics that were publicly available for comparison. For example, 'number of posts on Facebook' was not included as a metric in the first version because there were issues caused by manual observation as well as privacy reasons. In the current version of the SMI, as displayed in Table 8, every act of communication represents one point, to provide an equal value for each person-to-person interaction, regardless of the medium. A time interval must be defined before collecting the data. Over time, measurements can be repeated to show how usage develops.

The SMI makes use levels of individuals (who are members of groups and communities) in social media more visible and comparable. To illustrate the relevance and usefulness of the SMI an empirical example shows its capabilities.

The SMI was tested in exploratory studies. The cases used were those of the national elections in the Netherlands in 2010 and 2012. We tested the instrument, at national level, on all Dutch political parties and all candidates in the Second Chamber election. It was able to collect data that was then used in the calculation of statistically significant correlations during the 2010 and 2012 Dutch elections (Effing, Van Hillegersberg & Huibers, 2011; Effing, Huibers, De Krosse & Brandenburg, 2012). In the example above, the relationship between social media and the election results were analysed by using the SMI in comparison with preferential votes. Politician's personal SMI scores were compared with their received preference votes total. Scatterplot diagrams and the calculation of Spearman's rank correlations revealed the following outcomes: One negative significant correlation and a few positive significant correlations were found between SMI and votes as illustrated in Table 9 and 10.

Positive correlation > 0.5	Positive correlation > 0.3	No correlation found <0.3
PvdD	CDA	VVD
Piratenpartij	PVDA	Groenlinks
	D66	PVV
	Christenunie	SGP
	SP	TON
	TON	Nieuw NL
	Lijst17	MenS
		Partij één

Table 9. Correlations between SMI and voting outcome in NL national elections of 2010

Positive correlation > 0.3	No correlation -0.3 - 0.3	Negative correlation < -0.3
PvdA	CDA	Groenlinks
VVD	Christenunie	
50 Plus	SP	
PvdD	D66	
	PVV	
	SGP	
	D66	

Table 10. Correlations between SMI and voting outcome in NL national elections of 2012

The differences in correlations could be a result of differences in their target audiences, content strategy and other factors, but these factors have not yet been thoroughly explored. Although the empirical results show that Social Media Use in nine out of sixteen cases has a positive relationship with voting outcome, the study could not completely explain what determined the relationship (Effing, Van Hillegersberg & Huibers, 2011). This emphasized the need for further research. Furthermore, for six parties, the relationship was not significant. To understand what determines effectiveness in Social Media Use, additional interviews with Dutch political parties indicated that the presence of underlying strategies partly determined the variations in the effectiveness of social media. For example, in 2010, the party PvdD worked with a comprehensive plan which underpinned their social media campaigns. Differences in target group could also partly explain variations in the significance of the correlations.

Most of the data necessary in calculating the SMI scores was available from open databases. Although certain statistics are not accessible due to privacy settings, the majority of personal data on Social Network Sites is publicly accessible (Boyd & Hargittai, 2010). In cases where authorization is required to access the required data, collaboration with the communities - that are the subject of study - can be the solution. Since the field of political communication is to a large extent public debate, access to data is not a key problem in that particular field. In religious communities it is more often the case that a large amount of the data is protected for privacy reasons.

In this study's projects, the top five social media channels were included, which represent of the vast majority of all social media traffic. That was based on the numbers of advertisement-reach from market researchers. In the Netherlands, for instance, Hyves was one of the largest Social

Network Sites in 2010, therefore, it was part of the Social Media Indicator to obtain valid results. In 2013, Hyves was discontinued due to a large decline in use.
Since the SMI only serves as an indicator, it is unnecessary and impractical to include all available social media channels. Social media channels with low adoption rates are not included because of their low reach. However, there could be specific reasons for including social media which are less common. For instance, political party communities or church communities might use the internal Social Medium called Yammer. In that case, this social media channel should be included.
Indicators should be investigated carefully, before being included into the SMI. Because social media channels can have very different purposes (Kaplan & Haenlein, 2010) the selection of indicators is made more difficult. Also, certain indicating questions could provide invalid results. For example, the view count of Hyves in the Netherlands was not a valid indicator of impact because artificial users such as search engine spiders heavily skewed the results. In such a case, the total apparent score is biased.

At this point, all relevant constructs of the concept of Social Media Participation have been discussed. Now, we will elaborate upon the concept of Community Participation.

3.3. Community Participation

Offline Community Participation is addressed in this study by two constructs as shown in Figure 4. The first construct is Community Engagement. The second construct is Sense of Community.

Figure 4. Constructs of the concept of offline community participation

3.3.1. Community Engagement

To evaluate the level of general offline community engagement, we collected data about individual members' activity within the community. Community engagement is a generic term to include certain kinds of interaction and activities from someone in a community. The specific interpretation of community engagement in describing a process of interaction between government and local groups is not the subject of this study. The type of community engagement that is part of this study is about the level of engagement by a member within his/her community.

The following list displays a few examples of indicating metrics for community engagement:

- The time spent on their membership;
- Frequency of presence at meetings;
- Money donated;
- Number of Legislature Bills, requests or ideas contributed.

Asking survey questions to retrieve this data is possible, but could deliver some somewhat biased results (Borgatti, Mehra, Brass & Labianca, 2009). One of the reasons is that asking respondents directly will influence them, because they then may become aware of their (lack of) engagement. Unobtrusive methods are preferable to obtain similar data, such as document or database analysis.

In addition to the data mentioned above, basic social network analysis provides data showing how community members are connected with each other. "The two indispensable elements of any social network are actors and relations" (Knoke & Yang, 2007, p.6) By visualizing the relationships of community members into graphs it becomes possible to see how people are connected to each other. Social network analysis has received an increasing amount of attention in literature in recent decades (Otte & Rousseau, 2002). The value of social network analysis is respected in various fields such as sociology, the information sciences, computer sciences, and geography. (Otte & Rousseau, 2002). Social network analysis will help us to see structural relationship patterns as characteristics of the social structure of the community (Borgatti et al., 2009; Knoke & Yang, 2007). Understanding of the social structure of relationships between members in the community helps to shed light on regularities in the patterns of relations among the members (Knoke & Yang, 2007). However, Borgatti et al. (2009) make it clear that social network analysis has received criticism for being merely descriptive in nature. Combining it with other types of research ensures that social network analysis is used as a triangulation of results.

Otte and Rousseau (2002) present an overview of key measures related to social network data (Table 11).

Measure	Description
Density	The density is an indicator of the level of connectedness within a network. It is given as the number of lines in a graph divided by the maximum number of lines.
Degree centrality	Degree centrality is equal to the number of connections that an actor (a node) has with other actors.
Closeness	This indicator is more general than the previous one, as it takes the structural position of actors in the whole network into account. A high closeness of an actor means that he or she is related to all others through a small number of paths.
Betweenness	This measure is based on the number of shortest paths passing through an actor. Actors with a high betweenness play the role of connecting different groups, as 'middlemen'.
Cliques	Sub graphs consisting of three or more nodes.

Table 11. Key measures from social network analysis data (Otte & Rousseau, 2002)

Social network analysis provides insight into how people in a group are tied to each other. For example, the community may be formed around one powerful leader, while in other cases, the community power is distributed amongst many members. People tend to influence each other (Fowler & Christakis, 2008). Christakis and Fowler (2009) showed, for example, that being connected to each other in a social network influences political party campaigns, voting and co-sponsorship within politics. Making basic network diagrams of a community network can help us to understand how communication, power and influence within a community are distributed (Cross et al., 2002; Christakis & Fowler, 2009; Knoke & Yang, 2007). In addition, subgroups, cliques, powerful leaders or disengaged members tend to become visible. The investigation of those elements and networks can be repeated over time to see how the community engagement develops or collapses. "While social network information can be obtained in a variety of ways, the most pragmatic means in organizational settings is typically through surveys" (Cross, Borgatti & Parker, 2002, p. 27).

Community Participation is also determined by softer factors such as the Sense of Community, which will be discussed below.

3.3.2. Sense of Community

Measurement of participation within political communities involves more than measuring Community Engagement. The Sense of Community largely covers the psychological aspect of Community Participation (Figure 4).

David Chavis has contributed much to the scholarly literature in regard to Sense of Community (McMillan & Chavis, 1986; Chavis & Pretty, 1999; Chavis, Lee & Acosta, 2008). The concept of Sense of Community has been used in numerous social studies (Chavis, Lee & Acosta, 2008; Chipuer & Pretty, 1999). Sense of Community (SOC): "...is a feeling that members have of belonging, a feeling that members matter to one another and to the group and a shared faith that members' needs will be met through their commitment to be together." (McMillan & Chavis, 1986, p.9)

Sense of Community consists of four elements (McMillan & Chavis, 1986, p.9):

1. Membership: "the feeling of belonging or of sharing a sense of personal relatedness."
2. Influence: "a sense of mattering, of making a difference to a group and of the group mattering to its members."
3. Reinforcement / integration and fulfilment of needs: "the feeling that members' needs will be met by the resources received through their membership of the group."
4. Shared emotional connection: "the commitment and belief that members have shared and will share history, common places, time together and similar experiences."

It is difficult to reliably view the four elements in isolation because they influence each other (Chipuer & Pretty, 1999).

In literature there are many examples of studies regarding Sense of Community. There are published studies to explain the dynamics within various communities, such as neighbourhoods, youth gangs, kibbutz, churches, workplaces, schools, universities, recreational clubs and Internet communities. The Sense of Community theory does not limit itself to a certain type of community and is therefore useful in describing and comparing various types of community. McMillan and Chavis (1986, p.19) argue that "because of their common core, although our four elements will be of varying importance depending on the particular community and its membership. These elements, then, can provide a framework for comparing and contrasting various communities".

The last few decades have seen frequent testing and refinements in measuring Sense of Community. " The theory of Chavis was, during this research, the most comprehensive theory regarding Sense of Community (Zhang, 2010). One of the most refined measurement instruments is the so-called Sense of Community Index-2 (Chavis, Lee & Acosta, 2008). It consists of 24 statements that individuals can respond to on a Likert scale. The SCI-2 was used in a survey of 1,800 people and the measure's reliability was found to be very high (coefficient alpha= .94). This SCI-2 instrument is suitable to evaluate how strongly members feel attached to their political party's community. Also it is possible to measure how the Sense of Community develops over time, when measurements are repeated.

3.4. Discussion

Now that the theoretical framework for measuring Social Media Participation and Community Participation has been described (Figure 5), all the elements of the framework for this thesis have been elaborated upon.

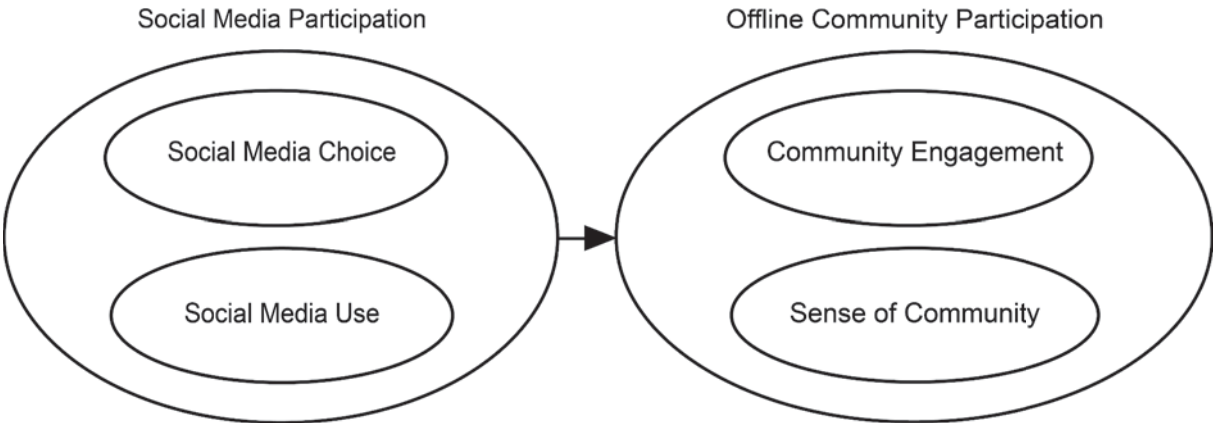

Figure 5. The Social Media Participation Framework

A summary of the operationalization of the constructs in the framework is displayed in Table 12. In the next chapter more details of the research design will be presented and methods will be introduced that were used to test the framework for gathering data from case studies.

Concept	Construct	Theory	Reference
Social Media Participation	Social Media Choice	Media Appropriateness	Rice (1993); Kaplan and Haenlein (2010)
		Social Presence	Short, Williams, Christie (1976); Kaplan and Haenlein (2010)
	Social Media Use	e-enabling	Macintosh and Smith (2002); Effing, Van Hillegersberg and Huibers (2011)
		e-engagement	Macintosh and Smith (2002); Effing, Van Hillegersberg and Huibers (2011)
Offline Community Participation	Community Engagement	Social Network Analysis	Christakis and Fowler (2009); Borgatti et al. (2009)
	Sense of Community	Psychological Sense of Community	McMillan and Chavis (1986); Chavis, Lee and Acosta(2008)

Table 12. Operationalization of the Social Media Participation Framework

In this chapter, the Social Media Participation Framework, as illustrated in Figure 5, was presented by addressing its concepts and constructs. Four measurement-constructs from theory and practice were combined into one integrated framework. The framework can be valuable to use as a comparative lens in case studies. Furthermore, the framework can be further refined after it has been used in studies and more is learnt about the relationships between the constructs. Consequently, the case findings were used to develop a revised version of the framework. The revised version is presented in Chapter 9.

In the following chapter a research design will be presented that is based on this framework.

4. Case Study Design

4.1. Introduction

The main approach to testing the theoretical framework, as described in the previous chapter, is based on a multi-method case study design (Mingers, 2001; Tashakkori and Teddlie 1998; Jick, 1979; Creswell, 2003). A multi-method case study design, based on Robert K. Yin's (2009) applied social research methods and was considered most appropriate for testing the value and limitations of the new theoretical framework, described in the previous chapter. Since organizations are highly dynamic constructs, with many influencing factors and underlying mechanisms, case studies can shed some light on what is happening within its natural organizational surroundings (Yin, 1994).

Case studies typically combine data collection methods (Eisenhardt, 1989). The evidence can be both qualitative and quantitative. Multiple data collection methods strengthen the grounding of theory by triangulation of evidence (Eisenhardt, 1989). Furthermore, using multi-method research is especially appropriate for emerging topics that are not well understood (Eisenhardt, 1989, Mingers, 2001). There is still a debate in science about the appropriateness of multi-method research but some researchers endorse and encourage the use of multiple methods because of reasons of triangulation and because they generate richer theories in novel research areas (Creswell, 2003; Jick, 1979; Mingers, 2001; Tashakkori & Teddlie, 1998). However, the amount of work in IS journals having more than one method still remains a relatively small proportion. "Around 13% of those papers that have definite empirical content used more than one research method" (Mingers, 2001, p. 243).
To investigate the effects of social media within communities it is important to conduct a longitudinal study with multiple points of inquiry over time (Eisenhardt, 1989; Waters et al., 2009). This longitudinal approach gathers the effects caused over time by the use of social media in nonprofit communities (Waters et al., 2009). According to Waters et al. (2009, p. 106): "longitudinal studies could offer insights into how organizations change their social networking strategies over time, and case studies should be conducted to help offer insights for other organizations based on efforts that have both succeeded and failed".

Given the immaturity of this research field, an important aim is also to increase understanding of the reasons, motivations and perceived value of social media for nonprofit communities.

Both qualitative and quantitative methods are used to enrich and triangulate findings in the multidisciplinary field. "By creating a design using diverse methodologies, researchers are able to achieve greater insight than if they followed the most frequent method encountered in the literature or suggested by a disciplinary bias" (Bumberg, Cooper & Schindler, 2011, p.57) A multi-method study should aim to give a more thorough understanding of the topic (Creswell, 2003; Eisenhardt, 1989; Mingers, 2001). For example, the technique of social networking analysis could augment data gathered via surveys or interviews.

A case study is "an empirical inquiry that investigates a contemporary phenomenon within its real life context; when the boundaries between phenomenon and context are not clearly evident" (Yin, 2003, p.23).

Three case studies play a key role in this dissertation. These longitudinal case studies provide us with different natural surroundings regarding the effects of social media participation on (offline) community participation.
This chapter explains the design of three case studies following the Social Media Participation Model as explained in the previous chapter. The three cases are as follows. The first case comes from the political landscape: the case study regarding Enschede council and its nine political party factions. The second case study is from a traditional church community: the Roman Catholic Church parish. The third case study is from a local community from the Apostolic Society, which is non-Christian, but has a church-like organizational structure.

This chapter is structured as follows. First the case selection will be elaborated upon. Then there will be a section about the data collection techniques. After that, a section will follow consisting of guidelines for the case data analysis. The final part of this chapter is the discussion section with an overview of limitations.

4.2. Case characteristics and selection criteria

		Nonprofit field			Geographical Place					Population characteristics		Focus	
Case Id	Case Type	Normative	Political	Religious	Country: Netherlands	Province: Overijssel	Region: Twente	City: Enschede	City: Oldenzaal	# Sub communities	# members selected	All members	Leading members
1	City Council	X	X	-	X	X	X	X	-	9	28	X	X
2	Church Parish	X	-	X	X	X	X	-	X	9	90	-	X
3	Religious Society	X	-	X	X	X	X	X	-	-	300	X	X

Table 13. Case study characteristics

In Table 13 an overview is presented of the various characteristics of the cases to explain some of the similarities and differences. The cases are to a large extent from the same region in the Eastern part of the Netherlands. As a result, the members and volunteers of the selected communities share the same societal environment. Two of the cases can be seen as religious types of communities while the remaining one is political in nature. While both the council and the church parish have nine sub communities, the Apostolic Society is a small local community without separate communities.

The focus within the studies is concentrated on the leading members: volunteers who take part in, for example, organizational or pastoral tasks. More selection criteria for the subjects is presented in Table 14.

Phase	Target subjects	Criteria
Exploratory Phase Qualitative Interviews	- Limited number of key informants - Knowledgeable regarding the topic - Experience within the organization of the community - Good insight into stakeholders expectations	- Capable of having an overview - Expected to have views regarding social media
Measurements	- All leading members of the community* *For example the pastoral team (including professional clergy), the overall parish board, local church community boards and voluntary groups with pastoral tasks - Limited to a maximum of 100 members	- Leading characters - Inner circle - Have a responsibility / task** **Regular parishioners were excluded in the Plechelmus case study

Table 14. Selection criteria for the subjects in the case studies

Now that the relevant case characteristics have been described, the case design can be addressed.

4.3. Data collection techniques

The proposed design presented here is based on comparative case study research (Yin, 2009), including both quantitative and qualitative data collection techniques. Case studies typically combine data collection methods (Eisenhardt, 1989; Yin, 2009). The evidence can be both qualitative and quantitative. A mixed-method case study design, based on Robert K. Yin's (2009) applied social research methods, was considered most appropriate in addressing the research problem. Multiple data collection methods strengthen the grounding of theory by triangulation of evidence (Eisenhardt, 1989).

We propose a multi-level approach to studies incorporating both the individual level (e.g. the politician or volunteer) and the group level (e.g. the political faction or parish). The level of inquiry is at the individual level. For a more detailed understanding of the selection criteria of the subjects there is an overview displayed in Table 14.

To recognize effects, more measurements are required, to be taken with a interval of approximately one year in between. The data collection techniques for each of the constructs from the Social Media Participation Framework will now be presented.

4.3.1. Social Media Choice

A selection of members is invited to face-to-face, semi-structured, open interviews. Specific members are selected for interviews in collaboration with the selected case organization. The questions are partly exploratory, to get to know why they use social media and how and why choices were made for specific practices. The aim was to select members that would have distinct opinions, motivations, and beliefs about the topic (either negative or positive) or who were expected to provide comprehensive insights regarding the relevance of the topic. Another part of the interviews were based on the theories of Short Williams and Christie (1976), Rice (1993) and Te'eni (2001) and were more directly aimed at understanding their choices of social media practices whenever that was applicable. All interviews are recorded, transcribed and analysed.

4.3.2. Social Media Use

The Social Media Indicator (SMI) has been developed to compare how actively community members use social media (Effing, Van Hillegersberg and Huibers, 2012). This instrument was used in five prior studies, mostly regarding Social Media Use by political candidates and elections outcome. The division between e-Enabling and e-Engagement is based on the e-Participation ladder from Macintosh (Macintosh & Smith, 2002; Grönlund, 2009; Medaglia, 2007; Sommer & Cullen, 2009). Due to privacy settings some potentially valuable metrics are excluded from the Social Media Indicator, such as the number of Wall Posts on Facebook. Nevertheless, the SMI still provides useful indicative scores. The metrics of the SMI, as used in this study, are presented in Table 15 and are based on social media-reach numbers from market researchers ComScore and NewCom.

At the time the research started the Dutch social network site Hyves was still very popular in the Netherlands and therefore this channel was included. In 2013, The Telegraaf Media Group decided to close its national social network site. The cause being that vast amount of its users had switched to Facebook. Scores can be calculated with the metrics of the SMI to indicate members' use. Scores were calculated for all selected members of the church parish based on the profile information they provided us with in an online questionnaire.

Other social media with high reach can be added for specific studies. Scores can be calculated with the metrics of the SMI to indicate the use of members. Scores were calculated for all members of the Enschede council based on the profile information they provided us with in an online questionnaire.

Social media:	e-Enabling:	e-Engagement:
Facebook profile	# friends	# likes
Twitter account	# tweets	# following
	# followers	# retweets*
		# replies and mentions*
YouTube channel	# videos	# comments
LinkedIn	# connections	# recommendations
Blog	# posts	# replies
Hyves	# friends	# comments (scraps)
	# posts (www)	
MSN	# friends	
Total:	Sub score Contribution	Sub score Interaction

TOTAL SMI = SUB SCORE CONTRIBUTION + SUB SCORE INTERACTION

*of the last 200 Tweets (to limit contribution to total score).

#the number of

Table 15. The Social Media Indicator

4.3.3. Community Engagement

In the questionnaire there is also an inquiry about the average time members spent per week on their community affiliation. While such a question does not lead to very reliable information, since members can exaggerate or have different ways of counting, it does help us to understand how politicians perceive their own engagement levels. If there are more reliable ways to obtain engagement, these should be preferred. Additionally, social network diagrams were created for the primary communication relationships within the community. These network diagrams can be made once the member has been asked for a list of the top five other members of the community, with whom they communicate the most. This helps us to understand how communication, power and influence within a community are distributed (Christakis & Fowler, 2009; Tichy, Tushman & Fombrun, 1979).

4.3.4. Sense of Community

To measure the Sense of Community the SCI-2 instrument from Chavis, Lee and Acosta (2008) is used. It consists of 24 statements that respondents can respond to on a Likert scale and provides a standardized scoring instruction to evaluate belonging, influence, reinforcement and shared emotional connection. This questionnaire is for pre-selected members of the community and sub communities. The total SCI-2 score provides an assessment of the individual Sense of Community of a member. Whenever possible the questions are repeated for different echelons within the community. A community often consists of sub communities. For example, a church community could consist of both the overarching parish and underlying sub communities. Also it is common that political parties consist of various echelons. Because the scale of the SCI is based on 24 questions with each of them a scale of 0 to 3 points, there is a maximum score of 72 points for the SCI-2. Scores above the value of 36 are considered positive and scores below 36 are considered negative.

4.4. Guidelines for the Case Study Data Analysis

The four constructs and relationships are analysed as follows. For the quantitative constructs regular forms of statistical analysis (means, graphs and Std. Dev.) will be applied. For the qualitative interviews there is an exploratory approach to capture motivations, and underlying reasons for social media choices. Social networking analysis software, such as Gephi and Netdraw, is used to create network diagrams of the existing ties between members. Furthermore, to discover the effects, we applied various statistical calculations with SPSS such as correlations and repeated measures to explore possible relationships and effects between the constructs.

4.5. Discussion

The multi-method case study approach is considered appropriate for theory development. By conducting multiple case studies it is guaranteed that the observations are not drawn from only one particular case.

The case evidence is used to generalize the theory instead of using a statistical sample to make claims for the entire population (Lee & Baskerville, 2003). "The resulting theoretical statements could comprise, respectively, a theory positing new variables and the relationships among them" (Lee & Baskerville, 2003, p. 236).

However, the generalizability with regard to theory development from the outcomes of these case studies remains challenging because of three reasons. Firstly, it is difficult to control all circumstances and create general knowledge from the practices. This means that the outcomes of these case studies cannot be generalized and applied to other types of nonprofit communities. While the three case studies in this study are all from the nonprofit field, more specifically religious and political ones (both normative), they are still from distinct fields and small in number. Therefore, findings should not too easily be generalized (Lee & Baskerville, 2003). Moreover, the outcomes cannot easily be generalized and applied to other religious or political communities in the nonprofit field. The small number of cases clearly limits the generalizability. Secondly, Orlikowski argues that studying the effects of information systems is challenging considering that we have "no way of knowing or anticipating the range of possible unintended consequences that might attend a technology's use in practice and over time" (Feldman and Orlikowski, 2011, p.13). As a result, the theoretical framework that is used as a lens in these case studies will neglect other potentially relevant effects. The framework serves as a comparative theoretical lens for these cases that has to be tested by gathering empirical data but is not intended to capture full reality. Furthermore, the theoretical framework is not intended - in the first place - as a theoretical model to explain the exact relationships between variables. It serves as a conceptual lens based on theoretical backgrounds. The framework contributes to having a systematic approach in case studies to enhance our understanding of the effects of social media. Additionally, while the framework zooms in on specific aspects of the community, it neglects others. Thirdly, because of the lack of a closed system, probabilistic causal analysis is at least problematic (Gregor, 2006). Many factors are involved. The organizations in the case studies are complex phenomena with many people and relationships.

5. Case Study of a City Council

5.1. Introduction

This chapter presents a case study based on the Social Media Participation Framework. The framework was presented in Chapters 3 and 4 of this dissertation. The framework was used in this case study to explore the effects of social media participation on offline community participation. By using this framework as a theoretical lens it is possible to evaluate its constructs and enhance our understanding of the effects of social media.

The main aim of this chapter is therefore to explore the value and limitations of the Social Media Participation Framework by using it in a case study. The framework is used to underpin a case study and also to act as a lens, gathering data to assess the community effects of social media. This first case study regards local political party communities. Testing the framework in an empirical setting helps us to understand the limitations of the framework.

This chapter will therefore contribute to the following research questions of this thesis:

RQ2: What are the key factors that determine the effectiveness of social media practices in relation to sustaining offline participation within these communities?

RQ3: How to develop a theoretical framework which is capable of serving as an empirical lens in evaluating the effects of social media on offline participation within nonprofit communities?

In addition, this chapter will report findings that will help us understand the extent to which social media has had an effect on the political party communities of a local city council. Political party communities are relational communities for a professional cause and are not necessarily territorially bounded (McMillan & Chavis, 1986). The members of political parties are engaged in their communities because of shared beliefs, goals or interests.

Social media could change the game of politics both on a national and local scale. Politicians increasingly use social media such as Facebook, Twitter, Blogs, YouTube and LinkedIn. However, at the time of writing, not much research had been carried out to understand how social media affects local politics. Local politicians can use social media for various reasons (Rustad & Sæbø, 2013) however, some parties make social media participation too much of a goal in itself, without thinking about the purpose. Local politicians may think that integrating

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This chapter is based on: Effing, R., Van Hillegersberg, J. & Huibers, T.W.C. (2013). Social media participation and local politics: A case study of the Enschede council in the Netherlands. In *Proceedings of Electronic Participation, ePart 2013*, Koblenz (pp.57-68), Springer.

social media in their political work is not difficult. However, using social media in an effective way requires more than just creating profiles to have a social media presence. More attention should be paid to the effects of social media at a local scale. Local concerns should be an explicit part of the social media approach in order for it to be effective (Bottles, & Sherlock, 2011; Berthon, Pitt, Plangger & Shapiro, 2012).

Are social media channels such as Facebook, Twitter and YouTube beneficial to the local political communities or are they a waste of time? Does social media participation by members of the party contribute to a stronger party-community? Or is the opposite true? Local politicians have to be careful about spending too much time on social media because generally they have little time for their political tasks (Rustad & Sæbø, 2013). In order to maximize the impact of time and effort spent on social media, members of local councils could benefit from understanding the effects of these tools on their work and political communities. Municipalities and their councils are relatively close to their citizens in comparison to national parliaments. Yet politicians within such local political communities know little about the effects of their social media participation.

Some politicians hope for new revolutionary tools that can help to strengthen political communities. However, they should be careful: previous efforts in e-participation to strengthen political participation using Internet tools, such as Internet forums and chat, have not brought revolutionary outcomes (Anadiotis et al., 2010; Roeder et al., 2005; Stern, Gudes & Svoray, 2009;). Moreover, Vissers et al. (2012) state that, when looking for effects, there should be a distinction between offline and online forms of political participation. In their experimental study they claim: "web-based mobilization only has a significant effect on online participation, whereas face-to-face mobilization has a significant impact on off-line behaviour, which would imply that mobilization effects are medium-specific" (Vissers et al., 2012, p.152). Online campaigns may stimulate online participation, but could have only limited effect on offline participation.

The remainder of this chapter is structured as follows. Firstly, the case study from Enschede Council will be introduced by showing its context and by providing more details about the specific method. The next section presents the results from the case, following the constructs of the theoretical framework. The final section will provide room for discussion and acknowledge limitations.

5.2. Context and specific method

This section shows the context and method specification for the case study of Enschede Council.

The municipality of Enschede was interested in how social media affected the work of politicians within their council and its political party communities. The municipality is one of the largest municipalities in the Netherlands with more than 150,000 citizens. The municipality is located in the Eastern part of the Netherlands, close to the border with Germany. In April 2011 the initiative was taken to start this research project. A longitudinal case study was conducted between June 2011 and March 2013. The 39 members of the Enschede council were elected in March 2010. These members are part of nine different political party communities (political factions).

The research design of the case study follows the suggested methods as presented and elaborated on, in the previous two chapters. The main foundation of the case study is the Social Media Participation Framework. The case study is a longitudinal multi-method case study (See chapter 4). The researcher and his students took the role of observer and did not interfere with any social media planning, nor did they help the candidates in any other way. The case study started with a series of semi-structured interviews with key informants. 8 out of 9 parties accepted the invitation to conduct these interviews. These interviews were carried out to gain understanding of the Social Media Choice construct of the framework. The other constructs of the frameworks were addressed by two systematic measurements, which included data collection by surveys, and social media channel observations. Two measurements were carried out regarding the entire population of elected members of the council (n=39). The level of inquiry was individual. All individual members were asked to fill in questionnaires and their social media channels were systematically observed. Data was also aggregated at the political party community level. As a result, this multi-level approach also finds patterns in these political communities at group level. The first measurement (T1) was run from November 2011 until April 2012 (n = 29 response 74%). The second measurement (T2) was from October 2012 until December 2012 (n= 26 response 67%).

Now the results from this case study, based on the Social Media Participation Framework, will be presented.

5.3. Results

5.3.1. Social Media Choice

The interviews held with key informants, during the period October – December 2011, delivered the following results. Twitter is definitely the preferred social media channel of the council interviewees. The members believe Twitter is best in helping increase political engagement. However, members stressed the importance of "the physical side of communication … it is important to keep having conversations" (Interviewee). And, based on their experiences, the members do not think that social media is revolutionary for local politics: "Twitter did not deliver the miracle we hoped for in advance". Only one of the nine political parties prepared a social media strategy. Some parties had a few loosely defined agreements about what and how they communicate via social media. Overall, the parties did not approach social media strategically: "we are in the end amateurs, we just do something, in our free time … we would like social media strategies, but we need external help for that" (Interviewee).

One of the most active social media users of the council says that there are difficulties with interaction: "during the past months where I have been the spokesman on Facebook, I have created links to the documents we discussed so that people can read them and you'd like to see interaction as a result, but that doesn't happen."

According to the interviewees, the divide between citizens still remains, despite broader access to social media. Local politics have limited appeal to the citizens of Enschede. One interviewee says that there is a clear 'divide in mentality' in most of their citizens. It is like local politicians and the citizens speak different languages making it difficult to understand each other. The citizens that are engaged are the 'usual suspects' as one of the interviewees says. One of the problems is that citizens only start engaging when there is an acute problem in their municipality that directly affects them personally: "When it is the direct living environment and when it directly affects them, citizens know how to find the politicians" (Interviewee).

It seems very difficult to engage the younger citizens of Enschede in politics. Only the students of the local university seem to show some interest in local politics according to the interviewees.

As stated clearly by some interviewees, social media cannot entirely replace face-to-face communication. The appropriateness of the media has some limitations for certain types of political communication. For example, Twitter is not always appropriate for debate because it only provides room for short sentences and 'one-liners' according to three of the interviewees.

5.3.2. Social Media Use

Based on the Social Media Indicator scores of 2012 we discovered that 93% of the members of the Enschede council were using social media (n=28). 93% of all members used LinkedIn. 82% used Twitter. Figure 6 shows a chart of the Social Media Use scores from all members of the council, sorted from high to low (Entire history use until April 2012). The lighter areas of the bars indicate the part of the communication that is interaction (e-Engagement) while the darker areas indicate contribution (e-Enabling). The highest SMI score of a member in this measurement was 19,141. These scores were based on the sum of the metrics of the Social Media Indicator, as explained in Chapter 3.

The vertical axis presents absolute scores for the SMI. The horizontal axis presents unique members. The score represents the total of both Contribution and Interaction scores. It consists of the sum of all metrics such as number of posts, comments, likes and so on (For all metrics, see the Table Social Media Indicator in Chapter 3). It becomes apparent in Figure 6 that council members used social media primarily to spread their message and very scarcely to interact with others. Their social media presence was mainly a one-way-street with limited dialogue.

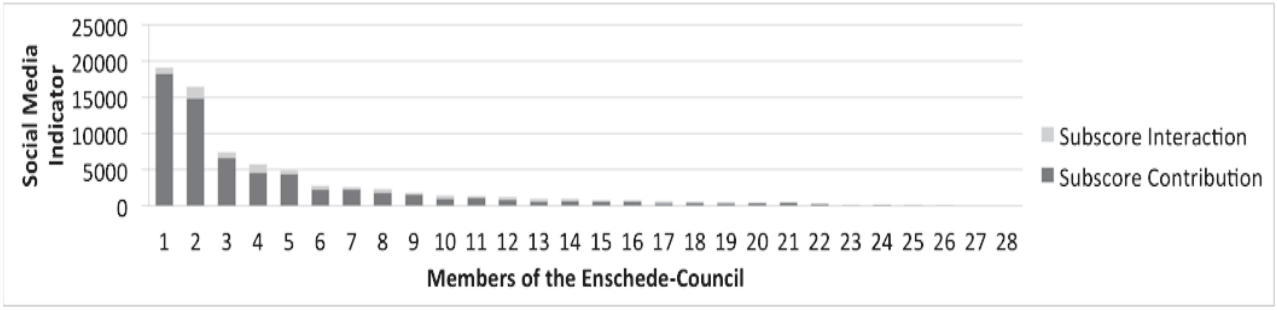

Figure 6. Social Media Use (Sorted high to low) of members on until April 2012

The second measurement captures a shorter period of time (April – November, 2012) and shows increased levels of interaction (e-Engagement) and fewer differences between members in comparison with measurement one in Figure 7. The highest score in the second measurement was 7,598 from the same member as the one ranked first in the first measurement.

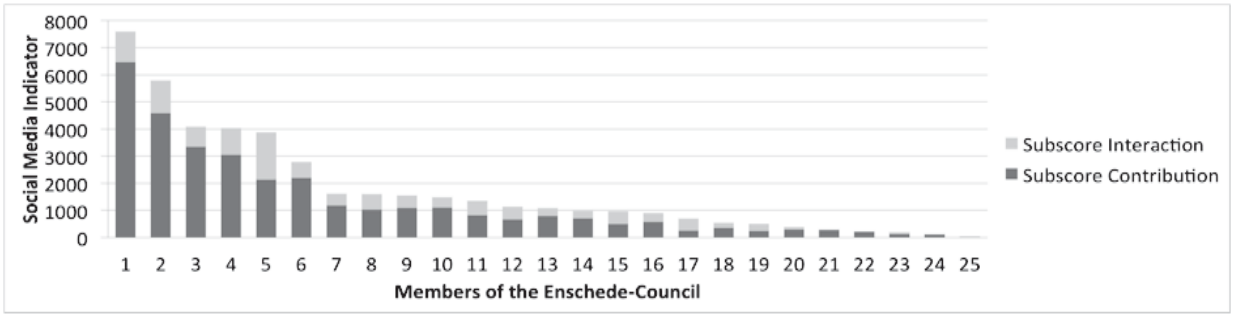

Figure 7. Social Media Use (Sorted) of members from April 2012 – November 2012

5.3.3. Community Engagement

In 2012, members of the Enschede council say they spend 23.8 hour per week on average (n=20) (Std. Dev. 7,9) doing their jobs. These outcomes they estimated themselves, as submitted in the survey.

The social network diagrams in Figure 8 show the primary communication ties between members. Every node is a person and every line a tie or relationship. Different colours refer to different parties. In the diagrams above, on first sight, it looks like the community of Enschede council has evolved toward a less fragmented community in November. However, measures from Social Network Analysis cannot support this idea. We have selected Density and Degree centrality as measures for this case study. The average for 'Degree centrality' has been reduced slightly from 1.216 to 1.183 (Table 16). The graph density has also reduced from 0.024 to 0.020 (Table 16). What we can conclude is that the communication has become less dependent on certain central members in the diagram (so called connectors).

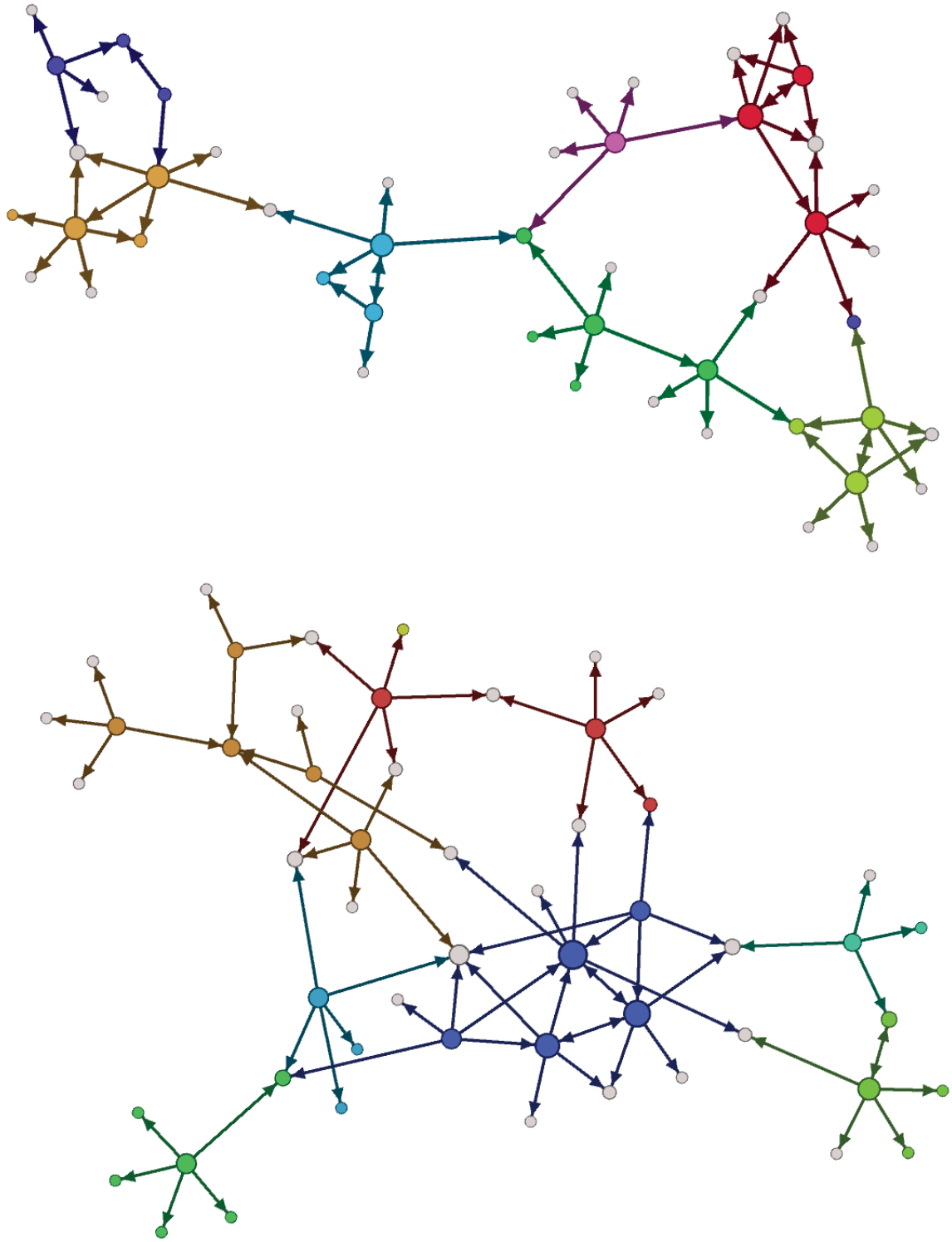

Figure 8. **Social network diagrams April (top) and November (bottom) 2012**

Measure	Description	April	November
Density	The density is an indicator for the level of connectedness in a network. It is given as the number of lines in a graph divided by the maximum number of lines.	0.024	0.020
Degree centrality	Degree centrality is equal to the number of connections that an actor (a node) has with other actors.	1.216 (average)	1.183 (average)

Table 16. Density and Degree of the network (Based on Otte & Rousseau, 2002)

5.3.4. Sense of Community

The SCI-2 scores, as presented below, in Figure 9 and Figure 10, represent the extent of the overall Sense of Community for each individual member of the political party communities. The scale has a maximum of 72 points (24 questions on a Likert scale). SCI-2 Scores that are 37 and higher can be interpreted as a positive Sense of Community.

96% (n=23) of the members of the council have a positive score (37-72) for the Sense of Community (SCI-2) within their party communities. The second measurement showed an increase of positive scores to 100% (n=21) but there are fewer scores in the highest category (55-72).

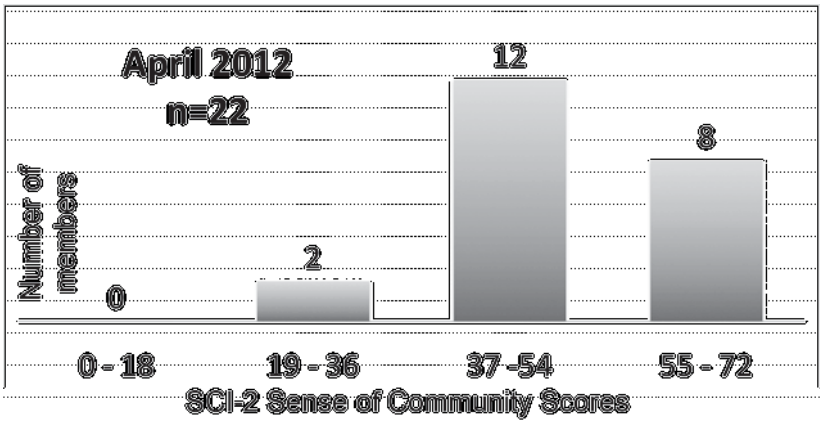

Figure 9. Measurement of SCI of members in April 2012

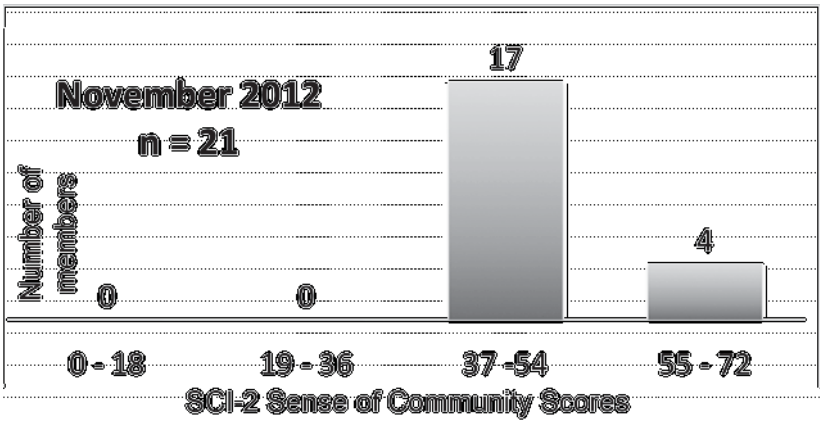

Figure 10. Measurement of SCI of members in November 2012

The Sense of Community scores can be divided into four aspects: Membership, Influence, Reinforcement of Needs, and Shared emotional connection (McMillan & Chavis, 1986). One of the sub scores was relatively low for almost all members: the shared emotional connection. This makes sense since the parties (factions) are primarily professional communities and offer fewer incentives for emotional bonding.

5.4. Analysis of Relationships

After performing statistical analysis a significant negative correlation between Social Media Use and Sense of Community of members was found. The Spearman's rho correlation is - .454* (*at the 0.05 significance level, n=23). This means that, on average, members who are relatively more active users of social media have relatively lower scores for Sense of Community. This correlation remained present in the second measurement although with smaller significance due to fewer respondents. The causal effects of the SMI on SCI were also investigated statistically. A check on variance was performed (with a SPLIT-PLOT ANOVA Repeated Measures) based on splitting the council into two groups. One group was the more frequent social media users (SMI above 1,000) and the other was a control group (SMI below 1,000). No significant variance was found to signal a causal effect during the period of investigation. This analysis did confirm that the group of frequent social media users have, on average, a lower Sense of Community than the control group of infrequent users. A possible explanation for this is that members who have the highest attachment to their party communities have potentially less time to invest in social media. It could also mean that members who are more focused on relationships outside their own party also use social media for that cause. Statistical correlation calculations between SMI and CE (Time spent) did not deliver any indications for a relationship between those constructs.

5.5. Discussion

Given the findings of this case study it is possible to evaluate the value and the limitations of the Social Media Participation Framework. The theoretical framework was useful in collecting data for the included constructs. However, collecting data for the four constructs of the framework took a serious time investment. Especially the manual observation of Social Media Use by the members, observing these aspects of the Social Media Indicator was time consuming.
The framework can be further refined to recognize more precisely how social media affects political communities as in the case of Enschede council and its political party communities.

By working with the Social Media Participation Framework and due to the specific design of the case study we noticed at least the following five limitations.
Firstly, monitoring the use of social media with this instrument has limitations for presenting the real-world behaviour of members. Members could have use-scores that actually represent a different background. Or an already existing large offline network size can influence the SMI score because the network size is often mirrored in online connections. Secondly, it is difficult to separate Sense of Community from online or offline behaviour and it could consist of various echelons (such as local versus national communities). Thirdly, the decision of members whether or not to participate in social media is sometimes dependent on a higher authority level in the political party, exceeding the communication strategies as provided in our framework. Fourthly, the framework was based on a linear causal view, while in reality the constructs could also influence each other in cycles, and over time, and maybe also reverse relationships play a considerable role (e.g. Community Participation influences the Social Media Participation). Finally, the effects of Social Media Participation on Offline Community Participation could be so modest that we need a much larger dataset to find clearer indications for these effects. Because there were many unexpected changes in the membership and formations within the council it became more difficult to measure relationships between the first and second measurements in time.

In the case of Enschede council it became apparent that social media participation by political parties and their members did not make much of a difference in the political game. Yet during the time of research, the parties seemed to struggle with finding effective ways to use social media for their own benefits. In Enschede, the parties have not yet professionalized their social media campaigns. Overall most of them have neglected to think about social media choice, goals, target audience selection and local concerns. This shows that they were lacking strategies for their social media campaigns. This result was also found in a study from Rustad and Sæbø (2013) regarding the members of the Kristiansand council in Norway.

The research revealed a negative correlation (-.454) between Social Media Use and the Sense of Community of council members. However, during the period of the research, the Sense of Community of members was not directly influenced by their Social Media Use. This outcome is puzzling. What causes the negative correlation? Do members that already have lower levels of Sense of Community tend to use social media more? This may be the case if there is less bonding with colleagues. Or is it valuable to be connected to others outside the party-fraction, connecting with citizens and organizations?

The following four possible explanations are given to address this counter-intuitive finding. Firstly, it could be the case that council members who are more active with social media are more focused on maintaining relationships with others outside their own parties. Their main goal in using social media could have been to reach citizens or to connect with other external stakeholders, instead of community reasons. It could also be that less active social media users focus more on bonding with party-colleagues. However, the findings of this case study give us reason to think that the council members did not manage to successfully engage with new groups of citizens. Local politicians mainly connect with their council colleagues and already established elites within the civic society (Rustad & Sæbø, 2013).

Secondly, online political participation perhaps has to be seen as being more isolated from offline political participation as indicated by Baumgartner (2009) and Vissers et al. (2011). Social media participation does affect community feeling with others in networks online and does affect offline, pre-existing forms of political communities, but only to a very limited extent. The assumption that political social media participation directly affects the community participation may not hold true.

Thirdly, there may be a shift going on from party-centred-politics to more personified politics (Enli & Skogerbø, 2013). This shift was also recognized in the qualitative interviews of this case study. Politicians are, in that case, less involved in their own parties, and are aiming to have a more individualized political presence. As a result this type of politician could have more interest in social media than their counterparts who are more community-driven.
Fourthly, it could be that politicians who are less involved or engaged in local political issues are more distracted by social media. Consequently, this could mean that social media is a negative phenomenon for local politics.

In an open system, such as a city council, it is not easy to isolate the influence of social media. While the Social Media Participation Framework was capable of finding a negative relationship between Social Media Use and Sense of Community, it could not yet explain the cause of this relationship. Further refinements of the framework and its constructs could help to gain more understanding of the community effects of social media.

6. Case Study of a Roman Catholic Church Parish

6.1. Introduction

This chapter presents another case study based on the Social Media Participation Framework as introduced in Chapters 3 and 4 of this dissertation. A second case study is presented here to evaluate the usefulness and limitations of the theoretical framework. By using the framework as a theoretical lens in various settings, it provides us with a more thorough understanding of the value and limitations of the framework in studying the effects of social media within non-profit communities. The aim of this chapter is to test the Social Media Participation Framework in another case study.

This chapter will therefore contribute to the following research questions in this thesis:

RQ2: What are the key factors that determine the effectiveness of social media practices in relation to sustaining offline participation within these communities?

RQ3: How to develop a theoretical framework which is capable of serving as an empirical lens in evaluating the effects of social media on offline participation within nonprofit communities?

This second case study regards a Roman Catholic Church community. Church communities are being challenged by the rise of social media. Churchgoers have started forming online networks of people connected via social media channels such as Facebook, YouTube, Twitter, Google Plus and LinkedIn. Since the Internet has largely contributed to various forms of online communities during the last 10 – 15 years (Hunt & White, 2009; Hutchings, 2010), churches have increased their interest in understanding how social media could help them sustain participation in their communities. The rapid rise of the acceptance of social media, as demonstrated in chapter 1, raises the question of whether churches should engage in social media to strengthen their communities. Knowledge regarding the effective use of social media within church communities is still lacking. The relevance of exploring the value of social media in church communities is illustrated by the following three examples.

The first example: The Pope, the leader of the Roman Catholic Church, appreciates the importance of social media to the church. In 2013, the newly elected Pope Francis, Time Magazine's person of the year, was revealed to also be the most talked about person on

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This chapter is based on: Effing, R. (2013). Kerk in verbinding: Op weg naar een sociale netwerkkerk, *Communio, Internationaal Katholiek Tijdschrift, 37*(3), 295-307.

Facebook (Facebook, 2013). As the following quote illustrates, Pope Francis started using Twitter himself almost directly after the start of his pontificate.

> *"Dear friends, I thank you from my heart and ask you to continue to pray for me"*
>
> (Pope Francis, via Twitter on March 17, 2013)

In recent years, both Pope Benedict XVI and Pope Francis have stressed the importance of the Church being present on social media channels (Benedict XVI, 2013; Biccini, 2013). The message of the 47th World Communication Day, by Pope Benedict XVI, was entitled: "Social Networks: portals of truth and faith; new spaces for evangelization", stressing the importance of this topic to the church (Pope Benedict XVI, 2013).

A second example is the increased attention for this topic at religious conferences. In 2001 the first international conference on religion and the Internet was held at the University of Copenhagen in Denmark (Campbell, 2005). In 2012 and 2013, the international Catholic New Media Conference was held, in the United States and in Australia, highlighting the increased attention to this subject by Catholics from all over the world. "The Catholic New Media Conference shows wonderful new ways to have God's Word reach a new generation" according to Cardinal Seán O'Malley, Archbishop of Boston (SQPN, 2013).

The practical experiments with new virtual church communities are our third example (Hutchings, 2010). The Protestant Church of the Netherlands (PKN) has created a dedicated online church (My Church/"Mijnkerk") as a pilot to create an online church community (PKN, 2013). The project aims to reach out to people who are no longer attracted via the traditional forms of church attendance. Along with the community's website, Facebook and Twitter are used to build a virtual community of believers. The online church has a pastoral team with vicars and was professionally founded by the Dutch church organization PKN, the second largest church in the Netherlands.

Yet there remains a knowledge gap regarding effective implementations of social media within church communities. There are theories available in literature describing the potential impact of online and social media in church communities. However, not much empirical evidence is available in understanding the effects of social media participation on offline communities. While there has been some attention to the evaluation of the Sense of Community within churches (e.g. Fisher, Sonn & Bishop, 2002), little attention has yet been given to the impact of social media. To our knowledge, the published work regarding social media and the church is still in its

infancy. Nevertheless, there are some empirical studies available that relate online media to churches and delivers relevant findings (Hutchings, 2010; Michels, 2009; Webb, 2012). Hutchings (2010) claims that the rise of the Internet can change people's expectations of traditional types of community, such as churches. Online experiences can potentially lead to further decrease in church attendance as people's spiritual needs could be fulfilled via the computer screen. However, in the end, Hutchings (2010) argues that, while social media can play an important role in developing and sustaining church communities, citing some experiences online, social media cannot completely replace the physical channels of gathering and communication. Physical and personal forms of contact remain very important to churches. Webb (2012) acknowledges this importance. After surveying 1,056 church leaders she came to the conclusion that social media is helpful in attracting and sustaining church members, but cannot replace other forms of communication completely.

Campbell (2005) says that online forms of religion are a result of changes in people's offline lives. As a result of societal changes, such as increased technological opportunities, people are currently living in the era of the network society (e.g. Castells, 2010). Furthermore, in Western societies, people's faith has moved towards the private sphere instead of being part of their public community life around church communities. Moreover, there is a societal change towards more individuality in society. Since people can be part of many relationships networks at the same time, the church has moved to the corner of people's lives. Campbell (2005) claims that the decline of church attendance is related to the rise of the network society. In the network society, there is more individualism, more technology, and the church is no longer the centre of people's lives. Hutchings (2010, p.18) acknowledges this transformation in society and the important role of the Internet in that transition: "the Internet is part of a shift in society towards 'personal communities' and 'networked individualism', with support and relationships increasingly provided through ever-changing, loosely-tied webs of connections maintained through digital communications".

Other authors argue that online forms of religion could have a positive effect on offline forms of church membership. Stewart (2011) claims that offline and online forms of religion augment each other. After studying the online activity of religious women, she found out that the contents of the social media they used were, to a large extent, based on offline experiences. Stewart (2011) argues that offline experiences are often shared online. As a result the offline experiences are closely linked to the online communication about them. Online and offline forms of religion do

not replace each other, but augment each other. Moreover, Ploderer, Howard and Thomas (2008) claim that strong forms of online relationships and online communities can be like an incentive to stimulate offline meetings. Someone with religious friends online can be stimulated to attend churches' services.

The community task of churches has traditionally played an important role and is therefore a relevant topic to study. Hutchings (2010, p. 13) says that these communities are based on: "the sharing of values and social organization". In addition, Miers and Fisher (2002) say that communities are any set of social relations that are bound together by a Sense of Community. The Sense of Community does not limit itself to offline forms of community. According to Campbell (2005. p.18): "the Internet serves to affirm or build communal identity and cohesion". Therefore, churches wonder how social media can contribute to sustaining these communities of people formed around the church. Furthermore, changes in society could also contribute to difficulties in sustaining these church communities.

Religious communication specifically asks for richer types of content because words are often not enough to express religious feelings. A study of Heidbrink and Miczek (2010) indicate that people who are interested in religion are sensitive to more visual forms of posts. McGarthy (2011) confirms the importance of that idea of using multiple types of content, such as pictures, movie clips and music, to augment the message broadcast via social media channels. The advantage of these additional media types, such as pictures and video, is that they are more capable of transferring emotion and feelings. That is considered to be an important part of religious communication (Drescher, 2011).

Yet researchers have not yet paid much attention to developing frameworks and methods for studying the community effects of social media within churches. The case study in this chapter will contribute to the evaluation of the Social Media Participation Framework as a theoretical lens.

The remainder of this chapter is structured as follows. Firstly, the context of the case study will be introduced and specific details of the method used will be presented. After that, the method for this case study will be explained. Thirdly, the case results are presented. The final section of this chapter provides discussion and considers the limitations of the framework.

6.2. Context and specific method

The Plechelmus parish is a large Roman Catholic Church community in the eastern part of the Netherlands. In recent decades, The Catholic Church has faced a serious decline in membership in the Netherlands. Moreover, the numbers of priests is shrinking. The Archdiocese of Utrecht, the higher echelon, found the solution to be creating larger parishes that needed fewer priests. Therefore, in 2007 the archdiocese Utrecht, to which this parish belongs, decided to merge many parishes into larger ones. The Plechelmus parish was the result of a merger of nine smaller parishes into one large parish of about 25,000 parishioners. The majority of its parishioners are not actively involved in the churches' activities. The city of Oldenzaal is the central location of the parish with its basilica of St. Plechelm. But as well as this urban area the parish also covers large rural areas. In 2011, Father B.H.M. Reerink, the leading parish priest, took the initiative to start a social media project for the benefits of the parish. The aims of this project were to adapt to contemporary culture, aiming to appeal more to youth and to help to build bridges of communication between the church's sub communities. Considering the novelty of social media in this parish, it was a good opportunity to start studying the effects directly from the beginning of the project.

The design of the case study was based on the Social Media Participation Framework. Since the members did not know much about social media, the researcher was asked to create an educational program. Also the researcher helped to facilitate two decision-making sessions with members from the pastoral team and the board. As a result, the case study was not completely carried out from the outsider's perspective. Nevertheless, the church parish was completely free in making their own channel choices. Neither the researcher, nor his students helped out with posting any content.

The case study focuses on the key members of the parish. The focus is directed to the leading professionals and volunteers and not at all parishioners. To recognize effects over time, there was a time interval in between measurements. Two measurements were carried out regarding the selected groups of key members (n=90) as mentioned in the criteria in Table 18. The first measurement (T1) was from September 2011 to January 2012 (n = 56 response 64%). The second measurement (T2) was from September 2012 to December 2012 (n= 49 response 54%).

The case design presented here follows the Social Media Participation Framework as presented in earlier chapters and includes both quantitative and qualitative data collection techniques.
A multi-level approach was used for data collection. This means that both the individual level (e.g. the key church community members) and the group level (e.g. the parish as a whole and underlying church communities around church buildings) are included. The level of inquiry is at the individual level. The focus of the study's included subjects was twofold as explained in Table 17.

Phase	Target subjects	Criteria
Exploratory Phase Qualitative Interviews	- Limited to 11 informants - Knowledgeable regarding the topic - Experience within the organization of the church - Good insight into parishioner's expectations	- Capable of having an overview - Expected to have a view point regarding social media
Measurements	- Limited to less than 100 members - All Members of the pastoral team (including professional clergy) - All members of the overall parish board - All members of the nine local church community boards - All members of voluntary groups with pastoral tasks	- Leading characters - Inner circle of the church parish - Has a voluntary or professional responsibility/task - Regular parishioners were excluded

Table 17. Selection criteria for the subjects in this case study

Carefully selected informants in the church parish were invited for face-to-face, semi-structured, open interviews in the explorative phase. The selection process for the 11 interviewees was carried out in collaboration with the overall board members of the church parish. We did not strive for completeness in this first phase of the case study. The aim was to include members who would have distinct opinions, motivations, and beliefs about the topic (either negative or positive) or were expected to provide us with comprehensive insights regarding the relevance of the topic within the parish. The questions were partly exploratory to get to know their ideas, opinions and motivations regarding social media. The expectation was that within the church community almost nobody was active in social media. While the leading parish priest, its professional team and the board members lacked the knowledge of how to use social media, they were very motivated to start the project. In this case the interviews were not underpinned with the theories of Short Williams and Christie (1976), Rice (1993) and Te'eni (2001) because no campaigns and practices with social media existed yet. All 11 interviews were recorded, transcribed and analysed. Mind-mapping software was used to discover themes and patterns in the outcomes. The main topics for the exploratory interviews were: church engagement, participation, youth participation, societal changes and social media.

6.3. Results

Now the results from this study will be presented. Firstly, the outcomes of the exploratory interviews will be presented and then the outcomes based on the constructs of the Social Media Participation Framework.

6.3.1. Exploratory interviews

The outcomes of the open, structured interviews with selected members are presented in the following order of topics: participation, youth, and society.

Participation

Engagement in a church community is based on more than just regular church attendance, according to the interviewees. One interviewee stated that: "people are not merely engaged around the church service but are there for each other in general". To be engaged, it is not essential to attend every Sunday mass. According to the interviewees, taking part in voluntary activities is at least as important. Another possible way to indicate church engagement is to look at financial donations. Church engagement and church participation are strongly intermingled. "Can you really participate without feeling engaged? It cannot be easily separated" (Interviewee).

While the Plechelmus parish is part of the broader Roman Catholic Church, the local parishioners do not feel much commitment to the Archdiocese Utrecht or the Vatican. The local church community – the sub community – is the church for them. Even the newly formed parish is not considered to be an established reality. Most of the parishioners have trouble identifying themselves with the larger parish.

Youth

There remain clear challenges in attracting younger members to the Plechelmus parish. The current forms of liturgy have little appeal to the young. Moreover, the existing traditional forms of communication, such as periodical booklets, do not fit with the expectations of younger generations. They prefer to have digital means of keeping in touch with the church. The interviewees say that most communication with younger groups is based on contact around the events of sacraments (e.g. baptism, confirmation, first communion, marriage): "we do not reach them except via the sacraments". While the sacraments still hold value for many young parishioners, they are also currently the best way to establish contacts with younger people. However, after a while, the communication with these groups fades away. It seems incredibly difficult to sustain these contacts within the large Plechelmus parish. One of the interviewees, a local professional with pastoral tasks, helped with an initiative called "Nightfever" to attract people to the church. This is a specially organised evening event arranged as a mechanism to invite new, younger audiences who have different expectations.

Society

The contemporary culture and the increase of individualism are considered to be the key reasons for the decline in the church engagement according to the interviewees. People are more self-centred and do not need the church anymore (Interviewee). Moreover, negative news regarding the Roman Catholic Church (e.g. child abuse) has led to further distrust in the church. The recent merger did not help either, as one of the interviewees says: "The merger that took part in recent years cost a lot of energy. People were resistant for this change and attention was focused on this resistance. This negatively affected engagement and participation."

The initial existing beliefs and expectations regarding social media from the interviews are discussed in the following section of Social Media Choice.

6.3.2. Social Media Choice

Interviewees notice the following advantages of social media:

- Large reach (including extending reach to younger target groups and people with disabilities)
- Social media is the media for the future (expecting emerging importance)
- Quick and easy to establish new ties
- No time and place constraints
- Transparent
- Capable of transferring a clear written message
- Good fit with city culture
- Limited investment of time

The interviewees also notice some disadvantages:

- Facilitating online disagreements with people who have different beliefs
- Creating a platform to share dissatisfaction
- Shallow relationships
- Loss of physical contacts
- Contra social effects
- Difficult to speak with one voice (central identity)
- Social media needs investment in education, time and effort
- Increased digital divide (possibly neglecting groups that are not on social media)

While the interviewees were aware of the existence of social media channels such as Facebook, Twitter, Hyves, LinkedIn, YouTube and Blogs they did not yet participate in these channels.

The strategy

At the beginning of the project, the leaders of the Plechelmus parish decided to create a social media strategy. This strategy plan would help them to make choices and align the social media to existing parish plans. The social media choice depended on this newly defined plan describing the social media strategy, which was created in two strategic sessions with pastoral staff and board members. Figure 11 shows a graphic version of the choices of channels, related organizational themes and the distinction between external (public) and internal (private) focus.

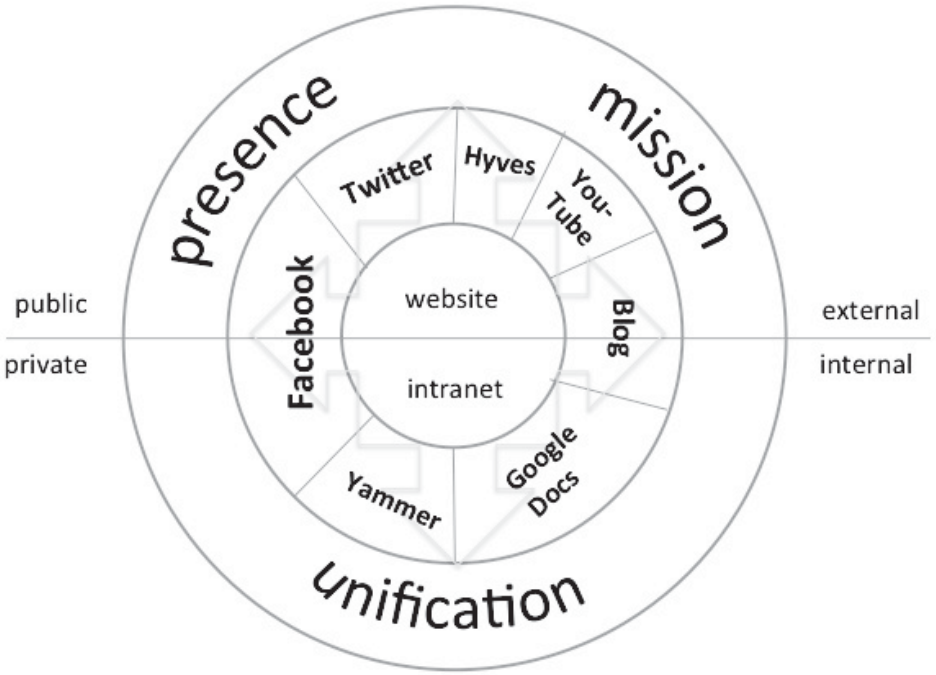

Figure 11. Social Media Strategy wheel of the Plechelmus Parish

The board and the pastoral team chose three strategic organizational themes: presence, mission and unity. Top priority has been given to the social media channels of Facebook and Twitter. Secondary choices were YouTube and Blogs. During the project, Hyves, Yammer and Google Docs were eventually eliminated from the strategy in order to focus on a limited number of tools. Moreover, the internal Facebook group functionality made using Yammer less necessary. One of the subprojects was to provide members with tablet computers (Apple iPads) to support them in the social media activities.

The Plechelmus parish took a strategic approach towards social media. Clear choices were made regarding goals, target audience, social media channels, educational resources and activity planning for 2012/2013. Furthermore, basic policies were set to prevent the users from harming either users or the reputation of the church parish via social media.

6.3.3. Social Media Use

During a year of research the participation of the selected members on social media increased from 20% to 46%. Facebook participation increased from 13% to 36%. A smaller group is active on LinkedIn (23%) and Twitter (16%). The Social Media Indicator scores help to shed some light on the extent to which members have used social media. The scores of individual members are displayed in Figures 12 and 13. The vertical axis presents absolute scores for the SMI. The horizontal axis presents unique members. The score represents the total of both the Contribution and Interaction scores. It consists of the sum of all metrics such as number of posts, comments, likes and so on (For all metrics, see the Table Social Media Indicator in Chapter 3). The activity on social media during this time frame was mainly based on posting contents. The interaction levels were rather limited but are increasing. The members turned out to be a bit hesitant to react to others via social media. In the second measurement the levels of interaction had increased.

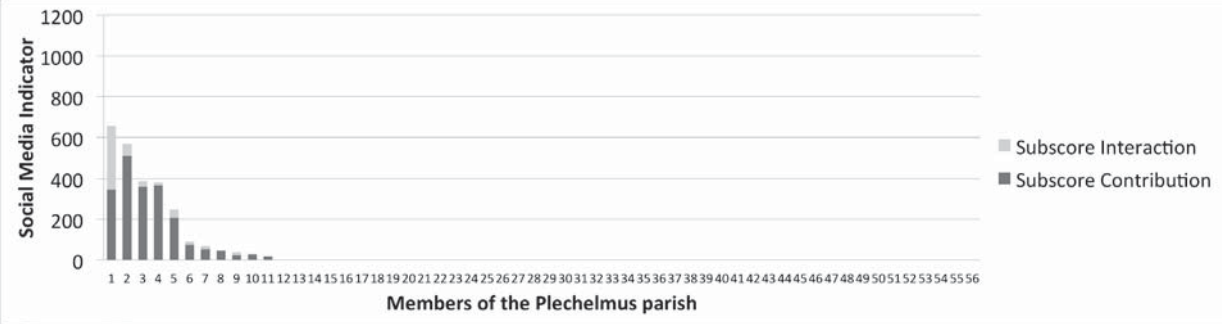

Figure 12. Social Media Use November 2011

Figure 12 above shows that there are only 5 individuals that have a SMI score higher than 200. These scores indicate that the Social Media Use is for only 5 of the 56 people somewhat active and only 11 out of 56 showed some –very limited – activity on social media.

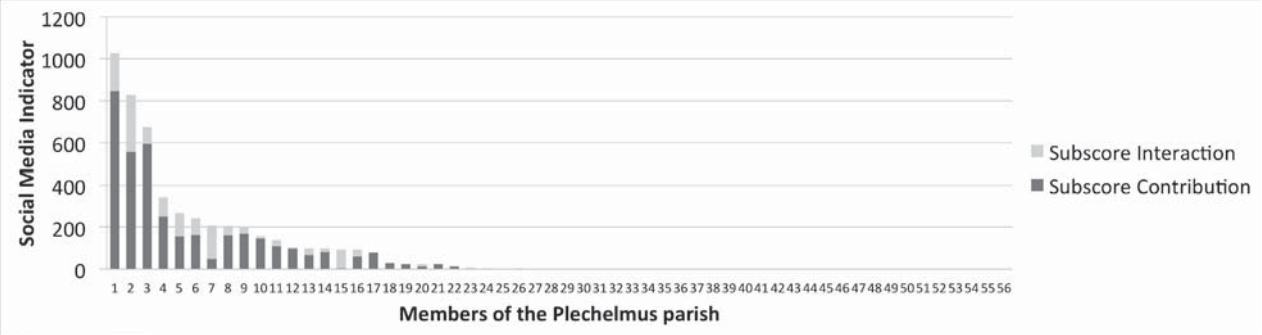

Figure 13. Social Media Use October 2012

As Figure 13 makes clear, almost half of the selected members in this study have started using social media. Also the interaction levels have increased. However, the use scores are still relatively low since most are still below 200 points.

6.3.4. Community engagement

The selected members in this case study, mostly volunteers, were on average busy with their tasks for 6 hours per week. The clergy and other members of the pastoral team say they spent more than 40 hours working per week. The social network diagrams in Figures 14 and 15 show the primary communication ties between members. Every dot (node) is a person and every line a connection (tie). Different colours are used to indicate different local churches' sub communities. The diagrams show no changed density in the ties in the network. At the end of the day the graphs should be very carefully interpreted. The calculations of 'degree centrality' and 'network density' of the graphs did not show differences between the first and second measurement as displayed in Table 18. By observing the nodes and ties we cannot observe that the connections between sub communities have improved. Although the social network diagrams and calculations cannot provide a definitive answer for this, considering the complexity of networks.

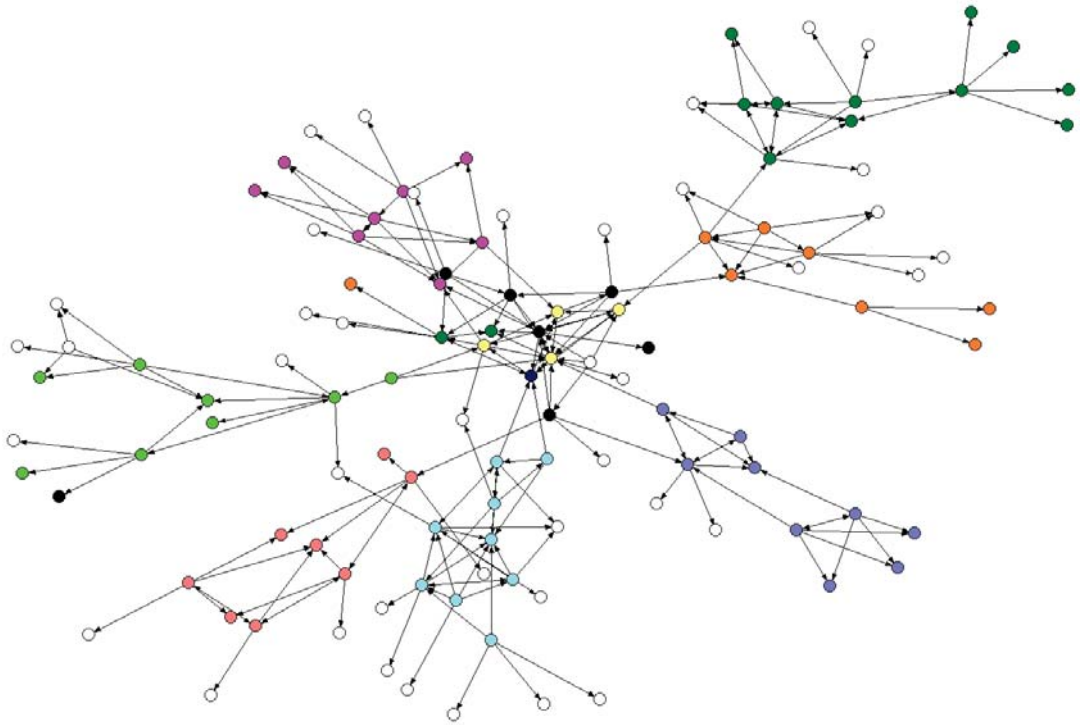

Figure 14. Social Network Diagram November 2011

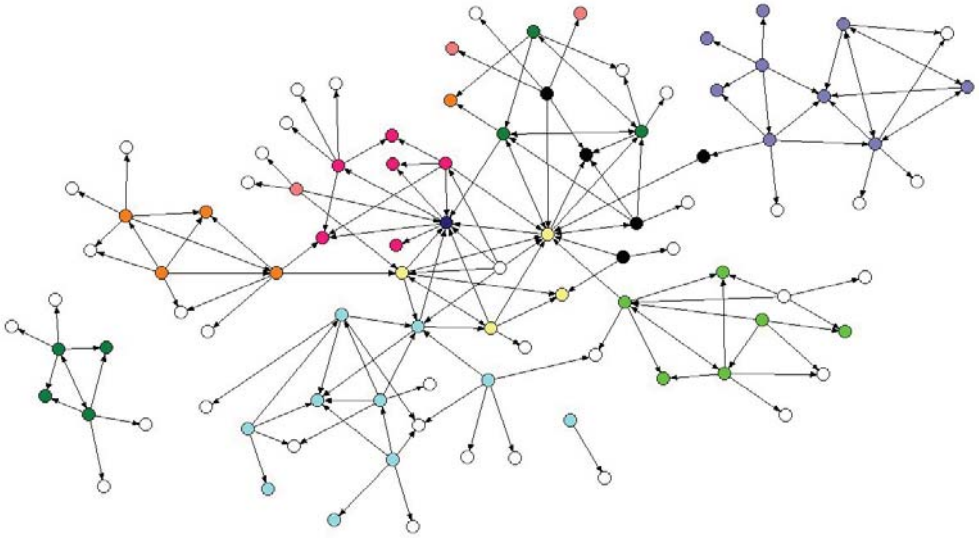

Figure 15. Social Network Diagram October 2012

The average for 'Degree centrality' has remained 1.831. The graph density has also kept the value of 0.016 during the two measurements, which were taken at an interval of one year (Table 18).

Measure	Description	November 2011	October 2012
Density	The density is an indicator for the level of connectedness of a network. It is given as the number of lines in a graph divided by the maximum number of lines.	0.016	0.016
Degree centrality	Degree centrality is equal to the number of connections that an actor (a node) has with other actors.	1.831 (average)	1.831 (average)

Table 18. Density and Degree of the network (Based on Otte & Rousseau, 2002)

6.3.5. Sense of Community

The results of the questionnaire regarding the Sense of Community within the parish and its underlying church communities (the former smaller parishes before the merger) are now presented. The results are based on the Sense of Community Index 2 by Chavis, Lee & Acosta (2008).

The following charts (Figure 16, 17, 18, 19) illustrate the levels of Sense of Community for both the parish and local sub-communities in November 2011 and November 2012. Scores above 36 are considered to be positive. Scores below 36 are negative.

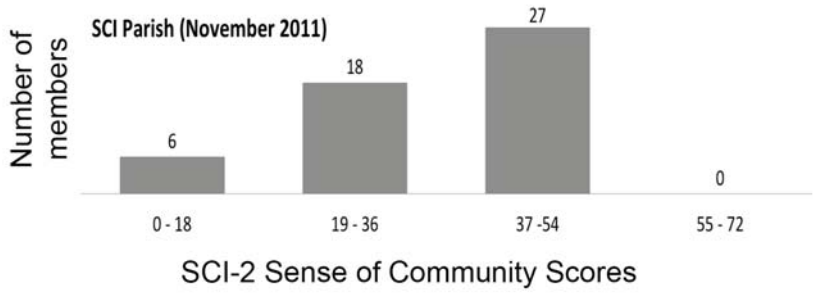

Figure 16. **Sense of Community Index of parish members November 2011**

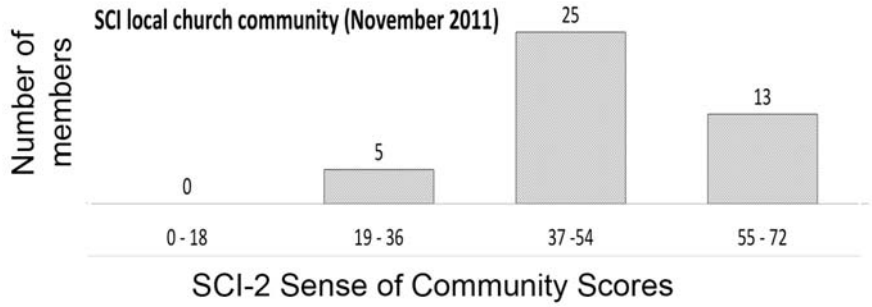

Figure 17. **Sense of Community Index of local church members November 2011**

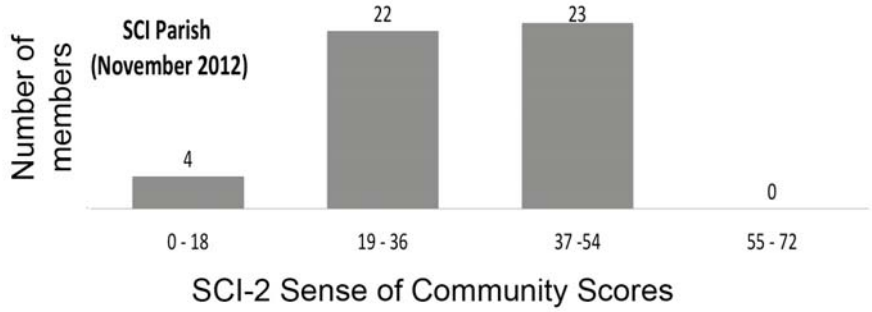

Figure 18. **Sense of Community Index of parish members November 2012**

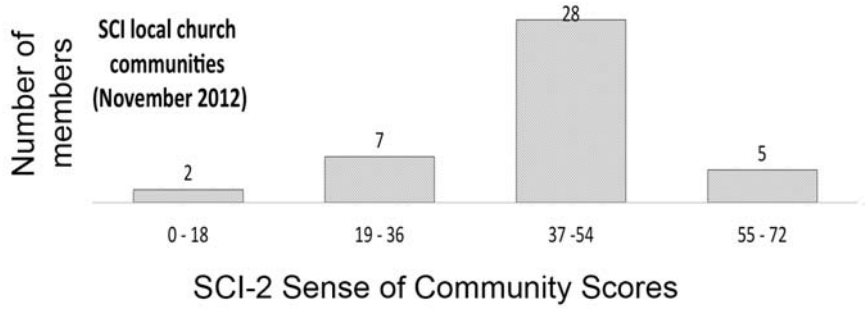

Figure 19. **Sense of Community Index of local church members November 2012**

Despite the fact that the merger was carried out a few years ago, the majority of members have a negative score for the Sense of Community regarding the new parish, but they do feel part of the local church community, formed around one of the many church buildings in the parish. At the time of the second measurement, the number of people who experience a positive Sense of Community regarding the parish has dropped from 52% to 47%.

The scores are far more positive for the local churches' sub communities. The vast majority, 83% of the church members, show a positive Sense of Community. However, this is also a declining number since the year before when the rate was 88%. This difference is statistically significant at the 0.05 significance level.

Overall it can be stated that within the Plechelmus parish the general Sense of Community is decreasing. The merger can be seen as the main cause for this, as our earlier qualitative analysis already indicated.

6.4. Analysis of Relationships

Statistical analysis was carried out to discover the relationships and effects between the constructs of the social media participation model. No significant effects were found based on the comparison of the use of social media to the general parish levels of Sense of Community. For a more thorough analysis the group of social media users was separated from those who did not use social media. In the group of social media users, the level of Sense of Community regarding the local church community was, on average, sustained (Split Plot ANOVA). This shows a difference from the group not using social media. In that group the average score of Sense of Community dropped. This difference as indicated by the data, however, is not significant at the 0.05 level because only a limited number of cases (n=13) could be related to each other in both the first and second measurement. This means that despite the indication for a difference caused by social media, there is still a chance that this difference is based on coincidence. Therefore, the case data suggests that Facebook, the main platform used at the time by the church members, helped sustain the local church members' Sense of Community.
In the case of the Plechelmus parish, there seems to be some minor signs that social media could help to sustain the Sense of Community within local church communities. On the other hand, there are no signs that the Sense of Community regarding the overarching parish is affected by the use of social media in this case.

6.5. Discussion

The Social Media Participation Framework was capable of capturing data for the various aspects of Social Media Participation and Offline Community Participation. In general, there were no difficulties regarding the members' willingness to provide us with information for this case study. The Social Media Indicator was useful in obtaining a comprehensive insight into the extent to which members participated in social media. The Sense of Community construct was valuable in showing that there is indeed a significant decline in the Sense of Community within this parish. However, it was difficult to identify significant causal effects of Social Media Participation on Offline Community Participation in the time frame of this case study. This could be caused by the shortcomings of the framework or because of the limited impact of social media in this case study. But the data suggests that there could be a positive causal effect from social media participation on the Sense of Community in regard to the local sub communities. But this indication was not statistically significant because of too few points of inquiry.

The following shortcomings were observed by using the Social Media Participation Framework as a lens in this study.
Firstly, collecting manual data was time consuming. Manual observation of scores was still possible because only a few of the respondents started using social media, but it will prove more difficult in repeated studies. When Social Media Use scores can be automatically monitored it will make conducting future studies more efficient and larger groups of respondents can be included. Secondly, the social media profiles of included key members reflect other affiliations. For example, a parish board member could use his social media profiles mainly for professional reasons, to promote his own company. This will probably lead to a less valid picture of the situation. Thirdly, in this case members were hesitant in using social media more actively, especially for interaction purposes. The Social Media Indicator was useful in making it clear that there is a difference between creating a profile (and being present on social media channels) and actually using them frequently to share content. It is valuable to recognize these kinds of behaviour within the framework but when social media is not yet used intensively the effects on the offline community are probably limited.

In the case of the Plechelmus church parish, social media did not deliver any great miracles in solving the existing problems of church participation. Nevertheless social media was implemented in a strategic way and the goals of the plan were largely met. This case indicates the usefulness of taking a strategic approach to social media. The Plechelmus case illustrates that it is possible for a church, with limited experience and knowledge, to develop and execute a strategic plan for social media. They followed the structural steps of 1.Education 2.Strategy 3.Implementation and 4.Evaluation. The parish was able to reach their objective of connecting with 600 people via social media for new evangelization. Already just the three members of the pastoral team together have connected to 772 Facebook friends, (measured on December 15th 2013).

In the period of this research key members had difficulties allocating time to their social media tasks. Having enough time for social media can be potentially a key factor for effective use.
It has to be stressed that this case is difficult to apply to other parish communities. In this case, for many parishioners, the overall parish seems somewhat difficult to like. Many parishioners blame the new large parish for many problems that did not exist before, when local church communities were smaller and had their own well-known priests. The circumstances of this parish have been made more difficult due to the recurring problems related to the merger that took place. While the other mergers in this diocese have sometimes led to similar problems, the problems in this particular parish seem more severe.

Social media and the church could open new windows of hope for the future. But as this case shows it is no easy task that it brings no great miracles. It seems to be hard work.

7. Case Study of the Apostolic Society

7.1. Introduction

There are non-Christian communities who have adopted similar organizational structures as Church communities to organize themselves. This provides them with the opportunity of benefiting from more than 2000 years of organizational experience. Examples of these non-profit communities are humanitarianism groups, new religious groups and philosophical societies.
"Het Apostolisch Genootschap", here translated as Apostolic Society, is such a community of people with shared beliefs in the Netherlands. Their most important key values are love toward other human beings and open attitudes towards new insights, according to KASKI, a research institute regarding religious participation at Nijmegen University (De Jong, 2007).
This community offers social functions like organized religion (Bremmer, 2005). However, while their organizational structure and rituals are very much like the Christian church ones, their key beliefs are not primarily grounded in faith in God. They departed from biblical dogmas and the idea of resurrection. Their core beliefs and spirituality have similarities to humanitarianism. The Apostolic Society was formally founded in the Netherlands in 1951 (Leeflang, 2010). The earlier origins of the community are related to the Apostolic Movement in England and the earlier Age of Enlightenment or Age of Reason from the 18th century. The Apostolic Society has about 17,000 members in the Netherlands. It has various local communities with their own buildings that are very much like church buildings.

The Dutch Apostolic Society has received little attention in literature (Bremmer, 2005). Even though a large share of the members have received higher education or have high academic positions at respected universities, there have not been many studies regarding the Dutch Apostolic Society.

This chapter is based on: Effing, R. (2013). De casestudies. In Effing, R. (Ed.), *De sociale netwerkkerk: De verbindende kracht van Facebook, YouTube, Twitter en LinkedIn* (pp.156-167). Kampen, The Netherlands, Kok.

Members of the Apostolic Society consider themselves to be part of strong communities. The communities and their activities are a key part of members' lives. It is more than just another affiliation to an interest group or organization. Remarkably, in recent years, the Apostolic Community has not suffered from a decline in participation. While there are also some societal challenges as a result of the rise of the network society (e.g. Castells, 2010), the community was able to sustain the levels of participation by its members over the years.

The Apostolic Society has an open mind towards new trends in society (De Jong, 2007). Therefore, they find it important to explore the opportunities created by new phenomena in people's lives, such as the potential of social media.

Given these community characteristics, the Apostolic Community can serve as a valuable case to test our theoretical framework. The main aim of this chapter is to test the Social Media Participation Framework by using it as a theoretical lens in a case study within a local community from the Apostolic Society. A detailed description of this framework can be found in earlier chapters of this dissertation. In the next section, the specific method for this case study will be explained in further detail.

The remainder of this chapter is structured as follows. Firstly, there will be a clarification of the specific context and method for this case study. Secondly, the results will be presented following the four constructs of the Social Media Participation Framework. Thirdly, there will be a section of analysis of the findings. The final section provides room for discussion and acknowledgement of the limitations of this case study.

7.2. Context and specific method

The case study was carried out within "Het Apostolisch Genootschap Enschede-1" abbreviated as APGEN-1. This community is centred in the eastern part of Enschede, a city of more than 150,000 citizens. The community APGEN-1 currently has more than 300 members from Enschede (APGEN.nl, 2013). The community was created in 1895 within people's homes. Their current building is from 1959.
In the midst of 2011, the board and leader of the APGEN-1 community wanted to professionalize its use of social media in order to sustain the community. In advance of this case study, 65 of its members were already connected to each other via Hyves, a Dutch social networking site. They formed a closed group to ensure optimal privacy. This provided the community members with the opportunity to have discussions without being afraid of possible harm from outsiders. However, the owners of Hyves, Telegraaf Media Group, decided to discontinue its Dutch social network site after a major decline in use in the years 2012 and 2013. This was partly because of the increasing popularity of Facebook at that time in The Netherlands. The perceived challenges for APGEN-1 were; to adapt to new and emerging social media channels; use social media more strategically and to sustain the community for the future. A pro-active approach toward new technology was primarily driven by this cause.

Part of the decision making process were two strategic sessions on the subject of social media. They were organized to include the leader of the community, selected board members and some key volunteers. The researcher facilitated the strategic sessions. As a result, the study was not completely carried out from an outsider's perspective. By facilitating the sessions, the researcher could have had limited indirect influence on the outcomes. For example, by providing insight into social media alternatives and its application, the decision makers of APGEN-1 could have been influenced. Nevertheless, the APGEN-1 community made their own choices. Neither the researcher nor his assisting students were involved in the content creation process. During the implementation phase, the researcher took the role of observer. However, because of the help provided with the formulation of the strategy, the researcher's influence cannot be completely isolated from the results in this case study.

The case study regarding the Apostolic Society is based on the Social Media Participation Framework, as presented in earlier chapters. The case study includes both quantitative and qualitative data collection techniques. The scope of the case study is limited to this local

community in Enschede. The case excludes other communities that are part of the Apostolic Society in the Netherlands.

A multi-level approach is used. This means that the individual level (e.g. all individual community members from the local community) and the group level (e.g. the entire local community) are included. The community in this research is small enough to include all members. As a result, we did not have to limit the scope to a selection of members from this community. The level of inquiry is at the individual level of a member. To recognize effects, multiple measurements with time intervals in between are required.

Two measurements were carried out regarding the entire population of members from APGEN-1. The first measurement (T1) was from February 2012 to June 2012 (n = 86 response 29%). The second measurement (T2) was from April 2013 to June 2013 (n= 54 response 18%).

Members of this community took part in a written (printed) questionnaire that was completed during important community gatherings. This explains the differences in response between the first and second measurement. Most of the members were expected to attend these physical gatherings. However, the attendance rates fluctuated. The reasons for it being introduced and presented during this gathering were to stress the importance of this survey and to obtain trust from the members. All of the questionnaires that were filled in by members were later digitalized and recorded on an excel sheet. Furthermore, the questionnaire provided us with user profile names that were used to obtain statistics from social media channels by manual observation based on the Social Media Indicator.

7.3. Results

7.3.1. Social Media Choice

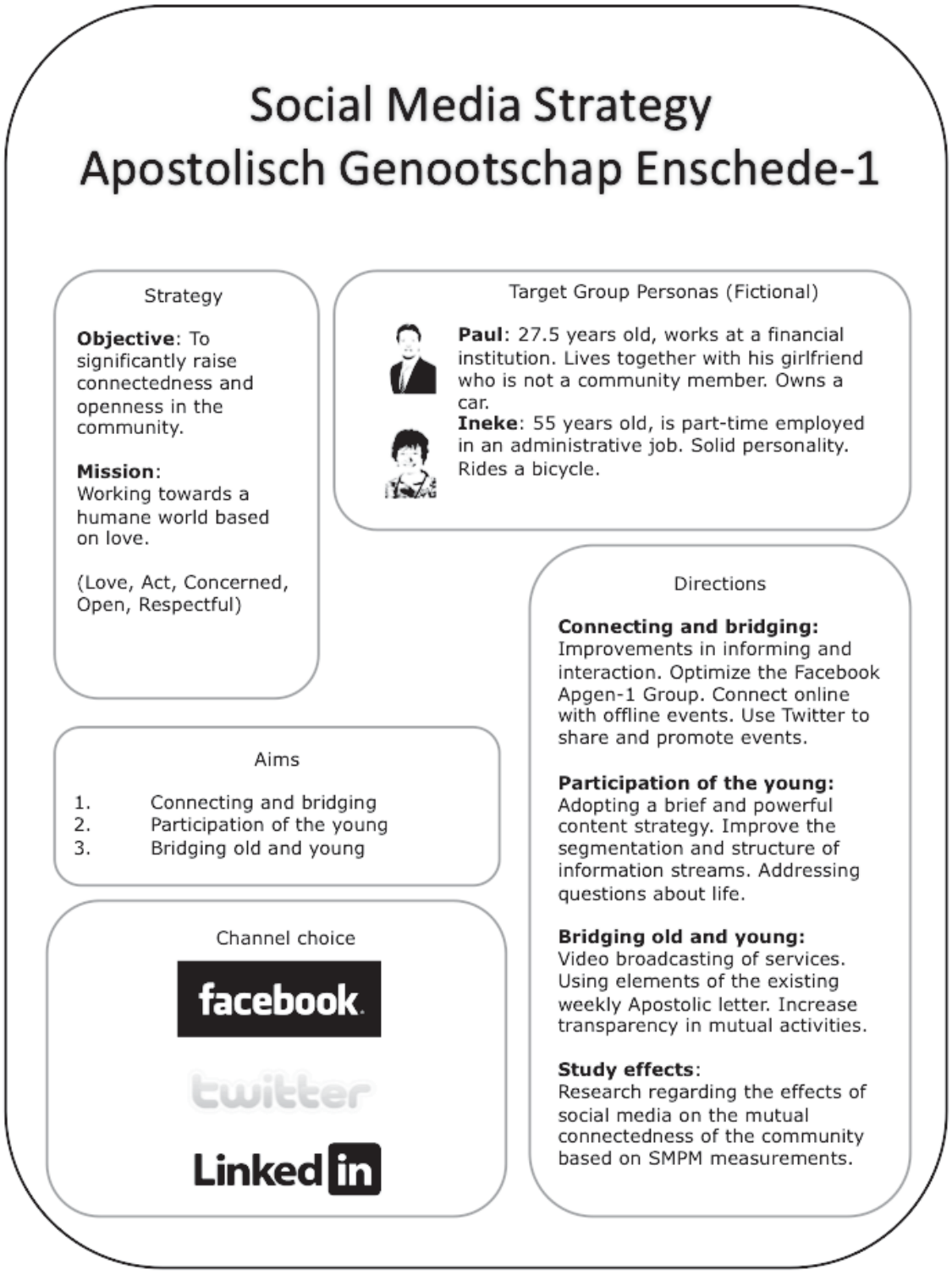

Figure 20. Social Media Strategy poster of the Apostolisch Genootschap

Figure 20 displays the social media strategy from the APGEN-1 community. This poster was created after two strategic meetings took place with a small team of members who were given responsibility for this task. The community's leader led the team. The strategy as displayed in Figure 20 is a reorientation of existing social media practices. The newly formed social media strategy has the following contents.

Firstly, the most important underlying objective, of their social media activities, is to significantly contribute to the connectedness inside their existing community of members. Secondly, the mission, as formulated in the poster (Figure 20), should always be the background for their communication via social media channels. Thirdly, two target audience personas are defined. Personas are fictional stereotypes of the target audience. They help the community to keep specific characters from the target audience in mind when communicating through social media channels. Fourthly, there are specific aims for the social media strategy, that were aligned to general community goals: 1.Connecting and Bridging; 2.Participation of the Young; and 3.Bridging Old and Young.

Fifthly, these aims led to clear choices in the vast landscape of social media channels. They decided to stop using the social networking site Hyves. The primary position of a channel in the strategy was given to Facebook. In addition to using Facebook in the semi-public space, it was decided to form a closed group for members. LinkedIn and Twitter were considered most appropriate for sharing and promoting events. Sixthly, a set of policies was set in place to guide the behaviour of the members on social media (not displayed in the poster in Figure 20). A final part of the strategy is the structural monitoring of the effects based on the Social Media Participation Framework.

7.3.2. Social Media Use

During one year, the presence of the community members on social media has increased from 18% (n=86) to 52% (n=54). There was a clear increase in members using social media channels. Facebook is the favourite platform for members. Exactly half (50%) of the members had a Facebook profile in the second measurement. LinkedIn is also popular, with 15% of the members on it.

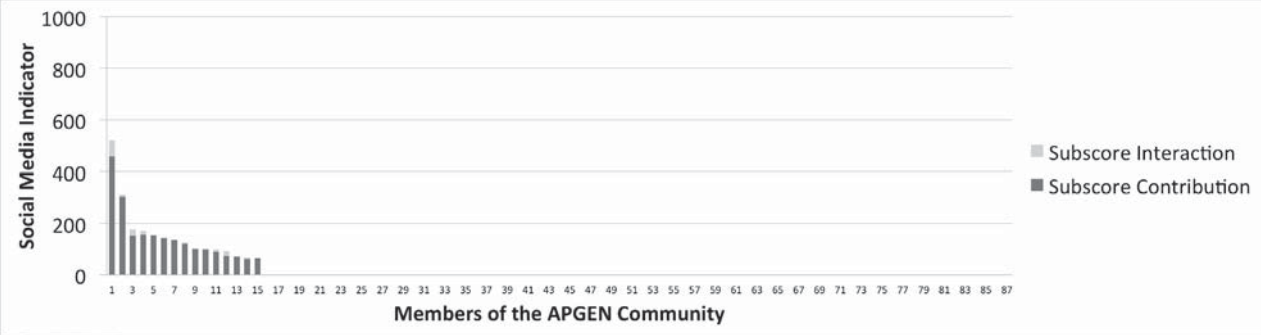

Figure 21. Social Media Use June 2012

During the first measurement it became apparent that both contribution and interaction levels were very low (Figure 21). Interaction scores are relatively low. While 18% of the community's members had created profiles on social media, they were not yet actively using them, as Figure 21 makes clear. Only two members had a SMI score above 200 which is still a very low score compared to other cases. Although this is no official threshold, it can be argued that a score below 200 indicates that members are rather inactive on social media. A small share, 3% of the community, was using LinkedIn and for Twitter it was also only 3%. These scores clearly indicate that the activity levels on social media were still very limited in the beginning of this case study.

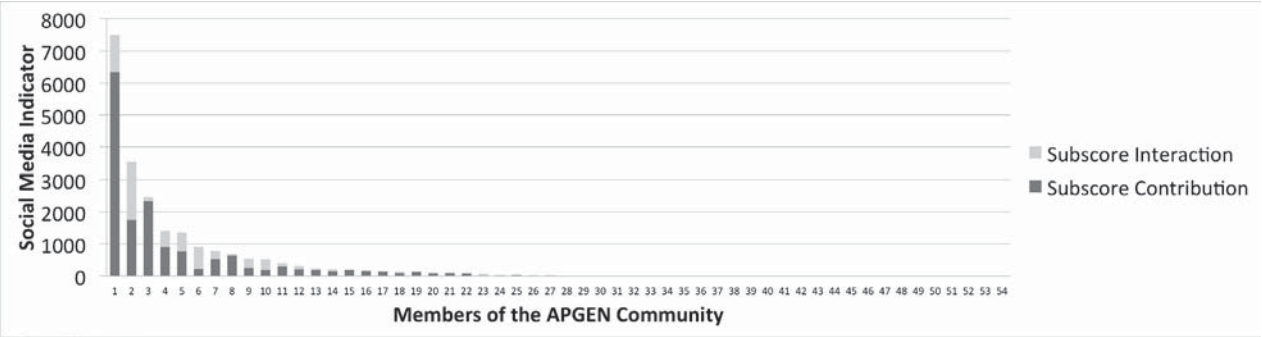

Figure 22. Social Media Use May 2013

The case study's second measurement shows both a significant increase in contribution levels and in interaction levels within the APGEN-1 community (Figure 22). 14 members of the community now have a score above 200. Figure 22 also shows that there are two members who are actively contributing and interacting through social media channels with SMI scores of 7,497 and 3,547.

7.3.3. Community engagement

The members in this case study claim to be, on average, busy 4.7 hours per week in relation to their community affiliation (n=91, Std. Dev 3.6). The community is based completely on voluntary participation and most members have other obligations as well. The time spent increased to 5.4 hours per week (n= 54, Std. Dev. 3.9) by the second measurement.

The social network diagrams in Figures 23 and 24 show the primary communication ties between members. Every point (node) is a person and every line a relationship (tie).

The social network diagrams, as shown below, indicate that there is more bridging now between groups. The separate groups did not show up anymore in the 2013 data. This indicates that there is increased contact between subgroups, which was one of the sub goals of the social media strategy (section 7.3.2).

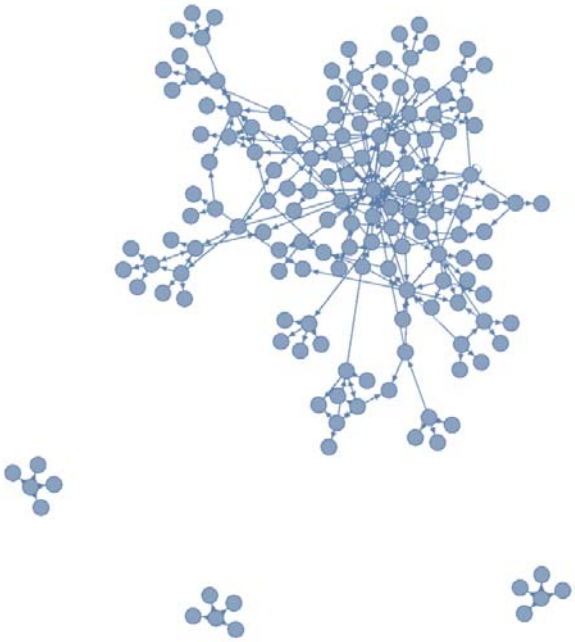

Figure 23. **Social Network Diagram 2012 June**

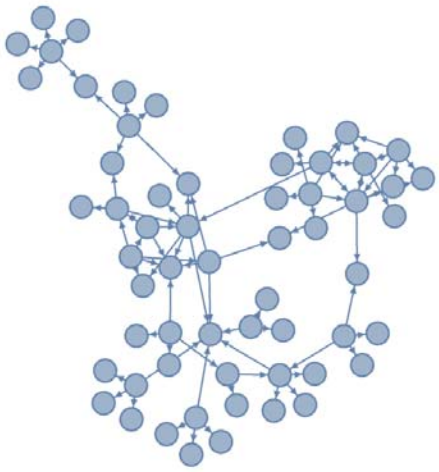

Figure 24. **Social Network Diagram 2013 May**

The social network diagram from a year later, as displayed in Figure 24, shows that there are no sub groups visible anymore in the diagram. Furthermore, the community is still highly interconnected. However, the second measurement received much less data regarding the primary communication lines, which can possibly limit the reliability of this diagram. There is a small change that the members of the sub groups in the first measurement did not participate in the second measurement, taken a year later.

The social network diagram as displayed in Figure 23 shows, on the one hand, that the community of APGEN-1 is very interconnected and, on the other hand, that it has three separate sub groups. However, the absence of the sub communities in the second measurement could also be the result of having a smaller number of cooperating members. The average for 'Degree centrality' was 1.548 in the first measurement. It had decreased to 1.390 but this is partly explained by reduced data (Table 19). The graph density has increased from 0.010 in the first measurement to 0.024 in the second measurement indicating a denser network (Table 19).

Measure	**Description**	**June 2012**	**May 2013**
Density	The density is an indicator for the level of connectedness of a network. It is given as the number of lines in a graph divided by the maximum number of lines.	0.010	0.024
Degree centrality	Degree centrality is equal to the number of connections that an actor (a node) has with other actors.	1.548 (average)	1.390 (average)

Table 19. Density and Degree of the network (Based on Otte & Rousseau, 2002)

Given the impression from the social network diagrams it is feasible to claim that the APGEN-1 community is a strong community with many interconnections. Communication is not dependent on only a few single connectors but communication spreads through many people in the network.

7.3.4. Sense of Community

The results of the questionnaire regarding the Sense of Community within the APGEN-1 community are now presented. The results are based on the Sense of Community Index 2 by Chavis, Lee & Acosta (2008). Scores above 36 are considered to be positive. Scores below 36 are negative. In this section, four scoring categories are provided with the number of individuals in those scoring categories following the answer categories from Chavis, Lee & Acosta (2008): Not at all 0-18; Somewhat 19-36; Mostly 37-54; Completely 55-72.

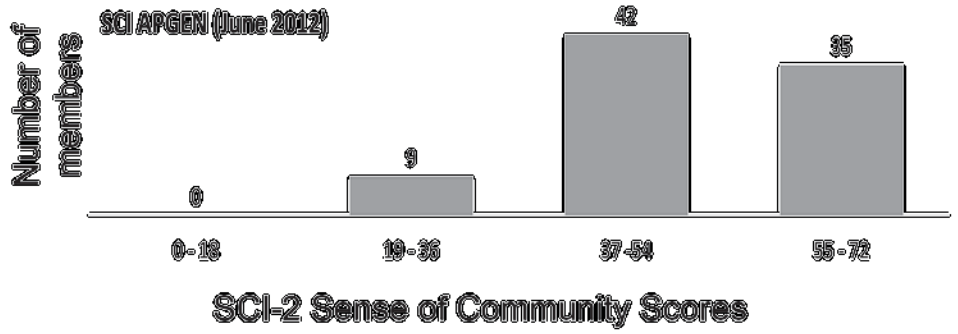

Figure 25. Sense of Community Index June 2012

In June 2012, 92% of the members show a positive Sense of Community measured with the SCI-2 scale (Figure 25). 35 members even have a score between 55 and 72. The average score is 52 (from max 72) and the Std. Dev. is 9,9.

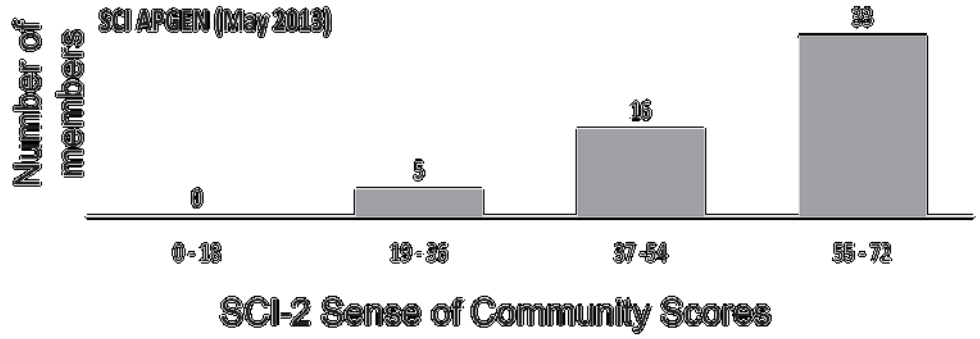

Figure 26. Sense of Community Index May 2013

In May 2013, 91% of the members show to have a positive Sense of Community (average 55 on a maximum of 72 Std. Dev. 10.7). The average Sense of Community level has slightly increased

within APGEN-1 during the period of research. This difference is, however, only significant on the 0.10 significance level. The shape of the distribution of scores has somewhat changed towards having more scores in the highest categories (Figure 26).
The scores support that the APGEN-1 community is a strong community. In general, members of APGEN-1 have high levels of Sense of Community. APGEN-1 is a vital and strong community, which was able to sustain its community in recent years.

7.4. Analysis of Relationships

Statistical analysis was carried out to discover relationships and effects between the constructs of the Social Media Participation Framework.
No significant correlations were found between SMI (Social Media Use) and SCI (Sense of Community) scores. There was a slight indication towards a positive correlation in the first measurement (.305 n=15) and a minor indication for a minor negative correlation in the second measurement (- .245 n=20). However, none of these Spearman rho rank correlations were proven statistically at the 0.05 significance level.

Unfortunately there were only 13 members that could reliably be linked to both the first and second measurement. As a result there was not enough data to reliably calculate the effects between the first and second measurement. Nevertheless, the split plot ANOVA test provides us with a minor indication that the use of social media could negatively affect the Sense of Community within the APGEN-1 community. During the two tests, the average level of Sense of Community increased within the group of people who did not actively used social media (SMI 0 or below 1,000). The average score for inactive users (n=9) increased from 52 to 58 points on the SCI-2 scale from June 2012 to May 2013. For the active social media users (n=4) the score remained stable at exactly 48 points on the SCI-2 scale. Within the group of people who actively used social media (SMI above 1,000) the Sense of Community index remained almost the same. But again these outcomes are based on only a small amount of data and there is a large change that this indication is based on coincidence. Given the rather small number, 13 members, who we were capable of relating data from both the first and second measurement to, the reliability is far too low for any conclusions.

7.5. Discussion

Given the findings of this case study we can now evaluate the value and limitations of the Social Media Participation Framework.

One of the main purposes of the framework is to relate Social Media Participation, on the one hand, to Offline Community Participation, on the other. The goal is to find longitudinal community effects that were caused by social media.

The framework was helpful as a descriptive, exploratory lens to obtain insights from the APGEN-1 case but was not yet successful as an explanatory lens, for understanding community effects. A few reasons are provided. Firstly, the Social Media Indicator was helpful in showing the increase of Social Media Use by members. It was valuable in distinguishing between contribution scores and interaction scores to learn more about exactly how members are using their social media profiles. Secondly, the description of the strategic approach to social media at APGEN-1 provides us with understanding of how and why they have made decisions on specific types of social media. However, it seems like there are many aspects in the strategy creation process that are not limited to media-appropriateness as suggested in the social media choice construct.

The framework was not yet capable of obtaining data to recognize longitudinal effects from social media on the community participation. This was mainly because there are only a few members from which we have received both first and second measurement data. For example, many entries on the questionnaires were not named. Furthermore, members were hesitant to name others for use in the social network diagram. Because of these reasons, important parts of the analysis could only be carried out with limited data sets. Thirdly, the Sense of Community construct helps us to evaluate the strength of the attachment of members with their community and provides us with comparative scores. Social Network Diagrams remain complex to analyse but do have value for understanding how people are interconnected.

In the end, the most important limitation that was observed in this case study was the unexpected lack of comparative data from members in both the first and second measurement. A clear shortcoming of the framework is that the value is limited when members decide to not to share too much because of privacy reasons, as observed in the survey comments.

In addition to the evaluation of the framework, there are some conclusions that can be drawn with regard to the APGEN-1 community. The Apostolic Community is a strong community. The findings confirm that the APGEN-1 community has both a high Sense of Community and shows strong interconnections between its members.

8. Comparative Case Analysis

8.1. Introduction

The previous three chapters have shown the specific outcomes of three longitudinal case studies that were based on the Social Media Participation Framework. These longitudinal case studies provide us with different natural surroundings to view the effects of social media participation on offline community participation. The longitudinal approach to the case studies helps us to gain insights regarding social media strategies and its effects over time (Waters et al., 2009). The first case study was taken from the political landscape: Enschede council and its nine political party factions. The second case study is a church community: a Roman Catholic Church parish. The third one is a community from the Apostolic Society, which is a non-Christian religious community. The main aim of this chapter is to compare the outcomes of the case studies to each other. Furthermore, the comparison contributes to the assessment of the value of the framework in designing such case studies. The primary value of comparing the findings of the case studies is to recognize patterns, similarities and differences for further theory development (Lee & Baskerville, 2003). Furthermore, prior assumptions about social media within nonprofit communities can be revisited. These assumptions could be scientifically falsified if they did not hold true in practice (Popper, 1996).

This chapter is structured as follows. The next section shows the outcome of the comparative case analysis. It follows the structure of the constructs of the Social Media Participation Framework. After that, the observed relationships and effects based on the constructs of the theoretical framework are compared to each other. The final section is a discussion section and derives a list of limitations from the comparative case analysis.

8.2. Comparison of the case findings

The comparison, as presented, in this section will follow the four constructs of the Social Media Participation Framework. The concept of Social Media Participation is addressed by the construct of Social Media Choice and by the construct of Social Media Use. The concept of Offline Community Participation is addressed by the construct of Community Engagement and by the construct of Sense of Community. A more detailed description of these constructs and related research instruments can be found in chapters 3 and 4.

8.2.1. Social Media Choice

In the communities of the three cases we have seen distinct preferences for certain social media channels as displayed in Table 20. While there is a plethora of social media channels, the communities decided to focus on a few well-known ones. The members of the city council prefer Twitter, a micro blogging service, as their favourite channel. Twitter is considered, in their opinion, to be the most appropriate for political purposes. The social network site Facebook seemed less appropriate to them for organizing political interaction. This is because they perceive a lower capacity for instant, direct interaction with others. This motivation can be recognized in considerations regarding Social Media Appropriateness as discussed in Chapter 3 (based on Kaplan & Heinlein, 2010 and Rice, 1993). Both the Roman Catholic Church community and the Apostolic Society have chosen Facebook as the primary channel for their social media strategies. Both the Apostolic Society and the city council have chosen to leave the Dutch social network site Hyves, because, at the time, many of its users switched to Facebook. The Telegraaf Media Group, the owner of Hyves, decided to discontinue the Dutch social network site in 2013. The Apostolic Society also selected LinkedIn as an appropriate tool for communication between their members. The church community has made plans to start using YouTube in a future marketing campaign.

Community / Priority for social media channels	1st priority (Key attention)	2nd priority	3d priority	No priority (Discarded)
1 City Council	Twitter (Micro-blogging)	Facebook (Social network site)	LinkedIn (Professional network site)	Hyves (Social network site)
2 Church Parish	Facebook (Social network site)	Twitter (Micro-blogging)	YouTube (Content community)	
3 Apostolic Society	Facebook (Social network site)	LinkedIn (Professional network site)	Twitter (Micro-blogging)	Hyves (Social network site)

Table 20. Preferred channels for social media

Both the Apostolic Society and the church community have created social media strategies to underpin their social media practices. They have paid attention to strategy aspects such as goals (aligned to organizational goals), target audience ('persona' descriptions), channel choice, and policies (Table 21). The plan of the church parish was most comprehensive and also included resources (such as education) and an activity plan (with a task division). However, despite the ambition to free up resources for social media, the church parish was having trouble making time to execute the strategy. In the period of the research, the parties within the city council did not create social media strategies to underpin their activities. While they have made some choices for certain social media channels, the parties lacked definite strategic plans for social media as made clear in Table 21. The key elements of social media strategy will be elaborated upon in Chapter 9 of this dissertation based on theoretical backgrounds.

Case Study	**Social media strategy elements** + well defined +/- somewhat defined - not defined						
	1. Goals	2. Target Audience	3. Channel Choice	4. Resources	5. Policies	6. Monitoring	7. Activity Plan
1 City Council	-	-	+	-	-	-	-
2 Church Parish	+	+	+	+/-	+	-	+
3 Apostolic Society	+	+	+	-	+	+/-	-

Table 21. Comparison of social media strategies

8.2.2. Social Media Use

The three cases have their own dynamics regarding the adoption and use of social media. In Table 22 there is an overview of the extent to which the members in the three cases have adopted and used social media.

	Percentage of members who have adopted social media	**Trend: difference in the percentages from first measurement**	**Percentage of 'active-contributors' (SMI > 500)**	**Dominant Channel (largest share of the total SMI contribution scores)**	**Stage of e-participation at 2nd measurement**
1 City Council	100% (n=26) (November 2012)	+ 7% (Since April 2012)	69% (n=26) (November 2012)	Twitter (November 2012)	Stage 2: e-engagement (November 2012)
2 Church Parish	46% (n=49) (October 2012)	+26% (Since November 2011)	6% (n=49) (October 2012)	Facebook (October 2012)	Stage 1: e-enabling (October 2012)
3 Apostolic Society	52% (n=54) (May 2013)	+ 34% (Since June 2012)	19% (n=54) (May 2013)	Facebook (May 2013)	Stage 2: e-engagement (May 2013)

Table 22. Overview of Social Media Use comparison

Members of the political parties in the city council have massively adopted social media, as made clear by the percentages in Table 22. All (100%) of the members of the city council were using one or more social media channel at the second measurement in November 2012. This percentage increased from the 93% first measured in April 2012. Some of them jumped on the bandwagon of social media to replicate the successes of political examples such as Barack Obama, Howard Dean and Ségolène Royal (Davis, 2009; Ren & Meister, 2010; Montero, 2009; Sæbø, Rose & Molka-danielsen, 2010). The most adopted channels within the council are the professional social network site LinkedIn (93%) and micro-blogging channel Twitter (82%). Most of their social media activities, such as sending posts and interaction with others, take place

via Twitter. Both the church community and the Apostolic Society show much lower levels of use compared to the city council community. The adoption of social media by its key members within the case of the church has increased significantly during the time-interval of a year from 20% to 46% (November 2011 – October 2012). They predominantly used Facebook and Twitter. Within the case of the Apostolic Society, the adoption of social media also increased significantly from 18% to 52% during the period of almost one year (June 2012 – May 2013). At the second measurement, a 52% share of their membership was using Facebook. In 2nd place came LinkedIn with an adoption rate of 15% of members. The church community case showed hesitation among members regarding interaction with others. The Apostolic Society case has shown that their members had higher levels of interaction in comparison with the church case. From the perspective of the participation ladder of Macintosh (Macintosh & Smith, 2002), the church case is best positioned at the lowest e-enabling stage. The other two cases are best positioned at the second stage of e-engaging, because they show more interaction between the members via social media. In all cases it is important to observe that a huge volume of the communication via social media is created by only a few 'key-contributors'. For the church and the Apostolic Society, this means that a small percentage of members are responsible for the largest share of communication via social media. The other members behave more like social media consumers, showing relatively low levels of contribution and interaction.

8.2.3. Community engagement

The concept of Offline Community Participation is, in this study, partly addressed by looking at the time spent by members. The time spent by members is an indicator for the construct of Community Engagement. Asking members about the time they have spent on their community affiliation, delivered insights into that aspect. In addition, to gain a richer understanding of how people are connected, social network diagrams were created to understand the dynamics of community engagement. Social network analysis made existing key relationships (ties) within the offline community visible. This helps us to see how the members' interrelatedness is developing within the community. Firstly, focus in drawn to the time members have spent. In Table 23 there is an overview of the average number of hours members estimated that they spent and how it developed over time (between the two measurements).

	Average time spent per member at the 2nd measurement	Trend, difference with the average hours per week at 1st measurement.
1 City Council	23.1 hours per week (n=18) (Std. Dev. 6.8) on his or her job. (November 2012)	- 0.7 hours (No significant change) (Since April 2012)
2 Church Parish	10.4 hours per week on average (n=40) (Std. Dev. 12.6) Large differences in scores since the pastoral staff says they spend 40 to 60 hours per week. (October 2012)	+ 4.0 hours (Increase) (Since November 2011)
3 Apostolic Society	5.3 hours per week (n=41) (Std. Dev. 3.9). Limited deviation in scores. In the second measurement only two people spend more than 20 hours per week. (May 2013)	+ 0.6 hours (No significant change) (Since June 2012)

Table 23. Overview engagement based on average time spent per member per case

Secondly, social network analysis using social network diagrams provide us with a basic understanding of how the members are interconnected and how this develops over time. The social network diagrams are based on the offline situation. A comparison of the findings is presented in Table 24.

	Observed trends using social network analysis between first and second measurement.
1 City Council	The communication between council members has become less dependent on certain central members in the diagram (so called connectors). The structure of the diagram for Enschede council has changed toward a somewhat less fragmented community. (Period April 2012 – November 2012)
2 Church Parish	By observing the nodes and ties there are no clear signs for improvement in the network structure within the parish. The network diagram shows the existence of cliques instead of an integrated community in both the first and second measurements. (Period November 2011 – October 2012)
3 Apostolic Society	The network diagram demonstrates that all the sub communities are now connected to each other while previously there was one disconnected sub community. Also the calculations indicate a somewhat denser network structure. (Period June 2012 – May 2013)

Table 24. Trends based on social network analysis

By analysing the social network diagrams (see also the previous case chapters for diagrams) lessons can be drawn from the way in which members are related to each other. Furthermore, we can discover patterns in the social structure of the offline social network. For the city council, the most important development in the social network diagram is that the members of different parties increased their connections to each other. This indicates that the members of various parties have increased their communication with each other. Within the church community, the social network analysis could not deliver any reliable conclusions regarding the development of the community structure. At first glance it seems like there is a denser network structure, but calculations cannot support this observation. In the social network diagram of the Apostolic Society, there seems to be a higher interconnectedness, visualized best by the newly formed ties with a sub community that was not previously connected to the other nodes (members) in the network diagram. This was supported by statistics considering the density. However, there was very little data because members were keen to hold on to their privacy.

It is a challenge to reliably compare network diagrams since they provide us a variety of views on very distinct types of communities. Also the changes we recognize in these offline network diagrams are not necessarily caused by the use of social media. The social network diagrams are helpful to us in understanding what the structure is of the network and to recognize how the network is developing. However, it remains difficult to reliably interpret these patterns in the diagrams. In the end, social network analysis is helpful in its descriptive value and as a secondary, supportive source of data for this study.

8.2.4. Sense of Community

In this section the sense of community levels will be compared for the three cases. In addition to the overall scores, there will be a comparison based on the four sub aspects of Sense of Community. McMillan & Chavis (1986) divide the Sense of Community in four sub aspects: Membership, Influence, Reinforcement of needs, and Shared Emotional Connection. The aspects can be used to compare and contrast various types of communities (McMillan & Chavis, 1986). The Shared Emotional Connection has shown less importance for the City Council's Sense of Community. In that regard, the city council's parties can be seen as professional communities. Having an emotional connection with each other is not as essential as in other types of communities that have less professional reasons for their existence. The data from the church and Apostolic Society cases does not highlight specific patterns in the sub elements of the Sense of Community. Table 25 shows the main origins of the Sense of Community and related developments.

	Primary level where community's members experience a Sense of Community	Percentage of positive scores for Sense of Community (SCI-2 > 36) at 2nd measurement	Trend: difference of percentage from 1st measurement.
1 City Council	Political Party Faction (sub community)	100% (November 2012)	+ 4% (Increase) (Since April 2012)
2 Church Parish	Underlying local church community (sub community)	83% (although the Sense of Community of the members regarding the overarching parish was 47%) (October 2012)	- 5% (Decline) (Since November 2011)
3 Apostolic Society	Apostolic Society (no sub community)	91% (May 2013)	- 1% (No significant change) (Since June 2012)

Table 25. Sense of Community per case

In the political parties of the city council, the members experienced a highly positive Sense of Community. In the church community, it became clear that it had difficulties in sustaining the Sense of Community. Within the Apostolic Society, the Sense of Community levels of members were sustained.

8.3. Comparison of the observed relationships and effects

A series of statistical tests were conducted to explore the relationships and effects between the constructs of the Social Media Participation Framework in the three case studies. Table 26 provides an overview of the relationships and effects elicited from the case studies.

	Discovery of relationships between constructs	**Discovery of offline community effects caused by social media participation**
1 City Council	Significant negative correlation found (-.454) between Social Media Use (SMI) and Sense of Community (SCI-2).	- No significant causal effects from Social Media Use (SMI) on Sense of Community (SCI-2) were suggested by the repeated measurements analysis. - Minor indication was found for the bridging value of social media in improving connections with members of other party factions (social network analysis).
2 Church Parish	No significant correlations found between the constructs.	- Minor indication was found for the sustaining value of social media (SMI) for the Sense of Community (SCI-2) at the local (sub community) level. However, this was not proven significant at the 0.05 significance level.
3 Apostolic Society	No significant correlations found between the constructs.	- Too little longitudinal data to reliably indicate effects between constructs. - Minor indication was found for the bridging value of social media to bridge sub communities that existed before in the offline social network (social network analysis).

Table 26. Overview of relationships and effects in the case studies

A number of findings are relevant for discussion here. Firstly, the city council case shows a statistically significant relationship between Social Media Use (SMI) and Sense of Community (SCI-2). The members who use social media more actively have, on average, lower levels of Sense of Community for their party factions. This negative correlation between social media use and sense of community regarding the party faction was somewhat counter-intuitive. Yet the data cannot fully explain the cause of this negative correlation. For the two other cases, neither positive nor negative correlations were found.

Secondly, some indications for causal effects from Social Media Participation on Offline Community Participation are suggested by the data. However, it is still unclear whether the use of social media by members directly affects their Sense of Community in these three cases. Within the church community, the group of social media users showed they sustained their levels of Sense of Community within their local sub communities. The group that did not use social media, however, showed a decline in their levels of Sense of Community in that same period. The available data was too limited to prove this on the 0.05 significance level. A larger dataset could have helped to show this effect. Within the Apostolic Society it was not possible to calculate any effects in a reliable way because of too little longitudinal data. Linking scores of members for both first and second measurements was only possible for a few members. The three cases combined demonstrate that the direct influence from social media on the sense of community is probably limited and larger datasets are required to measure the exact influence. It could also be that another or a more extensive timeframe is necessary to discover causal effects.

Thirdly, two of the cases indicated increased bridging of sub groups in the offline social network diagrams during the period of research. Social media could have caused this, but other influences could also be responsible. Since the strategy of the Apostolic Society specifically aimed to bridge sub communities, it is encouraging for them that the social network diagram now shows communication ties between all sub groups of the community.

8.4. Discussion

The constructs of the Social Media Participation Framework were useful for descriptive purposes in these case studies. Furthermore, by systematically measuring the constructs it became possible to start relating constructs and exploring the effects of social media on the offline community. In addition, the framework combined both qualitative and quantitative insights as explained in Chapter 3 and 4. As a result, we gained rich insights regarding the reasons why community members use social media and its impact on the community. Given the comparison in this chapter we have not yet been able to fully understand the direct effects of Social Media Participation on Offline Community Participation. According to the evidence in these three case studies, social media did not greatly affect the offline participation of members within their communities. In the case of the city council, where parties did not approach social media strategically, there was a somewhat counter-intuitive discovery. The use of social media was negatively associated with the Sense of Community of individual members in that case. It seems that council members who have more interest in social media have lower interest in bonding with their party faction colleagues. This could mean that social media is the direct cause for this but that was not proven during the time frame of this research. The lack of social media strategies in the city council is possibly related to the negative correlation because the negative correlation was not found in the other cases, where social media was approached with pre-defined strategic plans. Other reasons could also be theorized. Another lesson could also be drawn from the comparative case analysis. The cases indicate that the value of social media for nonprofit communities is possibly its power to connect members with each other, bridging physical and relational distances. The case findings support the idea that social media is not so important to the social bonding aspect inside the community, but maybe more important for the social bridging aspect towards others in the surrounding of the (sub) communities.

The generalizability of the outcomes in case studies is always challenging. Firstly, no two communities are completely identical. They are an accumulation of people's behaviours and relationships. It is important to acknowledge that communities are highly dynamic constructs. Secondly, it is difficult to control all circumstances and create general knowledge from the practices and that holds true for all similar types of communities. Nevertheless, in such an immature field of research, even conclusions from one case can already reveal knowledge that is also useful in other situations (Flyvbjerg, 2006). Empirical case evidence can also be used to falsify existing notions about a certain phenomenon.

The concept of generalizability is often approached too much from the perspective of sample-based, statistical generalization (Lee & Baskerville, 2003; Baskerville & Lee, 1999). "Statistical, sampling-based generalizability is a valid concept, but its uncritical application as the norm for all generalizability can lead to an improper assessment of the generalizability of a research study" (Lee and Baskerville, 2003, p. 224). Just having a higher number of cases does not warrant that outcomes can be more easily generalized in other communities. Because there is still so little knowledge available about the potential consequences of social media in nonprofit communities, the outcomes of these cases are still valuable to other nonprofit communities. Furthermore, the aim of these case studies was to generate knowledge to contribute to theory development and not for universal knowledge. The findings stress the importance of further development in theoretical frameworks such as the Social Media Participation Framework.

By comparing the findings of this comparative case analysis we encountered a few limitations. Firstly, there were shortcomings regarding the collection of longitudinal data. While most of the measurements had a good response from the members, the set of members from whom we could collect longitudinal scores was limited. In all cases there were some changes and replacements in roles and positions. Some members left the communities while others joined. The number of people that filled in the questionnaires for both the first and second measurement was limited and as a result, statistical calculations for effects were based on rather small samples. That affected the reliability of claims for the entire case population. Privacy is an additional reason for the lack of longitudinal data in some measurements. Especially at the Apostolic Society, people were hesitant in providing names of others and had trouble with some personal questions regarding their community participation. In that case, a large group of members decided to respond anonymously, making it impossible to identify them for longitudinal analysis.

Secondly, the Sense of Community of a member is an outcome of many influencing factors. For example, the merger that took place in the church community has probably caused a decrease in the Sense of Community. Social media cannot easily be isolated from other influence factors regarding Sense of Community.

Thirdly, the focus of this study was on the effects on the offline communities that already existed before the emergence of social media. However, the Sense of Community was possibly developed separately for both offline and online communities. Other researchers have provided indications for the potential division between online and offline forms of community (Baumgartner & Morris, 2010; Vissers et al., 2011). Online and offline participation are like

separate worlds. If that is the case, the effects of social media on the Sense of Community should have been studied from another – online – perspective to recognize effects.
Fourthly, while the case study of Enschede Council was conducted from a complete outsider's perspective, there was more active involvement, though limited, in the other two case studies. The researcher had a minor role in those communities regarding the education in and facilitating of decision-making in developing social media strategies. Unobtrusive methods ensure that a researcher is not unintentionally influencing the data just because of his or her presence (Jick, 1979). A complete outsider's perspective could have resulted in a slightly different picture coming from other choices of social media and different numbers of use.
Fifthly, the measure of the Social Media Indicator comprised a list of questions for multiple social media channels but was not flexible enough to adapt to a changing social media landscape. For example, many users abandoned the popular Dutch social media site Hyves. As a result, the owner of Hyves, Telegraaf Media Groep, decided to discontinue its social network site.

Given the outcomes of the comparison, it becomes clear that the Social Media Participation Framework is promising in some regards. However, considering the complex nature of communities and the highly dynamic relationships of their members, it was not an easy job to isolate the effects of social media within these case studies. Due to the lack of a closed system, probabilistic causal analysis is at least problematic (Gregor, 2006). Feldman and Orlikowski (2011, p.13) argue that studying the effects of information systems is challenging considering that we have "no way of knowing or anticipating the range of possible unintended consequences that might attend a technology's use in practice and over time". More refined frameworks and more efficient data collection techniques could help us to learn more about the precise effects of social media on the offline community participation. The proposed refinements to the framework will be explained in the next chapter.

9. The Revised Social Media Participation Framework

9.1. Introduction

In this chapter, a revised version of the Social Media Participation Framework is introduced. The constructs of the Social Media Participation Framework are revisited and improved. The aim is to take the framework one step further towards becoming an aid for studying the offline community effects of social media. Based on the experience of using the initial framework in three case studies we propose a revised framework. The reasons for designing a revised version of the theoretical framework are threefold. Firstly, the revised framework addresses a number of observed limitations, as highlighted in the case studies. Secondly, the framework is simplified by reducing the number of constructs based on the relevance and explanatory value of the constructs. These changes are based on the empirical data from the case studies. Thirdly, the revised version of the framework will be designed in such a way that it will reduce the time necessary for data collection. An improved framework could be used in future studies helping to further enhance understanding of the community effects of social media within nonprofit communities.

The remainder of this chapter is structured as follows. Firstly, the Revised Social Media Participation Framework will be introduced. Secondly, the construct of Social Media Use and its revised Social Media Indicator-2 instrument will be elaborated upon. Thirdly, there will be a section explaining the construct of Social Media Strategy with its key elements. Fourthly, the changes to the Sense of Community construct will be described. The final section of this chapter is for discussion and reviewing the constructs and the limitations.

This chapter is partly based on:

1. Effing, R. (2013). Social Media Strategy Design, Paper presented at The 2nd Scientific Conference Information Science In an Age of Change, University of Warsaw, Poland, April 15-16.
2. Withaar, R. J., Ribeiro, G. F., & Effing, R. (2013). The social media indicator 2: Towards a software tool for measuring the influence of social media. In Proceedings of EGOV/ePart.

9.2. Introducing the revised framework

After revisiting the initial Social Media Participation framework and careful analysis of the findings in the comparative case analysis, as presented in Chapter 8, we introduce a revised version. In order to increase its relevance in studying the relationship between social media participation and nonprofit community effects, we have considered various alternatives. The aim of the new framework, as introduced in this chapter, is however, not to strive for completeness. The revised framework is expected to be leaner. It aims to be of more relevant in discovering the community effects of social media. The revised framework focuses on those constructs of the Social Media Participation Framework that were proven to be of most relevance, as shown by the cases studies in earlier chapters. Some constructs delivered more valuable insights than others and various shortcomings were faced. In addition to selecting constructs from the former version of the framework, we will propose modifications to the structure and contents of the framework in order to improve its relevance and soundness. Consequently, the revised framework is not a completely new framework. It focuses on two of the already existing constructs of the initial framework and extents a third one. In addition, the case findings give reasons for changing the perspective from offline community participation to a more integrated way of addressing both online and offline participation.

The new focus is primarily drawn on two of the already existing constructs of the initial framework: Social Media Use and Sense of Community. We propose that the construct of Social Media Choice is replaced by the construct of Social Media Strategy. The Social Media Strategy construct is introduced as a more relevant construct regarding the decision making process behind social media practices. It is a more comprehensive construct that includes the choice of social media channels. Each of these constructs will be elaborated upon in the following sections. While the construct of Community Engagement and its social network analysis techniques did deliver some useful insights, the relevance and value of this construct for the framework has been questioned and is, therefore, no longer included in the revised framework.

The revised version of the Social Media Participation Framework is displayed in Figure 27 below.

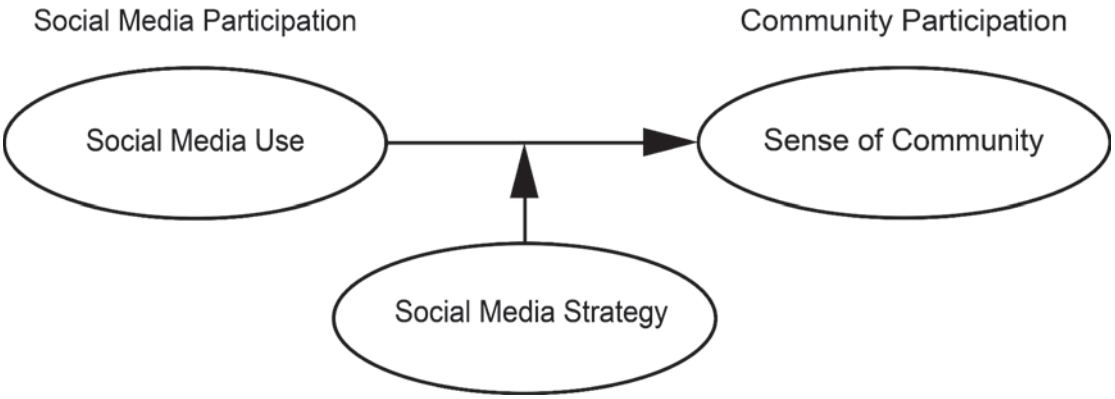

Figure 27. The Revised Social Media Participation Framework

Social Media Use is connected to Sense of Community in the framework. The findings of the cases studied in this dissertation support the idea that Social Media Use of community members could either positively or negatively be correlated to their Sense of Community. The direction of the arrow is from Social Media Use (independent variable) to Sense of Community (dependent variable) because there was a minor indication for this proposed causal relationship in one of the cases. From the case studies we have drawn the conclusion that the perceived value of social media for nonprofit communities depends on having a Social Media Strategy. Therefore, the construct of Social Media Strategy could determine the extent to which Social Media Use influences the Sense of Community. The Social Media Strategy construct in the framework is proposed as a moderating variable. A moderator is a variable that "affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable" (Baron & Kenny, 1986, p. 1174). However, we should be aware that the Sense of Community of members within nonprofit communities is the outcome of many factors and that social media is still only one of these many factors. The constructs of Social Media Use, Social Media Strategy and Sense of Community and its refinements will be explained in the following sections.

9.3. Social Media Use

The first construct of the Revised Social Media Participation Framework that will be elaborated upon is Social Media Use. The construct is addressed by the further development of the research instrument Social Media Indicator. This section develops the revised Social Media Indicator-2 (SMI2) as an instrument used to address the construct of Social Media Use. It can be seen as an evolution from the first version of the SMI, as presented and employed in the earlier chapters. The SMI2 aims to contribute to the measurement and comparison of Social Media Use by

members of nonprofit communities. In recent years, influence measurement of the individual users of social media has gained importance. Yet social media measurement from the perspective of participation is still in a stage of immaturity (Murdough, 2009; Sponder, 2012; Stieglitz & Dang-Xuan, 2013) and there is a lack of theoretical frameworks and instruments for this (Stieglitz & Dang-Xuan, 2013). This category of social media monitoring tools is increasingly addressed by the term: Social Media Analytics: "social media analytics is concerned with developing and evaluating informatics tools and frameworks to collect, monitor, analyse, summarize, and visualize social media data, usually driven by specific requirements from a target application." (Zeng, Chen, Lusch and Li, 2010).
However, while there is a rising number of - mostly commercial - monitoring tools, most of them do not take into perspective the influence of individual users. Most of the available tools are based on the principle of scanning keywords instead of monitoring individual influence levels. While keyword-based tools are highly relevant for understanding the impact of names of brands or organizations, they cannot help to understand the specific use levels of individual users. Stieglitz and Dang-Xuang (2013) have created a framework for social media analytics for political purposes and among other categories they distinguish between keyword-based tools and actor-based tools. The SMI2 is an instrument, and potentially a software solution, that contributes to the actor-based category of social media analytics. An example of an already available actor-based tool is Klout.com. Klout, however, has been subject to criticism, since their method of calculation lacks transparency and is sometimes argued to be biased (Edwards, Spence, Gentile & Edwards, 2013; Sponder, 2012; Peters, Chen, Kaplan, Ognibeni & Pauwels, 2013). Therefore it is necessary to investigate alternative approaches in collecting and analysing Social Media Use data.

The manual collection and analysis of social media parameters (such as number of messages, likes and shares) can be time-consuming, as discovered during the case studies. The reliability of the observations can be questioned because, if conducted manually, errors are easily made. This problem of inaccuracy can be solved by using a software tool that is capable of automatically analysing the social media profiles of all selected subjects. Another advantage of developing a software tool is the capability of monitoring all the participants' social media profiles in a more dynamic way, with multiple measurement points in time.

In order to find a software tool that could reliably measure use and influence-levels of individual Social Media users, existing applications were compared during 2013. Well-known examples, at

the time of writing, were social media analytics services such as Radian6, Teezir, Coosto, SocialMediaCheck, and Klout. We are not striving to provide a complete list of examples here, but many solutions were investigated to understand their approaches. In the following Table (27) some examples are shown of existing measurement tools for social media analytics.

Tool	Approach
Radian6	Keyword based monitoring
Teezir	Keyword based monitoring
Coosto	Keyword based monitoring
SocialMediaCheck	Keyword based monitoring
Klout	Individual network influence score

Table 27. List of examples of existing social media analytics tools

The main problem in using the available tools for our needs is that most of them are designed from the perspective of running search queries with keywords. Many of the existing tools have a keyword approach. The keyword approach has apparent disadvantages in measuring influence in networks and is useless for the comparison of the use levels of community members. The keyword approach is problematic for at least three reasons:

1. These keyword-based tools, such as SocialMediaCheck, scan the number of times the name of a person was mentioned on social media channels. The risk of this approach is that the results can be irrelevant and unreliable. This is because a higher number of retrieved results does not necessarily relate to a higher level of use or influence by that person.
2. There can be spam messages amongst the retrieved data. Since a vast amount of online posts can be categorized as spam (Sponder, 2012) these posts can easily bias the outcomes.
3. There are semantic problems. The keyword approach can easily cause validity issues as keywords can have various meanings in language. Words can have multiple meanings (e.g. ajax in mythology, as a football club or a programming framework) and can have different meanings in different languages. Also, it is difficult to reliably identify people who have the same or similar names. While there are sophisticated algorithms deployed in some of the solutions to cope with these problems, they cannot solve these issues completely.

While keyword-based tools primarily provide information about the larger mass in discussing a topic, the alternative approach focuses on the influence from organizations (e.g. community) and their people (e.g. community members). To measure the levels of use and influence it is

necessary to have a framework of metrics. According to Peters et al. (2013): "Social media metrics require theoretical grounding, completeness, and a diagnostic nature; they also need to be credible to management and reliable over time." To meet these criteria, the revised SMI2 instrument is presented in Table 28. It comprises of the parameters (metrics) to measure personal influence in the social media channels of Facebook, Twitter, LinkedIn, YouTube and Google+ while taking into account current technology limitations for each of them. Additionally, theoretical backgrounds are presented to sustain the matrix in the face of future changes in the application programming interfaces of social media channels.

Social Media Channel	Contribution (e-enabling)		Engagement (e-engagement)	
	Posts	**Network Size**	**Interaction**	**Word of mouth**
Facebook page	# of posts	O # of likes on page	O # of talking about[1] > # of comments on post > # of likes on post	> # of shares of all posts
Facebook profile	> list of posts[2]	> # of friends > # of subscribers	> # of comments on post[2]	
Twitter	+ # of tweets	+ # of followers	+ # of reply's + # of favourites > list of mentions[3]	+ # of retweeted
YouTube	O # of video's	O # of subscribers	O # of rates[2] O rating average[2] O # of likes[2] O # of dislikes2	O # of favourite[2] O # of views[2]
LinkedIn	+ # of updates[4]	+ # of 1st degree connections[4]		+ # of recommenders[4]
Google+	O list of activity's[5]	O list of activity's[5]	O # of comments per activity	O # of +1 per activity O # of re-shares per act.

1 Number based on activity of the last 7 days
2 Limited to retrieve 25 posts per request
3 Limited to retrieve 20 tweets per request with a maximum of 800 tweets in total
4 Limited to a maximum of 500kb per request
5 There are undefined limits for gathering activity per request
O Data publicly available to developers
+ Data available to developers depending on privacy settings of the users and in certain cases user authentication is required
> Data only available with authentication of the user
* Posts could be unreachable depending on the privacy settings

Table 28. The Social Media Indicator-2

The SMI2, as presented in Table 28, offers a distinction between two levels of participation. Firstly, there is the level of Contribution and secondly, the level of Engagement. Contribution is based on posts on various social media channels and the reach of these posts into the related networks of friends or relationships. The size of the network, at the individual participant level, is mostly used as the corresponding social media metric (Peters et al., 2013). Hoffman and Fodor

(2010) address this as the level of exposure. Engagement is based on both levels of interaction and the 'word of mouth' aspect. The first level of contribution is primarily disseminating information to an audience (one-way-street) while the second level of engagement accounts for dialogue with others (two-way-street).
For each of these aspects of, Posts, Network Size, Interaction and Word of Mouth, metrics can be selected for specific social media channels. "As individuals may participate in several social media like Facebook and Twitter, any social network may not be fully understood in isolation" (Peters et al., 2013, p. 289). Therefore it is important to develop a framework with multiple social media channels. Despite the differences of character between various social media channels, in most cases it is possible to find appropriate metrics, as Table 28 makes clear. The social media channels currently included in Table 28 are based on reach levels in Western countries. The top 5 channels in terms of reach in 2014 are included.
The aim is to address every social media channel from the same perspective and to deliver an equivalent value for each channel, regardless the number of available parameters.
Every social media channel has its own type of posts (publications) and ways of replying and sharing. The aim was to address every social media channel at the same level and return a number that was independent and comparable to all social media. The API[1]'s that were compared were behind the selected social media channels. After that a list was made with all the parameters that were relevant and potentially measurable. They were included in the matrix to provide an overview based upon the types of parameters.

The SMI2 draws upon the theoretical backgrounds of the Macintosh participation ladder (Grönlund, 2009; Medaglia, 2007; Sommer & Cullen, 2009; Macintosh & Smith, 2002) and the ROI model described by Hoffman and Fodor (2010). In the framework of Hoffman and Fodor (2010), there are parameters for brand awareness, brand engagement and word of mouth. The theory of Macintosh consists of a hierarchy in electronic participation levels. These steps on the e-participation ladder are e-Enabling, e-Engaging and e-Empowering (Grönlund, 2009; Medaglia, 2007; Sommer & Cullen, 2009). This theory is not specifically designed for social media but it is a general theory helpful in understanding the various levels within electronic participation.

Software developers can register as an official developer on various social media channels such as Facebook, Twitter, YouTube, LinkedIn and Google. As a result access is provided to some of

[1] Application Programming Interfaces, open, public or semi-open interfaces to access functions with a programming language to access social data.

the database functions of these social media channels. There are no additional costs in obtaining the status of a developer on these included social media channels. Table 29 provides a list of developer links to the API of included social media channels.

Social Media Channel	Hyperlink to documentation for developers
[API-1] Facebook	https://developers.facebook.com/docs/reference/apis/
[API-2] Twitter	https://dev.twitter.com/docs/api/1.1
[API-3] YouTube	https://developers.google.com/youtube/
[API-4] LinkedIn	https://developer.linkedin.com/apis
[API-5] Google +	https://developers.google.com/+/api/

Table 29. List of API and links to developer documentation

The availability of each parameter in the matrix (Table 28) is marked by a symbol. However, even the parameters that seem available for developers, by default, may require user authentication depending on the user's privacy settings (Vitak, 2012). Since most users decide themselves which posts they share publicly, the privacy control remains in the user's hands (Boyd & Ellison, 2008). The user decides what is shared publicly and what is accessible to the public. Since publicly available data is the primary source for retrieving statistics it is argued that the privacy consequences of this measurements are at an acceptable level. Nevertheless, researchers should always be aware that there could be potential privacy risks and violations that are the result of combination of user data.

The Social Media Use scores are proposed to be not merely the total sum of each metric of the SMI2. We provide an example here of a more refined scoring formula to take into account the Network Size of Posts.

We calculate the Contribution Score C as follows:

$$C = \log\left(\sum_{d=1}^{D} X_d\right) \cdot N_D^{\left(1+\frac{1}{N_D}\right)}$$

with

$d \in \{1,2, \dots D\}$ as an indicator for a day in the time horizon

D as the final day

X_d as the number of Posts on day d

N_D as the Network Size on day D

To calculate scores that reflect the influence of a post, the network has to be included as a leverage of the post. Therefore, it was decided to include the Network Size as a weighting factor in the scoring approach. It is assumed that, for measuring influence, the size of the network is more important than the number of posts. Table 30 displays a series of examples for the outcomes of such a scoring approach for the Contribution Score.

Posts (X)	Network Size (N)	Contribution Score (C)
5	150	108
10	150	155
50	150	264
100	150	310
5	500	354
10	500	506
50	500	860
100	500	1013
5	2000	1403
10	2000	2008
50	2000	3411
100	2000	4015

Table 30. Example of Contribution Scores for various network sizes

For the Engagement part of the SMI2 we have to count the sum of all the interactions (In) and also add the sum of the Word of Mouth (Wm) count for a selected period of time. The Word of Mouth count may receive a higher weight in the total participation score.

The participation score P can be written as follows

$$P = W = I$$

With the word-to-mouth score W given by the following equation:

$$W = \sum_{d=1}^{D} W_d^2$$

The interaction score I is given by the following equation:

$$I = \sum_{d=1}^{D} I_d$$

However, more empirical tests are necessary to revisit and decide on these proposed formulas. In the end, the total SMI2 scores have to be calculated in the following way.

$$SMI2 = C = P$$

Yet the formulas have to be tested with more empirical data. An initial exploratory test was carried out during the Municipal elections of March 19, 2014 in The Netherlands. The aim was to retrieve and compare Social Media Use scores from the council candidates of the seven largest municipalities in the province of Overijssel, The Netherlands. We started with developing software to collect the necessary data from the databases of Facebook, Twitter and YouTube. The software development was a joint initiative from a new consortium called SocialIndicator. The following three parties have collaborated in developing such a software tool: Saxion University of Applied Sciences, The University of Twente and eLabbs. As a result of this initial test, and of the theoretical background (as discussed above) we propose the SMI2 score to be a more reliable indicator in measuring the use and influence of individual community members.

The revised Social Media Indicator-2, as presented above, is expected to be a more reliable measure for the social media influence of an individual. It can easily be adapted to future social media channels that gain in popularity. This is because the SMI2 provides the theoretical foundation to select metrics of other (future) media channels that have similar functionality. The SMI2 can serve as an instrument in addressing the construct of Social Media Use in the Social Media Participation Framework.

9.4. Social Media Strategy

In the revised version of the Social Media Participation Framework, the construct of Social Media Choice is replaced by the more comprehensive construct of Social Media Strategy. However, the field of Social Media Strategy was not yet mature at the time of writing. Nevertheless, there is some useful theoretical background available and seven key elements of social media strategy were identified from literature, that give a more complete and comprehensive view of the decision making process behind social media practices of nonprofit communities.

It is important for organizations and communities to have an integrated approach to social media strategy, comprising elements that are opportunity based and risk based (Gotterbarn, 2012; Munar, 2012). Social media strategy can be a double-edged sword in that sense. Meaning that on the one hand the strategy will exploit the potential benefits and provide the community with the advantages of social media, such as reaching potential new members and on the other hand, it regulates the downsides of use, such as reducing the impact of social media attacks toward the community. In addition to having an integrated approach, it is important to understand that there is no one-size-fits-all strategy, but that the strategy is, to a large extent, dependent on the chosen social media channels, the specific nature and goals of the community and its environment (Berthon et al., 2012; Klang & Nolin, 2011).

Seven elements are considered to be key to a comprehensive social media strategy. An overview of the 7 key elements of Social Media Strategy based on literature reviews is displayed in Figure 28.

Figure 28. 7 Key Elements of Social Media Strategy

Each of the 7 key elements will now be discussed using the findings of a literature review that was conducted in 2013. An overview of the references used and the core contributions to these studies, of the key elements, are presented in Table 30.

Goals

In order to be of value, social media should be aligned with organizational goals (Bottles & Sherlock, 2011; Dutta, 2010; Gotterbarn, 2012; Thackeray et al., 2008). This means that social media should support the overall strategy of the organization or the community. The use of social media should have a pre-defined goal to be effective. After studying the social media policies of 26 municipalities in Sweden, Klang and Nolin (2011) stressed the importance of concrete and measurable goals as an integral part of social media planning. Nonprofit communities could, for example, consider goals for improving the community or to promote the activities of the nonprofit community. Thackeray et al. (2008) also specifically paid attention to the goals and objectives of social media practices for the purpose of promotion. They ask the question of whether social media enhances the overall marketing strategy or if it makes it more difficult to implement.

Target Audience

Organizations should consider which target groups to address using social media channels. Thackeray et al. (2008) raise multiple questions in evaluating whether social media practices are aimed at a specific priority population since companies "must be able to segment their priority populations, that is, be able to identify, isolate, and know the degree to which these populations use and access Web 2.0 social media" (Thackeray et al., 2008, p. 342). Nonprofit communities should carefully assess whether their target audience is reachable through social media channels and what behaviour is to be expected from this population. Berthon et al. (2012) say that social media practices should take into account the cultural aspects of the potential users: "It gets especially hard when firms attempt to target Generation Y, arguably the generation that has grown up with social media" (Berthon et al., 2012, p. 264). Dutta (2010) makes a distinction between different groups with implications for the development of the strategy. For example, target audiences of nonprofit community's could be divided into close members and potential members.

Social Media Choice

The choice of medium largely determines the effectiveness and even the appropriateness of communication (e.g. Rice's Media Appropriateness Theory from 1993 as discussed in chapter 3). Klang and Nolin (2011) say that affordances and limitations are set by the technological infrastructure. Thackeray et al. (2008) emphasize the importance of looking into the social media habits of the priority population. However, one of the complexities associated with the use of

social media is that "trend data are not yet conclusive with respect to who is generating and accessing information" (Thackeray et al., 2008). Kaplan and Haenlein (2010) provide a matrix of various social media channels with different characteristics and capabilities in terms of media richness and self-disclosure (See Social Media Choice construct and specifically Table 7 in chapter 3). Dutta (2010) makes clear that different target groups can be addressed with different social media tools (e.g. Yammer for internal private groups within organizations).

Resources

Many of the available social media channels do not demand a paid subscription. However, that does not mean that organizational social media practices are free. Valuable resources (FTEs and professional expertise) should be allocated in order to successfully utilize social media. Since nonprofit communities often work with limited and voluntary resources, this is an important factor. Dutta (2010, p. 130) claims that: "the success of your social media strategy will depend on your resources and the quality and authenticity of your message". Employees should sometimes receive training to obtain the required skills needed to work with social media channels. Social media costs time, money and sometimes resources and supporting staff might be required as well (Dutta, 2010). Thackeray et al. (2008) also raise the question of how many resources can be allocated to develop expertise and to create, and distribute content via social media.

Policies

Since social media blurs the borders between communities and their environment, new policies are being considered to control communication via these social media channels. Gotterbarn (2012, p.387) says that: "new types of policies need to be developed which address the blurring of the distinction between corporate and personal computing". Some basic rules should be set in an organization to both regulate the communication of community members and warrant their rights in regard to free speech (Gotterbarn, 2012). The governance of communication via social media can be important within organizations to prevent bullying, harassment and gossip (Marlin-Bennet & Thornton, 2012). Good policies are difficult to employ as constraining policies tend to violate employee rights and may cause resentment from employees or community's members (Gotterbarn, 2012). But they are necessary as the reputation of an organization can be harmed if there are no clear policies regarding how it should or should not be used (Mortleman, 2011). Cases such as Visit Denmark, BP, United Airlines, and Nestlé KitKat show the potential negative impact of social media (Munar, 2012; Berthon et al., 2012).

Monitoring

Communication via social media takes place to a large extent in (semi) public spaces. This type of communication takes place outside the boundaries and control of an organization. Therefore, nonprofit communities should integrate plans for monitoring communication via social media into their strategies. For example, social media can be monitored to react and control communication in periods of crisis (Klang & Nolin, 2011). Organizations such as nonprofits now have new means for monitoring social media (Berthon et al., 2012). To prevent wasting time and to evaluate progress, Dutta (2010) suggests frequently monitoring social media channels by using standard software tools (e.g. Google Alerts, TweetDeck, Radian6, Fisheye). Mortleman (2012, p.10) stresses the importance of social media monitoring: "If you're not routinely monitoring the web and social networks for conversations taking place about you then these conversations can quickly escalate and cause severe reputational damage". Moreover, impact measurement can help to evaluate activities according to Klang and Nolin (2012). Basic indicating metrics can be, for example, numbers of comments/questions, likes, responses, visitors, followers, and friends or the metrics from the Social Media Indicator-2 (SMI2) as described in the previous section.

Activity plan

The final key element derived from literature, as part of the framework, is the activity plan. Several of the municipalities with a strategic plan for social media made a specific "activity plan" to underpin their social media practices (Klang & Nolin, 2011). The scope of the program is considered in terms of timeframe (process, impact, outcome) (Thackeray et al., 2008). The activity plan makes it clear in which timeframe and in which order campaigns, projects, content placement and monitoring will take place.

Key Element	Description	Klang & Nolin (2011)	Thackeray et al. (2008)	Berthon et al. (2012)	Dutta (2010)	Gotterbarn (2012)	Marlin-Bonett & Thorntonb (2012)	Mortleman (2011)
1. Goals	Objectives, desired outcomes with link to organizational and community goals.	x	x					
2. Target Audience	Definition of (local) priority population, segmentation and desired audience.		x	x	x			
3. Social Media Choice	Selection of appropriate social media channels and related content forms.	x	x		x			
4. Resources	Requirements of expertise, financial investments, training and quality control of messages.		x		x			
5. Policies	Guidelines for use, password policies, restrictions in (semi) public and ethical considerations (freedom versus loyalty).	x				x	x	x
6. Monitoring	Measuring behaviour and effects. Deciding which effects will be measured by which metrics.	x		x	x			x
7. Activity plan	Making clear in which timeframe and in which order campaigns, projects, use, content placement and monitoring will take place.	x	x					

Table 31. Overview of key elements of social media strategy and references

Table 31 displays an overview of the key elements as identified in literature. It is envisaged that these key elements of Social Media Strategy can be used for reviewing the comprehensiveness of existing social media strategies or to support the creation of new ones. For example, the comprehensiveness of the social media strategy can be expressed on a scale with a maximum of 7 points. However, further empirical validation is necessary to evaluate the validity and completeness of the list of elements in future studies.
The seven elements could be used in comparative studies to compare the scores of comprehensiveness of social strategies. Then it would be possible to draw conclusions regarding the extent to which having a comprehensive Social Media Strategy makes a difference to the Sense of Community.

9.5. Sense of Community

Considering the outcomes of the case studies it is valuable not only to explore the effects on the offline community. As explained earlier in the comparative case analysis chapter, the sense of community could be developed separately for both offline and online communities.
Therefore, it is suggested here that Sense of Community should be addressed on two levels: offline and online. This approach is not new. There are already studies available that have looked at the Sense of Virtual Community (Abfalter, Zaglia & Mueller, 2012; Blanchard, 2007; Blanchard & Markus, 2004; Koh & Kim, 2003). Koh and Kim (2003, p. 1086) define the Sense of Virtual Community as: "the individual's feelings of membership, influence and immersion toward a virtual community". However, the multi-mode approach for both offline and online echelons of nonprofit communities is not yet well developed. Ultimately the online and offline levels of Sense of Community are interrelated. This means that community ties which originate from offline communities can be sustained through online interaction and that face-to-face meetings contribute to stronger online communities (Koh & Kim, 2003). In that case there could be two dependent variables with bi-directional impact. Offline activities play a critical role in enhancing the inherently low Social Presence of computer-mediated environments (Koh & Kim, 2003).

To measure the Sense of Virtual Community, there have to be some changes in the questions asked in the questionnaire based on the SCI-2 instrument, as used in our case studies (Abfalter et al., 2012; Blanchard, 2007). Researchers have not yet decided on a final list of questions, but they generally base their data collection on the SCI-2 instrument (Abfalter et al., 2012; Chavis, Lee and Acosta; 2008). However, some of the questions and categories need revision, as argued by

various authors (Abfalter et al., 2012; Blanchard, 2007). Moreover, participants in our case studies made some remarks regarding the peculiarity of some of the questions from the SCI-2 instrument. For example they found the question about sharing important events together (e.g. holidays, celebrations, or disasters) peculiar because of the example of disasters. These kinds of questions can potentially be dropped from the questionnaire as proposed by Abfalter et al. (2012). They exclude 9 from the 24 SCI-2 items. Consequently, the data collection instrument for evaluating the Sense of Community in combination with the Sense of Virtual Community should be carefully constructed for use in future studies.

9.6. Discussion

The revised Social Media Participation Framework aims to enhance the initial theoretical framework used in understanding the community effects of social media on nonprofit communities. However, the revised version still needs to be further developed and tested in new empirical cases, to evaluate its value. These measurements should preferably take place in cases of new organizations, because the three case study projects in this dissertation are finished and their members already familiar with the previous questions of the questionnaires. A summary of the operationalization of the constructs of the revised framework is displayed in Table 32.

Construct	Theory	Reference	Instrument
Social Media Use	e-enabling	Macintosh and Smith (2002); Effing, Van Hillegersberg and Huibers (2011)	SMI2
	e-engagement	Macintosh and Smith (2002); Effing, Van Hillegersberg and Huibers (2011);	
Sense of Community	Psychological Sense of Community (offline);	McMillan and Chavis (1986); Chavis, Lee and Acosta (2008);	SCI-2
	Sense of Virtual Community (online)	Koh and Kim (20013); Blanchard (2007);	SOVC based on SCI-2
Social Media Strategy	Key Elements Social Media Strategy	Effing (2013);	Qualitative interviews

Table 32. Operationalization of the Social Media Participation Framework

The revised framework is expected to address a number of observed limitations found in the previous version the framework:

1. The improved metrics of the SMI2 are automatically retrievable by developing a software tool that makes it possible to generate larger longitudinal datasets.
2. Sense of Community is addressed from both the offline and online perspective.
3. Having a more complete and thorough approach to the Social Media Choice construct by enhancing it to become a more comprehensive construct of Social Media Strategy.
4. Eliminating inefficient constructs and time-consuming data collection techniques.
5. More reliable identification of individual members where there are multiple measurements over time.

The revised framework contributes to all of these limitations. However, the challenge remains in how to deal with members who have more than one affiliation in their social media profiles. It might be decided to exclude certain members from studies where the other affiliations are expected to cause a bias in the results. Also, because of privacy settings, it remains challenging to obtain all relevant indicators for Social Media Use. Moreover, it could be a difficult task to keep the software up to date and to stay connected to the Application Programming Interfaces of these included social media channels. Furthermore, the Social Media Strategy construct needs to be developed further and be operationalized into an instrument that can be used in future studies.

10. Conclusion

10.1. Introduction

The main question of this study was: "How does the use of social media by members of nonprofit communities affect their offline participation?" This question was subdivided into four research questions. Each of these sub questions will now be revisited and addressed.

RQ1: To what extent is social media of added value in sustaining the offline participation of members from nonprofit communities?

Social media does not deliver miracles. The power of social media can easily be overestimated when nonprofits aim to replicate the results such as those achieved by Barack Obama and the Red Cross, as described in literature. Chapters 1 and 2 of this dissertation mentioned such remarkable social media examples, which were found in literature. The Social Media Participation Framework, as presented in Chapter 3, contributed to the measurement and comparison of both Social Media Participation and Offline Community Participation. The framework was useful as an empirical lens in studying this research question. The case studies of Chapters 5, 6 and 7 were based on this theoretical framework and addressed the first research question by providing case results regarding the effects of Social Media Participation on Offline Community Participation. However, this research did not find strong support for the added value of social media in sustaining offline participation within nonprofit communities.
Social media does not seem to be the key solution for increasing offline community participation, according to the comparative case analysis, as presented in Chapter 8. Social media can be used to augment already existing forms of communication within the community, but should not be seen as a replacement. Neither did this study reveal that social media was the ultimate solution for creating stronger communities within nonprofit organizations. In the case of the Church community, Chapter 6, we found an empirical indication that social media can help to sustain the local Sense of Community if applied following a clear strategy. However, the statistical significance of this finding was limited because of a rather small longitudinal dataset for this particular relationship. In the case of the city council, Chapter 5, the use of social media by members of party factions was negatively associated with their Sense of Community. Consequently, social media could possibly lead to the weakening of offline participation. More research with larger longitudinal datasets collected over longer timeframes could provide us with more knowledge regarding this relationship. Given the findings of the case studies in this

dissertation there is still a lack of evidence that social media can be of substantial added value for sustaining Offline Community Participation. While social media seems to have various benefits for nonprofit communities, the evidence in this study does not support the idea that social media is 'the cure' for the decline in member participation in all nonprofit communities.

RQ2: What are the key factors that determine the effectiveness of social media practices in relation to sustaining offline participation within these communities?

Nonprofit communities, which had defined social media strategies, were experiencing the added value of social media, as made clear in the comparative case analysis of Chapter 8.
The cases with a strategic approach to social media (Chapters 6 & 7) showed signs of meaningful outcomes regarding Offline Community Participation. There was also a case where social media strategies were completely lacking (Chapter 5). In that case, that of the city council, its members experienced fewer benefits from social media. Remarkably, a negative significant correlation was found between Social Media Use and Sense of Community in this case, which lacked social media strategies. Chapter 8, the comparative case analysis, and Chapter 9, the revised framework, show seven key elements for social media strategies, as derived from literature. Key elements for a Social Media Strategy in enhancing and sustaining community participation include goals, target audience, channel choice, resources, policies, monitoring and activity planning.
According to the comparative case analysis, these key elements of social media strategy determine the effectiveness of social media practices. The extent to which social media is perceived as useful depends partly on whether social media strategies are present. Social media strategies can help nonprofits in preventing the waste of precious time on social media and direct their activities towards community goals.

RQ3: How to develop a theoretical framework which is capable of serving as an empirical lens in evaluating the effects of social media on offline participation within nonprofit communities?

The initial version of the Social Media Participation Framework was defined in Chapter 3 of this dissertation. Drawing upon theoretical backgrounds and existing participation theories, as described in Chapter 2, the framework comprises of four theoretical constructs. The concept of Social Media Participation was addressed by the constructs of Social Media Choice and by Social Media Use. The concept of Offline Community Participation was addressed by the constructs of Community Engagement being applied on the one hand and by Sense of Community on the other. Chapter 4 elaborated on the method of the case studies, based on this version of the framework. The aim of the case studies was to test the framework and contribute to theory development. The first version of the framework was useful for descriptive purposes but not yet very successful in terms of explanatory results regarding the causal effects. Based on the evaluation of the first framework by employing it in case studies it became feasible to develop a revised version to address its observed limitations and shortcomings. Chapter 9 presented the revised Social Media Participation Framework. The revised framework is leaner and of more relevance to discovering the community effects of social media. Studies based on the revised framework will be more efficient because data collection can be largely automated. As a result, it becomes easier to retrieve comprehensive longitudinal datasets. The revised framework focuses on two of the already existing constructs that delivered most valuable results in the cases. To capture Social Media Use scores, a revised version of the Social Media Indicator was presented together with improved scoring instructions. The Sense of Community (SOC) is extended with the Sense of Virtual Community (SOVC). In the revised version of the framework, Social Media Strategy is proposed as a moderating variable for the extent to which Social Media Use affects the Sense of Community.

RQ4: How to best measure and compare social media influence levels of members of nonprofit communities?

Chapter 3 presents the first version of the Social Media Indicator. The measure comprises a list of metrics to indicate the extent to which a community member is using social media. The SMI distinct two levels of participation: contribution and interaction. These two levels relate to the e-enabling and e-engagement stages of electronic participation (e.g. Macintosh & Smith, 2002). Consequently, Social Media Use scores can be compared as shown in the case studies in chapters 5,6 and 7. The version as employed in these case studies was valuable to retrieve comparative scores. However, significant improvements for this measure are proposed in Chapter 9 of the Revised Social Media Participation Framework. In order to obtain reliable influence scores, there should be a distinction between someone's publications or posts and his or her network size as an impact factor. The engagement part of the score is subdivided into the categories of 'interaction' and 'word of mouth' to distinguish between conversation and sharing behaviour. The metrics and scoring instructions of the SMI2 can be found in chapter 9. The design of the SMI2 instrument takes into account the various opportunities and limitations of the Application Programming Interfaces within popular social media channels such as Facebook, Twitter, YouTube and Google+. The data collection procedure is based on automatic retrieval data from social media databases to ensure the optimal reliability of data collection. The SMI2 is expected to serve as a more reliable measure in comparing individual influence levels on social media.

The Social Media Participation Framework was a first step toward the development of a framework that can be used to discover the effects of Social Media Participation on Offline Community Participation. By carrying out case studies, based on this framework, we were able to measure and compare the individual Social Media Use scores and then relate them to dependent variables such as the Sense of Community. Because of the novel nature of the topic of social media in these communities it was not possible to use already established frameworks to this end. The framework was useful in guiding case study design in this novel field of research. The framework was also valuable as a descriptive lens in gaining understanding of the real-world situation in communities. However, the first version of the framework was not yet very successful in explaining exactly how Social Media Participation influences Offline Community Participation. In order to reliably identify the causal effects of social media, the explanatory value of this framework was limited. One of the reasons for this is that the participation of members in nonprofit communities is dependent on many factors and that the influence of social media is

difficult to isolate. This is a common problem in dynamic subjects of research where the circumstances cannot easily be controlled. "Many factors are usually required for an effect to occur, but we rarely know all of them and how they relate to each other" (Shadish, Cook & Campbell, 2002). The revised version of Social Media Participation Framework addresses the limitations of the initial version in order for us to increase the efficiency of data collection and enhance the understanding of the community effects of social media.

The remainder of this final chapter is organized as follows. The second section will discuss the limitations and validity of the study and its framework. The third section describes its contribution to science. The fourth section discusses its contribution to future practices including management implications. The final section outlines the directions of future research.

10.2. Limitations

The following limitations have to be taken into account when interpreting the findings of this dissertation. We did not strive to provide a complete list of limitations here, as each chapter already addressed the specific limitations of each specific part of the study. The focus of this section is to discuss the primary limitations of the Social Media Participation Framework, its constructs and method. This section concludes with observations regarding the external and internal validity of the study.

A first limitation of the framework is the focus on the participation of the already existing members within the communities and their Sense of Community. This focus draws primary attention to the 'bonding' aspect of social media (e.g. Ellison, Steinfeld & Lampe, 2007). The case studies have focused on the closest members within the community. This excludes a potentially relevant angle of studying, the disengaged members or potential members that are not yet part of the community. Social media seems to be a valuable tool for 'bridging' people and groups (Tomai et al., 2009). The findings of this dissertation suggests that social media could help to connect new groups of people, the 'bridging' aspect, but that was not the primary focus of this study. The primary value of social media to communities is expected to be the 'bridging' capability instead of the 'bonding' capability of already close members. Social media can help to bridge relationships with new members and between existing members from separate sub groups. Social media has not yet made much of a difference to the 'bonding' aspect within the

offline communities in this study. As argued by Vergeer and Pelzer (2009), online socializing seems less significant in the bonding of strong, existing ties in any network. Also, Tomai et al. (2009) discovered that online forms of community did not significantly affect the offline 'bonding' of the members of a school community.

A second limitation of the framework is with regard to the construct validity of the Social Media Use construct. The Social Media Indicator is the measure for addressing this construct.
The soundness of the Social Media Use construct of the framework was somewhat affected by the multiple backgrounds and affiliations of community members. A problematic issue in measurement is that social media profiles could reflect multiple backgrounds and interests. The borders between personal and professional communication are blurring (Dutta 2010; Klang & Nolin, 2011). Consequently, the use scores as delivered by the Social Media Indicator could reflect more than one background or affiliation. The scores are not necessarily reflective of the community affiliation. This problem is inherent in the nature of social media and researchers should be aware of this when using a measure such as the SMI. Their social media use scores sometimes reflect multiple affiliations. In addition, it could be the case that an already existing network of relationships is mirrored by the profile of a member on social media. This would change the way we look at the relationship and direction of the causality of the Social Media Participation Framework. Another problem is the lack of completeness of the included social media channels in the SMI. The Social Media Indicator provides indicative scores and does not completely mirror reality. The selection of included social media channels was dependent on the channels that had the largest reach according to market researchers. As a result, not all existing channels were included. Moreover, the outcomes of this study are largely based on two dominant social media channels, namely Facebook and Twitter. While there is plethora of social media channels, the evidence in this study is primarily based on these two channels. In other cases, where communities choose other social media channels with very different characteristics, there could be other results. Social media channels come and go. Princeton researchers already predict the end of Facebook based on epidemic trend models (Cannarella & Spechler, 2014). Nevertheless, insights regarding social network sites can - to some extent - be transferred to newer versions. We have seen before that research findings, based on social media channels that were popular in the past, such as Friendster and Myspace (Boyd & Ellison, 2008), can be applied to current social network sites. The revised version of the Social Media Participation Framework addresses these problems, to some extent, by taking into account the functionality and purpose of the various social media channels. The Social Media Indicator primarily focuses on the extent

to which community members use social media. It does not aim to provide us with any verdict about the quality of the contents. This point should be taken into account in future studies that rely on the SMI for indicating Social Media Use.

A third limitation is the manual observation of Social Media Use scores during the case studies. There are clear limitations regarding the measurement and comparison of Social Media Use scores and their accurateness. Manual observation of metrics could have led to mistakes and lower reliability. A more accurate method is preferred, as discussed in Chapter 9 as part of the revised Social Media Participation Framework. Automatic retrieval of scores via the Application Programming Interfaces can improve reliability. The metrics of the SMI2 are designed in such a way that the parameters can be retrieved automatically via software solution. In addition, a software approach to collecting data makes it possible to collect data more frequently and over longer timeframes. This could contribute to finding effects.

There are two remaining points of discussion regarding the external and internal validity of the multi-method case studies in this dissertation (Following Blumberg et al., 2011; Calder, Phillips & Tybout, 1982; Shadish, Cook & Campbell, 2002).
With regard to external validity, in the end, the selected types of communities have various characteristics. Every community is a unique combination of people with some kind of shared goals. The external validity is about: "the extent to which the effects holds over variations in persons, settings, treatments, or outcomes" (Shadish, Cook & Campbell, 2002, p. 22). When the goal is theory development, external validity is not the first priority (Calder, Phillips & Tybout, 1982). The case study findings cannot easily be generalized for different types of nonprofit communities but have theory development purposes. Nevertheless, the study has shown that the assumption that social media participation always substantially affects offline community participation was falsified because this could not be replicated in the three case studies. This contributes to the insights that were necessary to improve the theory of the framework, because the sample was relevant to the universe of the theory (Calder, Phillips & Tybout, 1982). While a larger selection of cases would have contributed to presenting more generalizable claims, generalization of the entire population would still be problematic (Lee and Baskerville, 2003; Shadish, Cook & Campell, 2002).

With regard to internal validity: this study cannot fully warrant the internal validity of the causal relationship claim because of multiple reasons. It is difficult to control all other causes in a case

study for a nonprofit community, which is a dynamic group of people. Nonprofit communities are dynamic constructs. Therefore, it is difficult to isolate the influence of social media from many other influence factors. Furthermore, each of the case studies, in this dissertation, had its own circumstances and unique backgrounds. For example, in the church case, there were still various conflicts caused by a merger that took place a few years before the case study. That could still have influenced the Sense of Community for individual members during the time of research. Furthermore, in this example, there could be alternative causes for the sustained levels of Sense of Community in the group of social media users, such as following the educational training program.

Despite the limitations of the study and its framework there are valuable contributions to the field of research and practice. These contributions will be elaborated on next.

10.3. Scientific contribution

The following four points illustrate the significance of this study from a scientific perspective.

Firstly, this study contributed to reduction of the void in theories and frameworks for studying social media and its effects on communities. The revised framework could be applied and tested in future studies. The complete framework and the constructs deliver a theoretical foundation for studying the community effects of social media within the nonprofit sector, drawing upon existing theories from the field of electronic participation and Sense of Community.

Secondly, the SMI2 measure, which is a part of the Social Media Participation Framework, comprises of a set of social media metrics that can be used and revised in many types of research where it is important to compare the Social Media Use and influence levels of individuals. The measure and metrics of the Social Media Indicator-2 can be revised in future studies to relate the independent variable of Social Media Use to other dependent variables. The Social Media Indicator-2 can be adjusted to specific situations in various countries and can be updated quite easily as social media channels change in popularity over time.

Thirdly, the study illustrates the added value of a multi-method research approach in the stage of theory development. The multi-method study was based on the principle of triangulation. Triangulation is defined as "the combination of methodologies in the study of the same phenomenon" (Denzin, 1978, p.291). In this case qualitative and quantitative methods are used

in a complementary way (e.g. Jick, 1979; Wijnhoven, 2012). Multiple and independent measures provide a more comprehensive picture of an empirical phenomenon in complex and dynamic situations. Davis (2010), for example, indicated this need for multi-method studies. This research shows that the combination of both qualitative and quantitative methods is valuable in gaining more theoretical understanding of the complex relationship between Social Media Participation on the one hand and Offline Community Participation on the other.

Fourthly, Waters et al. (2009) discussed the need for more longitudinal studies regarding the effects of social media within the nonprofit field. This study has delivered three longitudinal case studies, shedding new light on the capabilities and limitations of social media for nonprofit communities.
One case study took place in the field of politics and two of the cases are from the religious field. The longitudinal approach made it possible to look at effects over a period of time instead of solely a one-time snapshot of the situation. Consequently, the results were more insightful because of the connection with the organizational results instead of merely counting numbers of 'likes' and 'views'. It is also valuable for scholars to have more comparative data regarding the Sense of Community in various settings. Future findings regarding the Sense of Community can be compared with the findings of this study.

Because the study also provides theoretical insights that are not mentioned above, this list should not be seen as complete. Moreover, many aspects regarding the value of social media in nonprofit communities have not received attention and this study raises new questions as well.

10.4. Contribution to practice and management implications

This study and its findings have a large relevance in practice. Four examples are provided here.

Firstly, software companies can apply the Social Media Indicator-2 measure in new software solutions to monitor and measure both the impact and interaction caused by social media use. This provides them with new business opportunities. This contributes to more justified solutions in the field of social media analytics. In the final stage of this research, a consortium was initiated, in collaboration with a software company, to develop the first software tool for this reason. The open and scientific approach of measuring and comparing use levels of social media can provide companies with a more reliable approach to social media monitoring tools and social dashboards. This can help decision makers by indicating the potential impact of their campaigns

on their audiences and employees. In that sense, the theoretical contributions gained from this research serve as a ground for new business opportunities.

Secondly, the knowledge in this dissertation helps practitioners to revisit their expectations regarding the capabilities of social media. They should not be overly optimistic about the impact of social media on nonprofit communities. The current use of social media does not seem to be the cure for a decline in community participation. Furthermore, they are advised to periodically monitor the effects of social media to evaluate results. Practitioners in nonprofit communities could learn from the findings in this dissertation and the related publications that are aimed at a practitioner audience.

Thirdly, the perceived value of socials media seems to be moderated by whether or not social media strategies are present. The findings of this study encourages practitioners to approach social media more strategically, to prevent both loss of valuable time and damage to the reputation of their members and leverage the advantages of social media. But even with social media strategies in place the communities should not expect too much from social media in terms of improving the strength of the offline community in a short period of time. Social media seem to be a valuable tool in supporting and augmenting other forms of communication. However, leaders and managers of non-profit communities should not think of social media as a goal in itself or that it will automatically help their community.

Fourthly, consultancies can develop advice programs to help non-profit communities with the design of new social media strategies that fit the organizational agenda. A foundation for such an advice program can be found in the key elements of social media strategy, as described in the revised version of the Social Media Participation Framework.

The research provided directions for the relevant application of the findings as made clear by the three examples above.

10.5. Future research recommendations

Drawing from the outcomes in this dissertation there are many valuable directions that can be taken in future research. Therefore, suggested directions for this future research are proposed here.

Firstly, the revised version of the Social Media Participation Framework has yet to be empirically tested. Future research can evaluate the revised framework by conducting new case studies. The proposed changes to the framework can then be validated during these empirical studies. This could lead to a better understanding of the extent to which social media use can influence the sense of community within nonprofit communities. Moreover, the assumption that Social Media Strategy is a moderator of the effects can be further investigated.

Secondly, research within the nonprofit field could pay more attention to measuring the effects regarding the bridging value of social media. In this research we have focused on the bonding aspect of social media within nonprofit communities (e.g. Ellison et al., 2007). We focused on the leaders and key senders of the communities and not on their audience or other stakeholder groups. The relationships with stakeholders such as potential members and citizens were not part of the scope of this research. The findings indicate the possibility that social media contributes to making new connections with other (groups of) people who are not yet part of the inner circle of the community. Ellison et al. (2007) have conducted a study indicating that Facebook had the strongest relationship with the bridging aspect of social capital. Consequently, future studies should at least consider the integration of that kind of value for the community as well.

Thirdly, the method of social networking analysis provided a promising angle for capturing community effects. The field of social network analysis presents many other techniques for evaluating community effects. Studies that compare social networks in both online and offline communities are highly recommended. Comprehensive and longitudinal analysis could reveal new patterns of change in communities caused by social media.

Fourthly, the case studies in this dissertation have indicated the importance of a strategic approach to social media in that it is able to organize participation. In the case where social media strategies were completely lacking, the results of social media practices were quite

negative. The nonprofit communities who underpin their social media campaigns with strategies seem to experience more organizational value from social media. Moreover, organizations could benefit from a more thorough understanding and theoretical grounds with which to underpin the design and implementation of social media strategies. The Social Media Strategy elements as proposed in chapter 9, could form a theoretical groundwork for designing various studies. There could be, for example, evaluative studies to compare the comprehensiveness of the social media strategies of communities and organizations. Another example is empirical work where various strategy configurations are related to organizational success, measured by pre-defined indicators.

More understanding regarding which content strategies (in terms of tone-of-voice, frequency, purpose, etc.) could deliver the most interaction within the desired audience is also relevant for further research. These kinds of studies point towards of the quality of the contents. The content strategies could be dependent on the functionality of the social media channel. For example, Facebook, as a social network site, offers other social functions from those of its competitors, such as Google Plus. Therefore, many valuable studies can be designed to evaluate success factors in specific channels of social media. By conducting such studies it becomes possible to learn more about the way social media can be used to reach organizational goals.

Finally, more explanatory studies should be encouraged. The current research is based on a framework that was limited in its explanatory value. Future studies could use the insights of this study to develop comprehensive theory and theoretical models with multiple variables to explain the causal relationships between them. For example the bonding and bridging parts of the relationships between community members could be further investigated. Such studies will contribute to further understanding of the relationship between social media and community participation.

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Appendix A: Overview social media adoption and use

Table: overview social media adoption statistics

	Percentage population reach	Activity specification	Development	Source	Data From (area, year)
Overall internet access US	34% US 85% US 65%			Nielsen PEW[1] Nielsen[2]	Worldwide, 2013 US, 2013 (May) US, 2013 (June)
CH	CH 38%		From 80% in 2012	CNNIC NewCom	China, 2011 Netherlands, 2013
internet access	NL 94% > 75% of all internet users			Nielsen[3] NewCom[4]	(Feb) US, 2012
China internet access Netherlands	visit social media > 75% of all internet users		Time spent was up 21% from July 2011 to July 2012	Forrester (KaplanHaenl)	Netherlands, 2013 (Feb) US, 2008
a. Social media	visit social media 75% of all internet users visit social media				
Social Network Sites	72% 54% 58%		From 8% in 2005; From 67% in 2012 From 52% in 2011	PEW Nielsen NewCom comScore comScore comScore Nielsen Nielsen Comscore NewCom Nielsen NewCom NewCom Nielsen	US, 2013 (May) US, 2012 Netherlands, 2013 (Feb) Worldwide, 2010 Latin America, 2010 North America, 2010 Europe, 2010 Asia, 2010 US, 2013 (July) Worldwide, 2013 (July) US. 2013 (Dec 2012) Netherlands, 2013 (Feb) US, 2012 Netherlands, 2013 (Feb) US, 2012 Netherlands, 2013 (Feb)
Worldwide Latin America North America Europe Asia Facebook	75.8% female 69.7% male 94.1% female 91.9% male 91.0% female 87.5% male 85.6% female 80.6% male 54.9% female 50.7% male FB 42%[5] FB 1 billion people worldwide FB 47% FB 47%	Nrl category of sites 20% of the time spent on PCs 6 hour and 24 minutes per month p.p. 10.8 % part of the total minutes; nrl position user engagement 30% daily use		CNNIC	

[1] PEW Sample of 18 years and older n = 2,252

[2] Percentages from Nielsen are calculated by dividing the reach in millions through the total amount of Americans, assumed to be 316m.

[3] Nielsen Sample of 18 years and older n= 1,998

[4] NewCom Sample of 15 years and older n= 13,700

LinkedIn Google Plus Myspace	LI 9% LI 23% G+ 8% G+ 12% MS 6 % > 50%	2% daily use Increased 80% since 2011 (site started in Sep 2011) 3% daily use Decreased - 13% since 2011			US, 2012 China, 2011
Blogging Blogger Wordpress Tumblr	 B 18% W 10% Tn 8%			 Nielsen Nielsen Nielsen	 US, 2012 US, 2012 US, 2012
Microblogging Twitter Weibo	 T 18% T 12% T 20% W > 50%	 10% daily use	 From 8 % in 2010	 PEW Nielsen NewCom CNNIC	 US, 2013 (May) US, 2012 Netherlands, 2013 (Feb) China, 2011
Video sharing YouTube	36% 42%	1 hour and 50 minutes per month p.p. 15,004,387,000 streams per month 5% daily use 46% of mobile devices have the YouTube App installed		Nielsen Nielsen NewCom ComScore	 Worldwide, 2012 (Dec) Netherlands, 2013 (Feb) US, 2013
Picture sharing Instagram Pinterest	 I 4% P 9% P 3%	1% daily use Increased 1,047% since 2011		NewCom Nielsen NewCom	Netherlands, 2013 (Feb) US, 2012 Netherlands, 2013 (Feb)

Mobile					
	32%	Mobile devices take 37% share of the total internet usage Nr1 category 30% of the time spent on mobile is social media 55% of the use of social networking sites is mobile vs 45% pc	From 30% in 2011	comScore Nielsen Nielsen comScore	US, 2013 US, 2012 US, 2012 US, 2013
Smartphone		68% of Tablet users use Social networking Apps 24 hours per month	From 7% in 2007 to 59% in 2012	comScore Nielsen Nielsen Nielsen Comscore New Com	US, 2013 US, 2012 (Q4) US, 2012 (Dec) US, 2012 (Dec) US, 2013 Netherlands, 2013 (Feb)
		38 % daily use to access social media while watching TV 2 in 5 smartphone users read posts from organizations 81% of smartphone users use Facebook App	Twitter fastest growing iPhone App in 2012		

Tablet		44 % daily use to access social media while watching TV. 68% of Tablet users use Social networking Apps 63% of Tablet users use Facebook App		Nielsen Comscore NewCom	US, 2013 US, 2013 Netherlands, 2013 (Feb)

Sources: PEW, Nielsen, Comscore, NewCom

Audiences (Young, Old, Male, Female)

SNS Reach
a 18-29 (n=395) 89%
b 30-49 (n=542) 78%
c 50-64 (n=553) 60%
d 65+ (n=356) 43%

SNS Average time spent hours per month on PC (Nielsen, 2012 The social media report)
(mobile web even higher)
a 18-24 11:01
b 25-34 9:04
c 35-44 8:12
d 45-55 8:34
e 55-64 6:57
f 65+ 4:18

Male 6:13 hh:mm july 2013
Female 8:37 hh:mm july 2013

Male 64 minutes Facebook per day (facebook Sweden study)
Female 81 minutes Facebook per day

All Females 75.8% (Comscore, Social netyworking, Percentage of internet users, May 2010)
All Males 69.7%

Regions
Social Networking Category Reach by Worldwide Region for Females and Males
May 2010

Total Audience, Age 15+ - Home & Work Locations*
Source: comScore MMX
Social Networking % Reach by Region

	Females	Males
Worldwide	75.8%	69.7%
Latin America	94.1%	91.9%
North America	91.0%	87.5%
Europe	85.6%	80.6%
Asia Pacific	54.9%	50.7%

The total number of Weibo users rose 296 percent to 249.9 million in 2011, data from the China Internet Network Information Center (CNNIC) showed, meaning nearly half of the Chinese Internet population used Weibo.

CNNIC said in its report that by the end of December, there were 513 million Internet users in China, representing an Internet penetration rate of 38.3 percent. (Reuters)

Facebook	FB 42%[8] FB 1 billion people worldwide FB 47% FB 47%	Nr1 category of sites 20% of the time spent on PCs 6 hour and 24 minutes per month p.p. 10.8 % part of the total minutes; nr1 position user engagement	Nielsen Nielsen Comscore NewCom	US, 2013 (July) Worldwide, 2013 (July) US. 2013 (Dec 2012) Netherlands, 2013 (Feb)
LinkedIn	LI 9% LI 23%	30% daily use	Nielsen NewCom	US, 2012 Netherlands, 2013 (Feb)
Google Plus	G+ 8% G+ 12%	2% daily use	Nielsen NewCom	US, 2012 Netherlands, 2013 (Feb)
Myspace	MS 6 % > 50%	Increased 80% since 2011 (site started in Sep 2011) 3% daily use Decreased -13% since 2011	Nielsen NewCom Nielsen CNNIC	US, 2012 China, 2011
Blogging Blogger Wordpress Tumblr	B 18% W 10% Tn 8%		Nielsen Nielsen Nielsen	US, 2012 US, 2012 US, 2012

Microblogging Twitter Weibo	 T 18% T 12% T 20% W > 50%	 10% daily use	 PEW Niels en NewCo m CNNIC	 US, 2013 (May) US, 2012 Netherlands, 2013 (Feb) China, 2011
Video sharing YouTube	 36% 42%	 1 hour and 50 minutes per month p.p. 15,004,387,000 streams per month 5% daily use 46% of mobile devices have the YouTube App installed	 Niels en Niels en NewCo m ComSc ore	 Worldwide, 2012 (Dec) Netherlands, 2013 (Feb) US, 2013
Picture sharing Instagram Pinterest	 I 4% P 9% P 3%	 1% daily use Increased 1,047% since 2011	 NewCo m Niels en NewCo m	 Netherlands, 2013 (Feb) US, 2012 Netherlands, 2013 (Feb)

FB 42%[7] FB 1 bln users FB 47% FB 47% LI 9% LI 23% G+ 8% G+ 12% MS 6 %	Nr1 category of sites 20% of the time spent on PCs 6 hour and 24 minutes per month p.p. 10.8 % part of the total minutes; nr1 position user engagement 30% daily use 2% daily use Increased 80% since 2011 (site started in Sep 2011) 3% daily use Decreased -13% since 2011	Nielsen Nielsen Comscore NewCom Nielsen NewCom Nielsen NewCom Nielsen	US, 2013 (July) Worldwide, 2013 (July) US. 2013 (Dec 2012) Netherlands, 2013 (Feb) US, 2012 Netherlands, 2013 (Feb) US, 2012 Netherlands, 2013 (Feb) US, 2012

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Thank you very much.

Summary

Social media could help nonprofit communities to organize their communication with their members in new and innovative ways. This could contribute to sustaining or improving the participation of members within these communities. Yet little is known of how to measure and understand the offline community effects of social media use. Voluntary member participation is of great importance to the nonprofits in sustaining their communities and in reaching their goals. Therefore, the main question of this study is: "How does the use of social media by members of nonprofit communities affect their offline participation?" The Social Media Participation Framework was developed to address this question. It is an initial theoretical framework that aims to contribute to discovering the effects of Social Media Participation on Offline Community Participation.

The concept of Social Media Participation is addressed by the construct of Social Media Choice and the construct of Social Media Use. The concept of Offline Community Participation is addressed by the construct of Community Engagement and the construct of Sense of Community. To address the construct of Social Media Use, a new measure was created to capture participation levels: The Social Media Indicator (SMI) which divides the intensity of use of social media into two aspects: Contribution (e-enabling) and Interaction (e-engagement), following the e-participation theory of Macintosh.

In order to test the theoretical framework, it was employed in three longitudinal, multi-method, case studies. Both qualitative and quantitative data collection techniques were included in the design. The reason was to strengthen the grounding of theory by triangulation of evidence. This 1st case study was regarding a City Council and its elected political party members in Enschede, The Netherlands. It took place between November 2011 and December 2012. The 2nd case was a Roman Catholic Church community around Oldenzaal in The Netherlands. It was conducted between September 2011 and December 2012. The 3rd case was based on the Apostolic Society in Enschede, the Netherlands, conducted from February 2012 to June 2013.

The analysis of the data collected in these case studies reveals that social media did not greatly affect the offline participation of members within their communities. Some indications for causal effects from Social Media Participation on Offline Community Participation were present in the data. The communities who had defined social media strategies were experiencing added value from social media. However, in the case of the council, members who had higher scores for Social Media Use showed significantly lower scores for their Sense of Community. In the end, the exact causality of observed effects remains unclear. The evidence in this study does not support the idea that social media is 'the cure' for the decline in member participation in nonprofit communities. However, these findings could also be attributed to the high level of complexity in studying these effects. Based on the experiences of the framework in these case studies a revised framework is proposed which addresses the limitations of its predecessor. This study contributed to reducing the void of theories and frameworks for studying social media and its effects on communities.

Nederlandse samenvatting

Non-profitgemeenschappen, zoals kerken en politieke groeperingen, kunnen mogelijk gebaat zijn bij de inzet van sociale media. Gebruik van sociale media kan mogelijk helpen om de relaties tussen leden van deze gemeenschappen opnieuw te organiseren. Nieuwe en innovatieve inzet van sociale media zou kunnen bijdragen aan de participatie van leden binnen deze gemeenschappen. Toch is er weinig bekend over de meetbaarheid van de effecten van het gebruik van sociale media binnen dit type organisaties. Ook ontbreekt het over het algemeen aan kennis over hoe het gebruik van sociale media inwerkt op dergelijke gemeenschappen.

Vrijwillige participatie van leden is van essentieel belang voor non-profitgemeenschappen. Zonder vrijwilligers kunnen deze gemeenschappen moeilijk voortbestaan. Voorts is deze participatie van vrijwilligers van groot belang voor het bereiken van organisatorische doelen.

De hoofdvraag van dit onderzoek is dan ook:
"Hoe verandert de offline participatie van leden van non-profitgemeenschappen door het gebruik van sociale media?"

Het '*Social Media Participation Framework'* is door de onderzoeker ontwikkeld om deze vraag te kunnen beantwoorden. Dit initiële raamwerk heeft als doel om meer te ontdekken over de effecten van sociale-mediaparticipatie op de offline participatie binnen gemeenschappen.

Het concept van 'sociale-mediaparticipatie' is nader onderverdeeld in twee bouwstenen: 'sociale-mediaselectie' en 'sociale-mediagebruik'. Het concept van 'offline community participatie' is nader onderverdeeld in 'community deelname' en 'gemeenschapsgevoel'. Teneinde het "sociale-mediagebruik" in kaart te brengen is er een nieuw meetinstrument ontwikkeld. Dit meetinstrument is de zogenaamde '*Social Media Indicator'* (SMI) waarbij de mate van gebruik van sociale media bestaat uit twee aspecten. Deze aspecten zijn 'contributie' (*e-enabling*) en 'interactie'(*e-engagement*) en zijn afgeleid van de e-participatie theorie van Macintosh.

Om het initiële theoretische raamwerk te toetsen zijn er drie langdurige casestudies uitgevoerd. Deze casestudies zijn gebaseerd op een combinatie van onderzoeksmethoden (*multi-method research*). Een combinatie van kwalitatieve en kwantitatieve methoden is gebruikt voor de dataverzameling. Hierdoor kunnen de bevindingen uit de casestudies met elkaar in samenhang worden gebracht door middel van het principe van triangulatie. Triangulatie draagt bij aan een beter begrip van een verschijnsel en het vormen van theorieën daarover.

De eerste casestudie betrof de gemeenteraad met al zijn raadsleden en politieke partijen van de Gemeente Enschede. Deze casestudie vond plaats tussen november 2011 en december 2012. De tweede casestudie gaat over de rooms-katholieke parochie H. Plechelmus in Twente, Nederland. Deze casestudie is uitgevoerd in de periode september 2011 – december 2012. De derde casestudie heeft betrekking op de kerkgemeenschap van het eveneens in Twente gelegen Apostolisch Genootschap Enschede-1. Deze derde casestudie werd uitgevoerd tussen februari 2012 en juni 2013.

De uitkomsten van dit onderzoek laten zien dat sociale media in het geval van deze drie casestudies weinig verschil hebben gemaakt ten aanzien van de bevordering van offline participatie van de leden binnen deze gemeenschappen. De gegevens van het onderzoek geven wel enkele indicaties dat 'sociale-mediaparticipatie' van beperkte invloed zou kunnen zijn geweest op de mate van 'offline communityparticipatie'. De gemeenschappen die een sociale-mediastrategie hadden opgesteld ervoeren toegevoegde waarde van sociale-mediagebruik. Maar in de casestudie van de gemeenteraad is gebleken dat leden die relatief meer gebruik maakten van sociale media juist een lager gemeenschapsgevoel hadden ten opzichte van de eigen fractie. Uiteindelijk levert dit onderzoek geen definitief antwoord op de exacte causaliteit van de waargenomen effecten. Sociale media zijn niet 'hét tovermiddel' om een neerwaartse spiraal van communityparticipatie binnen non-profitgemeenschappen te kunnen keren, aldus de bevindingen in dit onderzoek. Het opsporen van dergelijke effecten aan de hand van onderzoek is echter een complex gebeuren vanwege de vele invloedfactoren.
Een vernieuwd raamwerk is opgesteld naar aanleiding van de ervaringen, bevindingen en geconstateerde beperkingen vanuit de drie casestudies. Het vernieuwde raamwerk lost een aantal van de waargenomen beperkingen op van de eerdere versie. Dit onderzoek heeft bijgedragen aan de vermindering van de leemte op het gebied van theoretische kennis en raamwerken om de effecten van het gebruik van sociale media op gemeenschappen te kunnen bestuderen.

Author publications

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About the author

Robin Effing was born in Enschede, The Netherlands, on May 6th, 1977.
In 2001 he obtained his Master's degree in Business Administration with the specialism of Management Information Studies from Radboud University Nijmegen in the Netherlands. In 2009 he finished a part-time bachelor course in Theology at Fontys University of Applied Sciences in the Netherlands. Before he started his academic career he helped nonprofit organizations in making choices and defining strategies to help them in facing the online future. He has worked for 3 years at the municipality of Enschede as a team manager developing their e-government services. Furthermore, he worked for more than 4 years in management consultancy mainly in the field of e-government. He started working as a lecturer and researcher at Saxion University of Applied Sciences in 2008. At the School of Creative Technology he teaches modules such as programming, web technology, online trends, social media and research. In 2010 he started his Ph.D. research in addition to his teaching role.

Stellingen behorende bij het proefschrift van Robin Effing:

Sociale media zijn geen modegril maar een onuitwisbare realiteit.
(chapter 1)

Volksvertegenwoordigers zitten niet te wachten op te veel inspraak van burgers via sociale media.
(chapter 5)

Er bestaan geen wonderen voor het bevorderen van participatie, zelfs niet bij katholieken.
(chapter 8)

Het leven van een onderzoeker komt dicht in de buurt van een kluizenaarsbestaan.

Een intensieve wisselwerking tussen onderzoek en onderwijs is essentieel voor kennisontwikkeling.

Onderzoek doen is als fotografie: je bent nooit helemaal tevreden met de scherpte van het objectief.

"*To know, is to know that you know nothing. That is the meaning of true knowledge"* (Socrates).

"Wonder is the desire for knowledge" (Thomas van Aquino).

De regie op ons sociale leven komt steeds meer in handen te liggen van de technologie.

Terwijl de praktijk genoeg heeft aan halve antwoorden, stelt de wetenschap liever nieuwe vragen.

strategy analysis case study church
community constructs development different
effects engagement following framework group indicator
information levels literature measurement social
members network nonprofit offline online parish
participation people political relationships
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