

**ORGANISATIONAL SOCIAL MEDIA PLATFORMS:
EXPLORING USER PARTICIPATION BEHAVIOURS
IN SOFTWARE AND TECHNOLOGY FIRMS**

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Table of Contents

LIST OF FIGURES	6
LIST OF TABLES.....	8
ABSTRACT	11
DECLARATION	12
COPYRIGHT STATEMENT.....	13
ACKNOWLEDGEMENTS.....	14
CHAPTER 1	15
INTRODUCTION.....	15
1.1 The rise of Social Media.....	15
1.2 The proliferation of Social Media in Organisations.....	20
1.3 Research Aims and Objectives	23
1.3.1 Research Questions	25
1.3.2 Research Design.....	26
1.4 Thesis Outline	27
CHAPTER 2	29
LITERATURE REVIEW.....	29
2.1 Social Organisation Structures.....	30
2.1.1 Social Media	30
2.1.1.1 Characteristics.....	34
2.1.1.2 Benefits and Challenges	36
2.1.2 Online Communities.....	38
2.1.2.1 Community Types.....	39
2.1.2.2 Success and Value.....	43
2.1.2.3 Firm-hosted Online Communities.....	48
2.2 Theories of Social Organisation.....	50
2.2.1 Critical Mass	50
2.2.2 Network Effects	52

2.2.3 Adoption and Diffusion	53
2.2.3.1 Technology Acceptance	56
2.2.4 Social Capital	58
2.2.5 Value Creation	62
2.2.6 Open Source.....	64
2.2.7 Open Innovation.....	69
2.3 Behaviours of Social Organisation.....	76
2.3.1 Participation and Contribution	76
2.3.2 Sharing Behaviours	83
2.3.2.1 Motivation theories	88
2.3.3 Altruism – Self-interest Continuum	90
2.3.3.1 Gift economy and Gift-giving Culture	91
2.3.3.2 Recognition, Reputation, Status, Prestige	93
2.4 Organisational Social Media Platforms	95
2.4.1 Contextual Theories	96
2.4.2 Behavioural Theories	97
2.5 Summary.....	99
CHAPTER 3	101
RESEARCH DESIGN AND METHODOLOGY.....	101
3.1 Philosophical Standpoint	101
3.2 Methodological Approach	103
3.3 Research Process	106
3.3.1 Research Questions and Themes.....	109
3.3.2 Participant Sample.....	111
3.3.3 Data Collection and Analysis Methods	113
3.4 Research Contexts	118
3.5 Research Ethics	121
3.6 Research Limitations	121
3.7 Summary.....	123
CHAPTER 4	124
DATA ANALYSIS AND INTERPRETATION	124

4.1	Social Media Use	124
4.1.1	Tools and Content	125
4.1.2	Adoption and Embeddedness	128
4.1.3	Levels of participation	129
4.2	Benefit and Value Outcomes	131
4.2.1	Communication, Reach, Interaction, Connectivity	131
4.2.2	Resources, Problem Solving and Keeping Informed	132
4.2.3	Knowledge, Expertise, Experience, Ideas	133
4.2.4	Community Building	135
4.2.5	Learning	136
4.2.6	Recognition	137
4.2.7	Indirect marketing and Career gains	138
4.2.8	Organisational benefit	139
4.3	Drivers and Motivation	140
4.3.1	Reciprocity and Paying it Forward	141
4.3.2	Visibility and Online presence	142
4.3.3	Reputation management	143
4.3.4	Satisfaction and Enjoyment	144
4.3.5	Interest and Passion	145
4.3.6	Personality trait and Pro-sharing attitude	146
4.4	Impact of Participation and Contribution	146
4.4.1	Recognition Contribution Programs	147
4.4.1.1	SAP Mentors	148
4.4.1.2	Oracle ACEs	148
4.4.1.3	Microsoft MVPs	149
4.4.2	Individual Level Impact	150
4.4.3	Community Level Impact	152
4.4.4	Organisational Level Impact	153
4.5	Construct Correlations	155
4.6	Summary	157

CHAPTER 5 **159**

DISCUSSION OF FINDINGS

5.1	Theoretical Contributions	159
5.1.1	Spectrum of Behaviours	160
5.1.2	Typology of users and user trajectory	165
5.1.3	The Impact of Recognition Contribution Programs	170
5.2	Practical Considerations	174
5.2.1	Platform Comparison	174
5.2.2	Emerging organisational positions	176
5.3	Reflections and Implications.....	178
5.3.1	Organisational Presence	179
5.3.2	Power Distribution	180
5.3.3	Brand Affiliation and Independent Voice	181
5.3.4	Marketing Relationship and External Advocacy	182
5.3.5	Extended Boundaries for an Emerging Business Model.....	183
5.4	Summary.....	184
CHAPTER 6		186
CONCLUSIONS AND FUTURE DIRECTIONS.....		186
6.1	Research Summary.....	186
6.2	Reflection on Outcomes and Contributions.....	189
6.3	Directions for Further Research	191
6.4	Summary.....	192
REFERENCES		193
APPENDIX A – INTERVIEW SCHEMA AND QUESTIONS.....		216
APPENDIX B – TRANSCRIPTION TAGS AND CODING		218
APPENDIX C – RESEARCH CONTEXTS.....		219
APPENDIX D – POINT SYSTEM		223
APPENDIX E – PUBLICATIONS.....		226

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List of Figures

Figure 1.1: A timeline of the relevant innovations that lead to the rise of modern social media in the early 2000s (Briggs and Burke, 2010, Skloog, 2010, Vossen and Hagemann, 2007).....	17
Figure 1.2: Social media growth from 2006 to 2010 (White, 2010).....	20
Figure 1.3: A graphical representation of the adoption trends of corporate technologies and Web 2.0 tools (Chui et al., 2009)	22
Figure 2.1: A framework for social media based on the formality/interaction matrix of communication, cooperation, collaboration and connection (Cook, 2008)	33
Figure 2.2: The functional, social and psychological needs of users in virtual communities that affect their online activities (Wang et al., 2002)	40
Figure 2.3: Types of virtual communities (Kozinets, 1999).....	41
Figure 2.4: A categorisation of virtual community types indicating that online communities are created along social, professional and commercial orientations (Markus, 2002).....	42
Figure 2.5: A typology of virtual communities (Porter, 2004).....	43
Figure 2.6: Metrics for online communities in terms of return on investment, insight and health (Cothrel, 2000).....	44
Figure 2.7: Dimensions of utilising firm-hosted online communities (Jantunen et al., 2009)	49
Figure 2.8: The rate of adoption for a non-interactive innovation (solid line) and for an interactive innovation (dotted line) (Mahler and Rogers, 1999)...	52
Figure 2.9: The technology adoption life cycle model indicating the different groups of innovation adopters (Moore, 1991).....	56
Figure 2.10: The extended Technology Acceptance Model (Davis et al., 1989, Venkatesh and Davis, 2000)	58
Figure 2.11: The value chain structure indicating how the primary and support activities are arranged in an organisation to deliver value and convert inputs to outputs (Porter, 1985).....	62

Figure 2.12: The three core processes of open innovation (outside-in, inside-out and coupled) indicating the locus of innovation (Gassmann and Enkel, 2004).....	70
Figure 2.13: Forrester’s Social Technographics ladder indicating seven levels of social media participation with ascending degrees of contribution (Bernoff, 2010).....	78
Figure 2.14: The 1-9-90% rule of user contribution indicating participation inequalities in online communities (Nielsen, 2006).....	79
Figure 2.15: The reader-to-leader framework indicates that the number of users decreases while progressing through the levels (illustrated by the decreasing size of block arrows) and that participation roles are non-sequential (illustrated by the overarching arrows) (Preece and Shneiderman, 2009).....	81
Figure 2.16: The behaviour chain of online participation (Fogg and Eckles, 2007) ...	82
Figure 2.17: A process model on recognition on virtual community participation (Chan et al., 2004).....	94
Figure 2.18: Literature summary indicating the links between the theories reviewed and the research questions	99
Figure 3.1: Structured-case research method (Carroll and Swatman, 2000).....	107
Figure 3.2: The research process followed for this doctoral study	109
Figure 5.1: The spectrum of behaviours indicates a continuum from altruistic to self-interest attitudes grouping constructs into three main categories; altruistic attitude, reciprocal behaviour, and personal gain.	161
Figure 5.2: A positive feedback loop of contribution that accumulates personal benefit and motivation	163
Figure 5.3: The direction of knowledge exchange between the three types of users	167
Figure 5.4: The different levels of participation with increasing degrees of contribution transforming lurking into recognition.....	167
Figure 5.5: Most prominent participant roles in terms of expertise and involvement.....	169
Figure 5.6: Process diagram of the impact of Recognition Contribution Programs (Demetriou and Kawalek, 2011)	172

List of Tables

Table 1.1:	Relevant definitions of Web 2.0, Social Media and Social Computing ..	18
Table 2.1:	The description and application of Web 2.0 technologies (Hoegg et al., 2006, Murugesan, 2007, Parameswaran and Whinston, 2007, Tredinnick, 2006, Vossen and Hagemann, 2007)	30
Table 2.2:	Classification of social media according to the characteristics of social presence/media richness and self-presentation/self-disclosure (Kaplan and Haenlein, 2010).....	32
Table 2.3:	Determinants and measures of success for online communities (Preece, 2001).....	45
Table 2.4:	An analysis of value of online communities along the technology, business, e-commerce, marketing, sociological, economic and learning perspective (Gupta and Kim, 2004).....	46
Table 2.5:	Short-term and long-term value of communities of practice to organisations and community members (Wenger et al., 2002).....	48
Table 2.6:	Theories of adoption/diffusion of innovation (Rogers, 2003)	54
Table 2.7:	Definitions of Social Capital from the internal and external perspective (Adler and Kwon, 2002).....	59
Table 2.8:	Examples of decentralised Web 2.0 value creation (Briggs, 2009)	63
Table 2.9:	The tenets of Open Source Ideology in terms of norms, beliefs and values (Stewart and Gosain, 2006).....	65
Table 2.10:	A list of empirically-tested motives for open source software development (Benbya and Belbaly, 2010).....	67
Table 2.11:	Open source business models (Chesbrough and Appleyard, 2007, Perr et al., 2010).....	68
Table 2.12:	Comparison of the different innovation models and their respective challenges and techniques (West and Gallagher, 2006)	71
Table 2.13:	The effect of the dimensions of participation architecture on transparency and accessibility compared to proprietary software development (West and O'Mahony, 2008).....	72

Table 2.14: Comparison of attributes between proprietary and open source software development models (Perr et al., 2010).....	73
Table 2.15: Customer roles in new product development (NPD) (Nambisan, 2002).	75
Table 2.16: Firm-based versus Community-based knowledge creation models (Lee and Cole, 2003)	77
Table 2.17: Participation trajectories applied to You Tube behaviours (Lave and Wenger, 1991).....	80
Table 2.18: Motivations for contributing in online communities (Kollock, 1998) ...	85
Table 2.19: A comprehensive list of sharing behaviour factors explored in a variety of contexts	86
Table 2.20: Traditional theories of motivation.....	88
Table 2.21: Definition of autonomy, mastery and purpose as a new approach to understanding motivation (Pink, 2010)	89
Table 3.1: The difference in emphasis in qualitative versus quantitative methods (Ghauri and Gronhaug, 2005)	104
Table 3.2: The main preoccupations and characteristics of qualitative research and qualitative researchers (Marshall and Rossman, 2006).....	105
Table 3.3: Sample breakdown	112
Table 3.4: Data analysis process (Dey, 1993)	115
Table 3.5: Question tags used to annotate transcribed text for data analysis	116
Table 3.6: Tags for the data quotes indicating the participant relationships with host organisation and the specific role in the platform.....	117
Table 3.7: Platform characteristics in terms of scale and functionality	120
Table 4.1: Data quotes on the use and content of social media tools	125
Table 4.2: Data quotes on internal and external use	126
Table 4.3: Data quotes on the adoption and embeddedness of organisational social media platforms to working routines.....	128
Table 4.4: Data quotes on the different levels of participation.....	130
Table 4.5: Data quotes on communication, reach, interaction, and connectivity ...	132
Table 4.6: Data quotes on resources, problem solving and keeping informed.....	133
Table 4.7: Data quotes on sharing knowledge, expertise, experience and ideas	134
Table 4.8: Data quotes on community building.....	135

Table 4.9:	Data quotes on learning	136
Table 4.10:	Data quotes on recognition	137
Table 4.11:	Data quotes on indirect marketing and career gains	138
Table 4.12:	Data quotes on organisational benefit	139
Table 4.13:	Data quotes on reciprocity and “paying it forward”	141
Table 4.14:	Data quotes on visibility and online presence	142
Table 4.15:	Data quotes on reputation management	143
Table 4.16:	Data quotes on satisfaction and enjoyments	144
Table 4.17:	Data quotes on interest and passion	145
Table 4.18:	Data quotes on personality and pro-sharing attitude	146
Table 4.19:	Data quotes on the SAP Mentor program	148
Table 4.20:	Data quotes on the Oracle ACE program	149
Table 4.21:	Data quotes on the Microsoft MVP program	150
Table 4.22:	Data quotes on the impact realised at the individual level	151
Table 4.23:	Data quotes on the impact realised at the community level	152
Table 4.24:	Data quotes on the impact realised at the organisational level	154
Table 4.25:	Behaviour processes shown in terms of construct correlations	155
Table 5.1:	Organisational positions, teams and departments in relation to organisational social media platforms	177
Table 6.1:	The basic data findings from data collection	187

Abstract

The aim of this research was to explore the user participation behaviours in the emerging structure of organisational social media platforms; a term coined and defined in this thesis. This emerging community structure originates from technical discussion forums and knowledge repository systems, and appears to be concerned with solving user problems, generating professional and technical content, and facilitating interaction in the external organisational domain. This research has explored three such platforms in the software and technology sector; namely, the SAP Community Network, the Oracle Community site, and Microsoft's professional platforms, MSDN and TechNet. Qualitative open-ended interviews were conducted and analysed under the interpretive paradigm, to generate a theoretically-grounded account on the use of social media tools in this context, the benefits and value outcomes gained, the underlined reasons and motivations that drive participation, and the emerging impact of active contribution as external users gain recognition.

It was found that organisational social media platforms enable the development of rich technical content, personalised experience and thought leadership, creating in this way an environment for problem solving, professional development and expert recognition. The voluntary participation observed is evidently underlined with a combination of altruistic attitudes (e.g. satisfaction, enjoyment and a pro-sharing attitude), reciprocal helping behaviours (e.g. paying it forward, and sharing knowledge and experience) and personal gain expectations (e.g. visibility, recognition and career advancement). The individual platform users appear to acquire participation roles based on their technical expertise (newbie, knowledgeable and expert) and on the level of engagement they wish to undertake (lurker, contributor, community influencer and recognised user). A group of highly active users is formed in this way at the top tier of participation that establishes channels for professional credibility, product feedback and external advocacy through a close relationship with organisational members.

These findings suggest that organisational social media platforms can constitute a new interface with the external environment and a potential business model, under which flexible forms of communication and interaction affect the support infrastructure changing the way in which customer service can be delivered, product and sales advocacy can be established, and innovation and product development can be achieved; complementing in this way internal processes with external activity.

Declaration

No portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

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CHAPTER 1

Introduction

The first chapter introduces the area of Social Media by exploring their use in the open Web and their application in organisational environments. The research aims and objectives, including the research questions and design are also defined to establish the focus and the boundaries of this research study. Finally, an outline of the thesis structure is presented introducing the subsequent chapters and providing an overview of the research undertaken.

1.1 The rise of Social Media

The group of online tools, applications and sites, named collectively social media, have substantially transformed the way individuals use the web, making it a more participatory and social space through dynamic and shareable content. Over the years, media have not only become digital and networked, but more importantly pervasive and ubiquitous; they cannot be switched off, they are everywhere and have become unavoidable (Dueze, 2009). The contemporary world is regarded as a ‘mediapolis’, a complete mediated public space where media underpin and overarch the experience of everyday life (Silverstone, 2007). In the constant mix of time spent on work, life and play, in and through media, these spheres of activity easily overlap (Dueze, 2009). The large traffic numbers of social networks (e.g. Facebook and LinkedIn), mass collaboration wikis (e.g. Wikipedia), video sharing (e.g. You Tube), and microblogging sites (e.g. Twitter) indicate a shift in social behaviour with an increased need to link to each other, to form relationships, groups and communities, to share information and to create content (Qualman, 2009). Social media can, therefore,

be seen as a significant behavioural evolution on the part of the Internet users creating an impact in the open Web and the organisational environment.

The history of the Web, dates back to 1945, when Vannevar Bush proposed a theoretical photo-hypertext computer system, called memex, a device in which an individual compresses and stores all of their books, records, and communications, which is then mechanised so that it may be consulted with exceeding speed and flexibility (Bush, 1945). Then in the 1960s, Doug Englebart's oN-Line System or NLS gave rise to the first computer collaboration system (Engelbart, 1963), and Ted Nelson's Xanadu project created hypertext (Nelson, 1981). In 1969, ARPANET became the first operational packet switching network and the official precursor of the World Wide Web (WWW) (BBN, 1981). With the Internet being the biggest innovation of our time, it was essentially designed to be an interactive world of shared information through which people could communicate with each other and with machines (Berners-Lee, 1996).

Social media are therefore built on an infrastructure of technologies that date approximately back to the 1960s (see Figure 1.1). At this point it is interesting to emphasise the development of Usenet and Bulletin Board Systems as the predecessors of today's forums, the multi-user dungeons as the predecessor of today's massive multi-player online role-playing games like World of Warcraft, the IRC as a predecessor of today's instant messaging platforms, and MOSAIC and Netscape as the first Internet browsers (Briggs and Burke, 2010, Vossen and Hagemann, 2007). This timeline of technological and social advancements is linked to the rise of social media, and their wide-spread use and acceptance for communication and exchange functionalities. In particular, Six Degrees was the first recognisable social networking site, even though similar setups existed before that (e.g. Classmates.com) (Boyd and Ellison, 2008). It comprised all the functionalities that define social networking sites today; that is a public or semi-public profile within a bounded system, a list of other users with whom an individual shares a connection, and the ability to view and traverse an individual's list of connections and those made by others within the system (Boyd and Ellison, 2008). What followed was a burst of social networking sites including Friendster, LinkedIn, Hi5, MySpace, Facebook and Bebo, that dominated the

computer-mediated communication market. In the meantime, blogging platforms with Blogger, wikis with Wikipedia, content sharing with You Tube and Flickr, mashups with Google Maps and microblogging with Twitter also took off enriching the online space with new tools and applications for the creation, distribution and exchange of user-generated content.

				Twitter 2006
				Bebo 2005
				You Tube 2005
				Google Maps 2005
				Digg 2004
				Flickr 2004
			Live Journal 1999	Facebook 2004
			Blogger 1999	Del.icio.us 2003
			Napster 1999	MySpace 2003
			Six Degrees 1997	Second Life 2003
			Google 1996	Hi5 2003
			WoW¹ 1994	LinkedIn 2003
CompuServe 1969	Usenet 1979	WWW² 1989	Forums 1994	LastFM 2002
ARPANET 1969	MUD³ 1978	IRC⁴ 1988	Netscape 1994	Friendster 2002
Email 1966	BBS⁵ 1978	Listserv 1986	Mosaic 1993	Wikipedia 2001
1960s	1970s	1980s	1990s	2000s

Figure 1.1: *A timeline of the relevant innovations that lead to the rise of modern social media in the early 2000s (Briggs and Burke, 2010, Skloog, 2010, Vossen and Hagemann, 2007)*

¹ WoW: World of Warcraft

² WWW: World Wide Web

³ MUD: Multi-User Dungeons

⁴ IRC: Internet Relay Chat

⁵ BBS: Bulletin Board Systems

When market-hype around this group of media gained some traction, O'Reilly (2005) initially defined it as a new version of the Web, i.e. Web 2.0; a term that was strongly contested by the inventor of the Internet, Tim-Berners Lee, stating that the objective of the internet from the beginning was to create “a collaborative space where people can interact; the tools that are available now are built on the existing standards and infrastructure that were made available by the people working on the original Web” (Laningham, 2006). Initially, the internet was designed to favour collaborative and social exchanges, but was rapidly sidetracked by the eruption of the commercial web; what was supposed to be a “Global Village” became a “Global Supermarket” in just a few years (Barbry, 2007). Web 2.0, therefore, may be considered as a back-to-basics web with its social and community features, and with a direct or indirect link to commercial activities. Since then an avalanche of terms and buzzwords have emerged in an attempt to define and explain this range of social media tools that predominantly foster online participation in content creation and social interaction sites (see Table 1.1).

Table 1.1: *Relevant definitions of Web 2.0, Social Media and Social Computing*

Definitions	Author(s)
“Web 2.0 is the business revolution in the computer industry caused by the move to the internet as platform, and an attempt to understand the rules for success on that new platform. Chief among those rules is this: Build applications that harness network effects to get better the more people use them...harnessing collective intelligence.”	(O'Reilly, 2007)
“Web 2.0 is defined as the philosophy of mutually maximising collective intelligence and added value for each participant by formalised and dynamic information sharing and creation.”	(Hoegg et al., 2006)
“A group of technologies that facilitate a more socially connected Web where everyone is able to add to and edit the information space underlined with the key ideas of individual production and user-generated content, harnessing the power of the crowd, data on an epic scale, architecture of participation, network effects and openness.”	(Anderson, 2007)
“Web 2.0 technologies provide rich and lightweight online tools that let users contribute new data they can aggregate to harness a community's “collective intelligence”. Web 2.0 thus represents a paradigm shift in how people use the Web. While most users were once limited to passively viewing Web sites created by a small number of providers with mark-up and programming skills, now nearly everyone can actively contribute content online. Technologies are important tools, but they are secondary to achieving the greater goal of promoting free and open	(Lin, 2007)

access to knowledge.”	
“Web 2.0 aims at creating a truly interactive Web based on a variety of technologies (AJAX, BitTorrent, RSS and Wiki).”	(Barbry, 2007)
“Social computing shifts computing to the edges of the network, and empowers individual users with relatively low technological sophistication in using the Web to manifest their creativity, engage in social interaction, contribute their expertise, share content, collectively build new tools, disseminate information and propaganda, and assimilate collective bargaining power.”	(Parameswaran and Whinston, 2007)
“Participation is a key feature of Web 2.0 which is structured around an open programming interface that allows any user to freely create, assemble, organise (tag), locate and share content.”	(Boulos and Wheeler, 2007)
“Social Computing and Social Software is the computational facilitation of social studies and human social dynamics as well as the design and use of ICT technologies that consider social context.”	(Wang et al., 2007)
“Collective intelligence refers to any system that attempts to reach a higher level of consensus or decision making by tapping the expertise of a group rather than an individual. Within Web 2.0 technologies, collective intelligence may involve collaborative publishing or common databases for sharing knowledge.”	(Bughin, 2008)
“Web 2.0 is a collection of open-source, interactive and user-controlled online applications expanding the experiences, knowledge and market power of the users as participants in business and social processes. Web 2.0 applications support the creation of informal user networks facilitating the flow of ideas and knowledge by allowing the efficient generation, dissemination, sharing and editing/refining of informational content.”	(Constantinides and Fountain, 2008)
“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.”	(Kaplan and Haenlein, 2010)

There is no one all-encompassing definition, partly because people are still unaware of the possibilities and the reach of this group of tools, and partly because they are sceptical about their lifespan. An undeniable aspect though, is the evident online activity that has reached all-time-high levels of participation and contribution encouraging people to think about the business applications of social media (See Figure 1.2). Shirky (2010) defines this behaviour as an immense “cognitive surplus”, the underused human potential that can be tapped by participatory tools, while Benkler (2006) proposes that volunteer-based projects, such as Wikipedia and Linux, will be arguably the next stage of human organisation and economic production. Networked markets are beginning to self-organise faster than the companies that have traditionally

served them, and they are getting smarter, better informed and more demanding (Levine et al., 2001). These markets are conversations and are enabling powerful new forms of social organisation and knowledge exchange to emerge. Organisations need to empower real human beings to speak on their behalf if they want to compete in such environments, as conventional corporate and marketing messages will no longer suffice as communication (Levine et al., 2001).

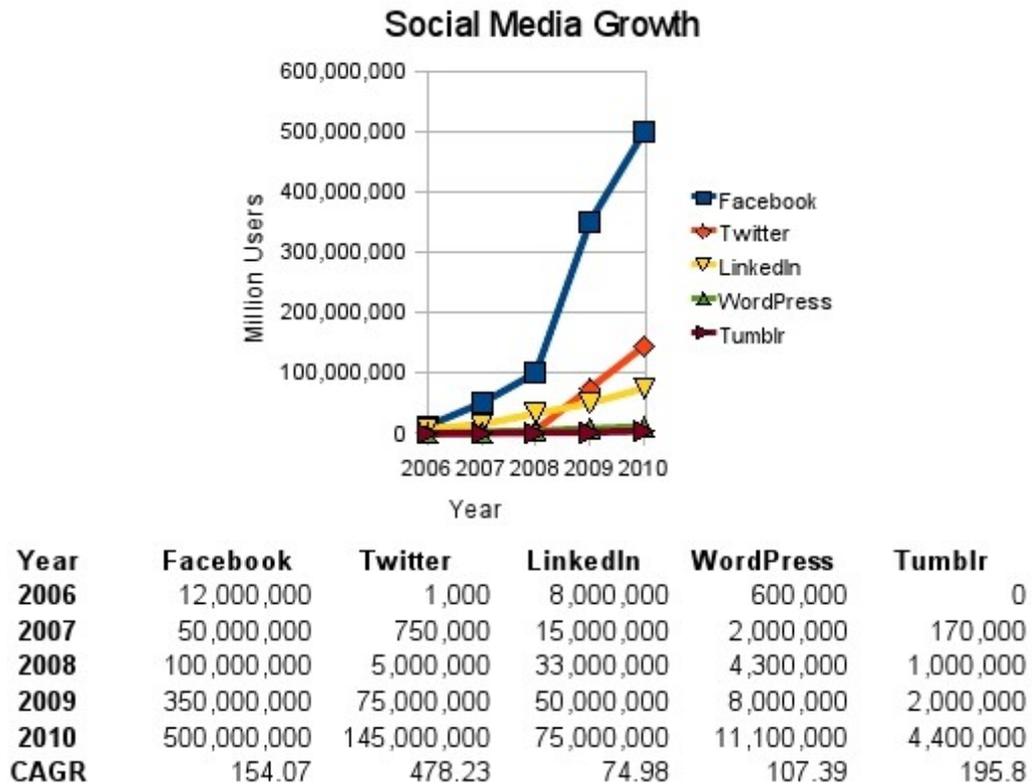


Figure 1.2: *Social media growth from 2006 to 2010 (White, 2010)*

1.2 The proliferation of Social Media in Organisations

On the basis that a successful social media company is characterised by being able to bring together a large number of users, and facilitate and encourage interaction between them, a number of various business models emerge on top of the technological and social advances. These include the exploitation of user-generated content to add value to commercial activities, the integration of different service providers into one-stop shops for commercial services, and the use of user data to target and personalise service provision and advertising (Tredinnick, 2006). Social

media tools, therefore, present a vast array of opportunities for organisations that know how to use them, predominantly by unlocking management capabilities through participation, in terms of content generation, community building and decision support (Chui et al., 2009).

The application of social media inside organisations is sometimes referred to as Enterprise 2.0; a term coined by McAfee (2006) and defined as the use of emergent social media platforms within companies, or between companies and their customers and partners. In a broader sense, it describes how organisations can create value from the participation of their employees, customers and partners. Through this participatory aspect, organisational social media place a greater emphasis on the contributions of users in creating and organising information compared to traditional information organisation and retrieval approaches (Tredinnick, 2006). In this way organisational social media are reflecting collective use over time rather than the organisation's preferred view of its internal and external environment. Introducing social media in an organisation, therefore, means ceding control over to employees, customers and partners by facilitating internal-external communication, establishing the mechanisms for collaborative content-creation and engaging them in the decision-making process.

One of the driving forces for social media is the desire to create more capable computational infrastructures to support collaborative work and online communities, and to invent new types of social media for communication (Wang et al., 2007). The source of competitive advantage seems to be linked with the way social media can harness cooperation inside and outside the enterprise. Companies adopting social media create new interfaces with their ecosystem, leveraging flexible forms of cooperation with suppliers and customers, and flexible forms of internal communications beyond traditional knowledge management systems (Bughin, 2008). According to a McKinsey Global Survey, the measurable benefits of social media range from faster access to knowledge to more effective marketing, as businesses see the technological and social changes enabled largely by these tools as a way of connecting with their own employees, reaching out to new customers, and reinforcing relationships with existing customers, partners and external experts (Bughin and Chui, 2010).

The patterns of adoption and diffusion of social media enterprise applications appear to resemble those of earlier eras when corporate technologies including ERP, CRM and SCM were introduced (see Figure 1.3). A classic S curve depicts this adoption, in which early adopters learn to use a new technology, and then adoption picks up rapidly as others begin to recognise its value (Bughin and Chui, 2010). It becomes, however, about emerging use and benefit for individuals, as they experiment with social media in a bottom-up manner identifying internal and external usability in organisational environments. Internally, it can be about a more advanced intranet that spans beyond communication and knowledge management systems, involving content creation through blogs and wikis, employee interaction through corporate social networks and emergent patterns through tagging, bookmarking and RSS. Externally, social media can enhance organisational communities beyond access to information and resources involving idea generation and thought leadership.

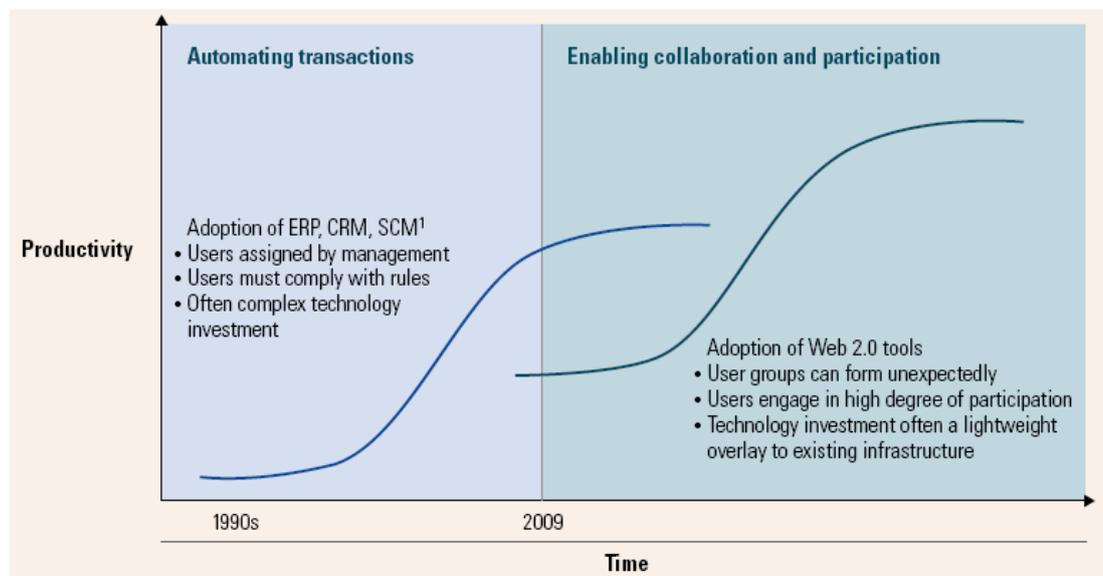


Figure 1.3: *A graphical representation of the adoption trends of corporate technologies and Web 2.0 tools (Chui et al., 2009)*

The bottom-up approach means that content and structure are not determined by professional corporate information providers, but by individuals in the organisational environment (Kolbitsch and Maurer, 2006). There are however, a number of potential disadvantages when it comes to bottom-up adoption in that behaviours may develop that suit the individual rather than the organisation and that

adoption happens at its own pace (Cook, 2008). Arguably then, top-down support is required to reinforce the use of strategically important systems and encourage adoption by emphasising individual value. At first, managers have to encourage and stimulate use of social media tools when they are first introduced, and then refrain from intervening too often or with too heavy a hand (McAfee, 2006).

This essentially indicates that the dynamics of introducing social media in an organisational environment are substantially different from those of traditional information systems. Adoption becomes about enabling participation and collaboration rather than about automating transactions. Use is broadly voluntary and requires a balance between autonomy and control. It becomes about user-driven adoption and emerging benefits with users identifying motivational drivers to participate, and exploring the impact their participation has towards the host organisation. With research in this area still being in its infancy, exploring the actual application of social media within organisational environments will enhance our understanding in terms of usage patterns, value outcomes, underlined reasons and effects of participation and contribution.

1.3 Research Aims and Objectives

This research study focuses on the external application of organisational social media in the form of online communities, referred to as organisational social media platforms; a context defined in this thesis. As information proliferates on the web one way for companies to create a market differential is to draw on the expertise of their own user communities and organisational ecosystems (Tredinnick, 2006). As a result, organisations are creating online spaces or platforms to accommodate the needs of their wider organisational community in terms of resources, to encourage social interaction between organisational stakeholders, and to create a space that nurtures creative thinking and idea generation (Demetriou and Kawalek, 2010). Such structures potentially aggregate external conversations, group similar interests and enable collective ideas to emerge.

The roles of producers and consumers in the traditional sense of a value chain converge, where consumers can also be producers due to their engagement in the product development process either by generating ideas or providing feedback on products or services. Toffler predicted the blurring of these roles when he first coined the role of the *prosumer*, where consumers will be increasingly involved in product development due to a need for mass customisation (Toffler, 1970, 1980). *Prosumption* was a development of the term explored by Tapscott (1996) to refer to the creation of products and services by the same people who will ultimately use them. *Prodsusage* is a term defined by Bruns (2007) that highlights user involvement in a hybrid process of continuous building on existing content in pursuit of further improvement. As organisations increasingly utilise their customers and end-users to create information about products and services, essentially involving them in the value creation process, delivering value to them can be greatly challenging as it affects substantially the way value is delivered (Tapscott, 1999). This involves a value network, where a web of relationships generates both tangible and intangible value through complex dynamic exchanges between two or more individuals, groups or organisations (Allee, 2003).

What becomes evident is that a new internal-external relationship is established as social media platforms facilitate organisational communities. Online communities (Chu, 2009, Plant, 2004) and communities of practice (Wenger, 1998, Wenger et al., 2002) are not new, but the context suggested here portrays a hybrid space where on one hand it is an online community hosted by a particular organisation, while on the other, it is a publicly open space powered by social media tools for the purpose of communication, collaboration, information exchange and content creation. Essentially, organisations develop professional networks at their boundaries, nurturing the activities of their internal and external stakeholders, and trying to find ways to utilise the collective intelligence of their ecosystem.

This research study seeks to explore online communities associated with the established corporations, termed organisational social media platforms. It aims to reveal what the issues are and to generate issues for further research. As participation levels vary so do the behaviours of individuals. At the heart of these communities are the apparently voluntary and altruistic behaviours of members, but underlined self-

interest motives arguably ensue as well. The study explores the dimensions of these behaviours and questions the motives that they serve, both on the part of the individual actors concerned and the host organisations. Then, more broadly, the study questions the significance of these communities both as a means of corporations engaging with markets and, possibly, as a blurring of the boundary of the corporation itself. From their inception, people have struggled to define what social media is and what value they can offer to organisations, yet more and more tools are being developed, more people are getting involved and more organisations are redefining their online strategies to incorporate social media as a way of getting closer to the consumer by building communities around products and services (Stephens, 2009). Understanding the behaviours that take place essentially outlines the implications that emerge when organisations develop closer relationships with their stakeholders.

1.3.1 Research Questions

This research study was designed in an exploratory manner to study the activity and behaviour that takes place in organisational social media platforms. Four broad research questions were defined to capture the main areas of interest in this context, while also allowing for unanticipated themes to emerge from the data:

1. How do organisational social media platforms function? What types of participation and contribution take place? How are social media tools used in this type of environment?
2. What benefit and value is derived from participation and contribution in organisational social media platforms? What are any observable outcomes from the use of social media tools in this environment for the internal and external people that use them, the organisation that hosts this environment, and the community that emerges?
3. What are the drivers and motives behind this behaviour? Why do internal and external users participate and contribute in organisational social media platforms?

4. What is the role of the most highly active participants and top contributors in organisational social media platforms on the individual, community and organisational level?

1.3.2 Research Design

Data was collected by exploring three organisational social media platforms to address the research questions, namely from the:

1. SAP Community Network – SAP Developer Network (SDN) and Business Process Experts (BPX)
2. Oracle Community Site – Oracle Technology Network (OTN), Oracle Blogs, Oracle Wiki and Oracle Mix
3. Microsoft Professional Communities – Microsoft Developer Network (MSDN) and TechNet for IT Professionals

A total of 78 semi-structured open-ended interviews were conducted with the sample comprised of four groups of participants from the corresponding internal and external organisational environments:

1. Company employees supporting, monitoring and moderating content and activity in organisational social media platforms.
2. Company employees participating, contributing and interacting in organisational social media platforms.
3. Non-company employees participating, contributing and interacting in organisational social media platforms.
4. Non-company employees officially recognised for their participation and contribution as highly active top contributors in organisational social media platforms under the corresponding recognition contribution programs, namely SAP Mentors, Oracle ACEs and Microsoft MVPs.

The analysis revealed that user participation behaviours in the software and technology sector emerge from service support functionalities. Access to information and resources is crucial for technology professionals with organisations establishing online platforms to support this need. Impelled by the social media movement, organisations appear to integrate social media tools as well to develop interactive social spaces that centre on professional content and business networking. There is arguably a shift in the value of information located outside traditional organisational boundaries that forces individuals to link to each other, exchange information and collaborate beyond economic transactions. Individuals have claimed to obtain a number of benefits and value outcomes that span altruism as well as self-interest including problem solving, access to resources and experts, community building and enjoyment of interacting with other professionals in the field. Contribution and content creation in these contexts were also claimed to be driven by the recognition and professional status individuals were able to build, the satisfaction of helping others, and the expert reputation developed that can have potential career gains. As a result, the implications from such behaviours not only affect individuals when they become highly involved, but also affect the particular organisation in terms of community image, marketing appeal and external collective power.

1.4 Thesis Outline

A brief summary of the subsequent chapters is presented in this section, in order to provide a comprehensive view of the scope of this thesis.

Chapter 2 reviews the main literature regarding organisational social media platforms. Literature on social media and online communities is explored to derive a definition for this emerging context situated beyond organisational boundaries. Theories of social organisation structures, including critical mass, network effects, adoption and diffusion, social capital, value creation, open source and open innovation, and behavioural theories in terms of participation, contribution and sharing are also explored in order to be able to understand the contextual and interpersonal activities that take place in organisational social media platforms.

Chapter 3 outlines the research methodology undertaken in this doctoral study. Under the interpretive paradigm, the research design involves a broadly qualitative study where semi-structured open-ended interviews reveal the participants' point of view on the behaviours that take place in organisational social media platforms. The collected data is analysed through tagging and coding to enable for patterns in the participant responses to emerge that in turn form conceptualisations for the behaviours in question. The inherent limitations are also acknowledged to set the boundaries of applicability of the research findings.

Chapter 4 analyses the collected data through a series of categories formed from participant responses. The chapter is structured along the four themes of the research questions, namely use, benefit, motivation and impact of organisational social media platforms. Each theme is analysed including direct quotes from the data indicating a well-grounded approach. Interpretation of findings shows that the constructs from these categories are correlated resulting to a number of emerging processes illustrating the complexity of non-economic behaviours in firm-hosted platforms.

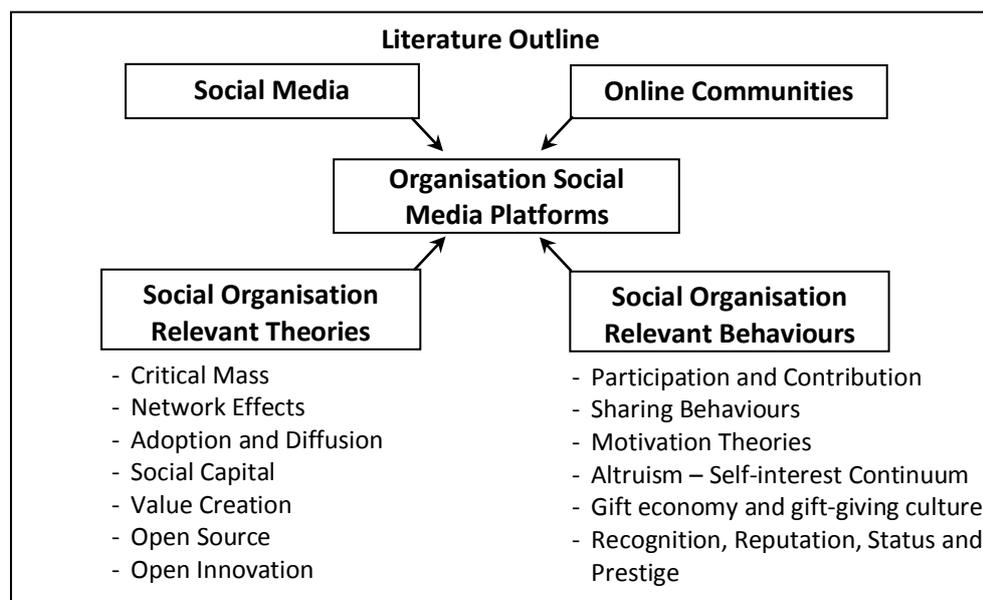
Chapter 5 provides a discussion of the analysed data in terms of its theoretical contributions and practical considerations. The corresponding reflections and implications are also outlined to indicate the extent of the findings beyond the research questions. A number of models and frameworks are developed that depict various processes in user participation behaviours that can have significant implications for the host organisations in terms of utilising business outcomes, mobilising collective bargaining power, establishing brand affinity and developing marketing potential. As a result this research suggests that there is potential for a new business model based on expanding organisational boundaries through a social media platform in order to complement internal activities with external content and support.

Chapter 6 concludes this thesis by summarising the research undertaken, briefly illustrating the major findings and contributions, and outlining possible trajectories for further research.

CHAPTER 2

Literature Review

Chapter 2 reviews all the relevant literature associated with the context of Organisational Social Media Platforms and the related user participation behaviours that take place there. This involves an analysis of the social organisation structures of social media and online communities, and a review of related online behaviours including participation, sharing, contribution and motivation. The literature review also outlines related social organisation theories including critical mass, network effects, adoption and diffusion, social capital, value creation, open source and open innovation. The literature review is organised in this way to generate a definition for the context of Organisational Social Media Platforms and to understand how such contexts function by reviewing similar social organisation structures. This essentially indicates a gap in existing literature and outlines a theoretical foundation to understand the user behaviours that exist in such hybrid online environments.



2.1 Social Organisation Structures

Organisational social media platforms portray new forms of social organisation that blur the boundaries of firms and communities. Largely based on the structure of an online community, these platforms introduce the functionality of social media in a professional context of practitioners and are hosted by a particular organisation. By exploring social media and online communities in depth, a definition of organisational social media platforms emerges that combines the structure of online communities and the characteristics, applications and potential of social media in an environment designed for professionals and experts.

2.1.1 Social Media

A variety of tools, including blogs, wikis, podcasts, tagging, RSS feeds and social networks have been developed under the umbrella term of Social Media (see Table 2.1). They are essentially community-driven internet applications, which facilitate a more socially connected web where everyone is able to communicate, participate, collaborate and add to and edit the information space (Ankolekar et al., 2008, Pachler and Daly, 2009, Rollett et al., 2007). Their use has become prominent in the Web substantially infiltrating organisational environments and enabling cross-organisational interaction and information exchange. The main source of participation is through creation of user-generated content, which is defined as content made publicly available over the Internet reflecting a certain amount of creative effort, and created outside of professional routines and practices (OECD, 2007).

Table 2.1: *The description and application of Web 2.0 technologies (Hoegg et al., 2006, Murugesan, 2007, Parameswaran and Whinston, 2007, Tredinnick, 2006, Vossen and Hagemann, 2007)*

Web 2.0 tools	Description	Application
Blogs	Online user-generated diaries with journal entries displayed in reverse chronological order.	Allow individuals to broadly share content and enable activities including commenting, linking, tagging and setting up RSS feeds.
Wikis	Derived from the Hawaiian word 'wikiwiki' which means quick, wikis	Facilitate broad co-creation of content with the ability to edit

	are a fast medium for collaborative publication of content on the Web.	content and to track the changes made by a group of individuals.
Podcasts	Audio or video content published on a website available for streaming.	Allow individuals to broadly communicate content, where sharing becomes priority with quality a secondary concern.
Tags	Single-word descriptions attached on objects of different types of content to offer additional information to primary content.	Allow metadata creation that prioritises information and makes it more visible leading to social tagging (or folksonomy) and to social bookmarking.
RSS feeds	Stands for 'Really Simple Syndication', it is the metadata content generated automatically including a summary or description of text, publication date and authorship.	Allow individuals to syndicate content automatically, to stay updated and to aggregate content from a variety of sources.
Social Networks	Online sites that allow individuals to create personal profiles, connect to others and establish affiliations.	Leverage the connections between individuals by developing network maps and social graphs.

Kaplan and Haenlein (2010) use a set of theories in the field of media research, in particular social presence and media richness theories, and a set of social processes, namely self-presentation and self-disclosure, to categorise social media tools (see Table 2.2). The social presence theory states that media differ in the degree of social presence they allow to emerge between two communication partners (Short et al., 1976), while the media richness theory is based on the assumption that the goal of any communication is the resolution of ambiguity and the reduction of uncertainty (Daft and Lengel, 1986). The concept of self-presentation states that in any type of social interaction people have the desire to control the impressions other people form of them (Goffman, 1959). Usually, such a presentation is done through self-disclosure; that is, the conscious or unconscious revelation of personal information that is consistent with the image one would like to give.

Table 2.2: *Classification of social media according to the characteristics of social presence/media richness and self-presentation/self-disclosure (Kaplan and Haenlein, 2010)*

		Social presence/ Media presence		
		Low	Medium	High
Self-presentation/ Self-disclosure	High	Blogs	Social networking sites (e.g. Facebook, Twitter)	Virtual social worlds (e.g. Second Life)
	Low	Collaborative projects (e.g. Wikipedia)	Content communities (e.g. You Tube, Flickr)	Virtual game worlds (e.g. World of Warcraft)

The first classification, therefore, is based on the richness of the medium and the degree of social presence it allows, while the second is based on the degree of self-disclosure it requires and the type of self-presentation it allows (see Table 2.2). In particular, blogs and collaborative projects have a low score in terms of social presence and media richness because they are mostly text-based and only allow a relatively simple exchange; with collaborative projects scoring lower than blogs, in terms of self-presentation and self-disclosure as they only allow content on specific topics. Social networking sites and content sharing communities allow for higher levels of social presence and media richness because apart from text-based exchange they also enable sharing of pictures, videos, and other forms of media; with social networking sites also allowing for more self-disclosure than content communities. Virtual social and game worlds have the highest level of social presence and media richness because they try to replicate all dimensions of face-to-face interactions in a virtual environment, with virtual game worlds having a lower score for self-disclosure than virtual social worlds, because they are usually based on fantasy contexts and imaginary storylines.

A different categorisation is presented by Cook (2008) based on the action involved, namely whether it entails communication, cooperation, collaboration or connection. Communication refers to those platforms that allow people to converse with others, either by text, image, voice or video, or a combination of these; cooperation involves the use of software that enable people to share content with others in structured and unstructured ways; collaboration tools encourage people to

collaborate with each other on particular problems, directly and indirectly in both central and distributed ways; and connection is about networking technologies that make it possible for people to make connections with and between content and other people (Cook, 2008). Within organisational environments, his approach of classifying social media tools can be broken down further based on how formal the organisational structure is and whether the organisational culture favours group interaction or rewards individual effort. Figure 2.1 shows this formality/interaction matrix in which at one end a company with predominantly formal organisational structures and a culture of group interaction will benefit from social media that enable collaboration, whereas a company with an informal structure and a culture that rewards individual effort may prefer to invest in social media that support communication (Cook, 2008).

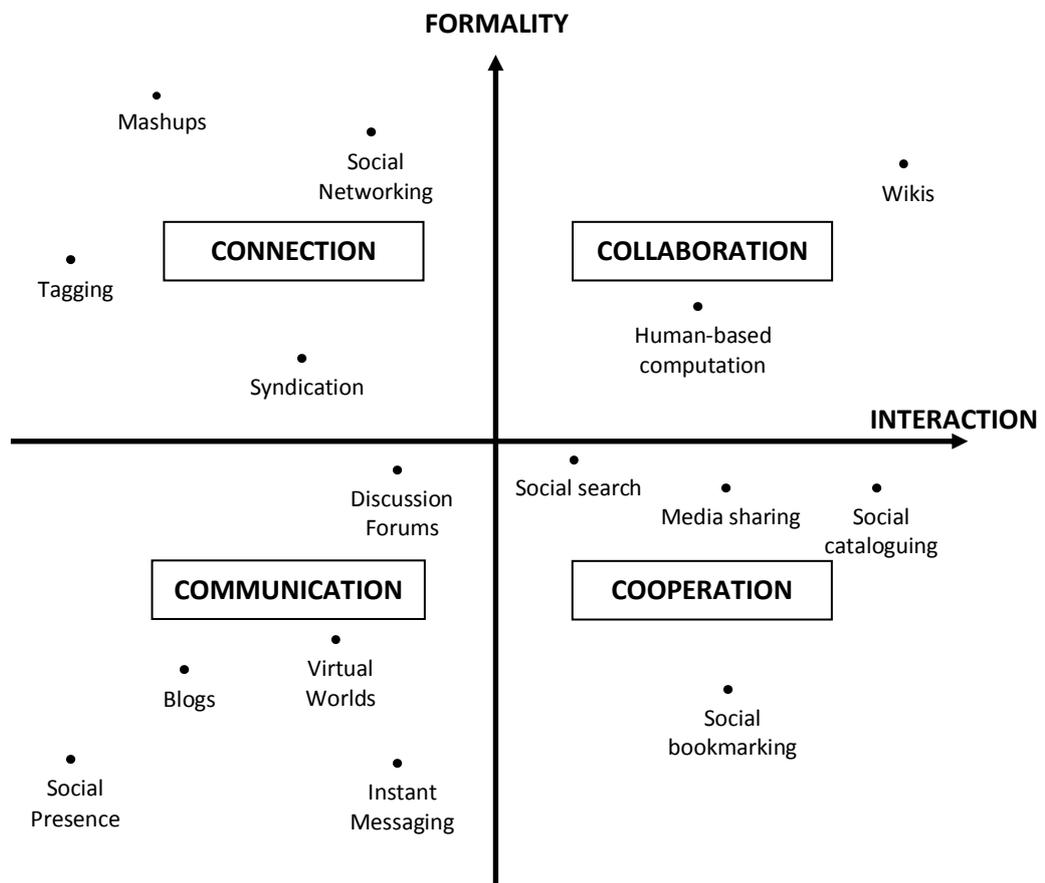


Figure 2.1: *A framework for social media based on the formality/interaction matrix of communication, cooperation, collaboration and connection (Cook, 2008)*

2.1.1.1 Characteristics

The reason these tools are grouped under a collective term is that they share a number of common characteristics. On the technological level, social media are based on lightweight programming tools that allow for loosely coupled systems (O'Reilly, 2007). Examples include AJAX (Asynchronous JavaScript and XML), Ruby on Rails, CSS (Cascading Style Sheets), DOM (Document Object Model), XHTML (Extensible HTML), XSLT (Extensible Stylesheet Language Transformations), and REST (Representational State Transfer) (Ankolekar et al., 2008, Lin, 2007, Rollett et al., 2007). These tools are easy to learn and use, even by individuals who are not programmers, lowering thus the barrier to entry for application development and participation (Parameswaran and Whinston, 2007). They have a high degree of interoperability and portability making them suitable for network deployment, with the locus of processing centred on the client device at the edge, hence decentralising the processing load and the consequent scalability, making them suitable for rapidly growing online communities (Parameswaran and Whinston, 2007). This also enables data from different sites to be pulled together creating mashups, where the recombination of data provides new sources of value ranging from the dynamic embedding of advertisements in AdSense to the dynamic visualisation of housing information on Google Maps (Ankolekar et al., 2008, Murugesan, 2007).

On the information level, social media enable dynamic, socially interactive, portable and location-sensitive information to develop (Parameswaran and Whinston, 2007). The contents of social media spaces are updated constantly to reflect the changing environment and situation (Lee and Lan, 2007). This enables an architecture of participation; a built-in ethic of cooperation, in which a service or a site acts primarily as an intelligent broker, connecting the edges to each other and harnessing the power of the users themselves (O'Reilly, 2007). Information is liberated from the control of traditional content owners allowing anyone to create, increasing thus the contributions of users and leading to the growth of 'collective intelligence' (Boulos and Wheeler, 2007). As a result, a certain level of objectivity of content is achieved by averaging the aggregation of diverse independent resources (Surowiecki, 2004). The higher the social collective the better the quality of the content generated due to

constant improvement, refinement and mass review (Parameswaran and Whinston, 2007).

On the activity level, social media enable interaction, sharing, contribution and collaboration (Boulos and Wheeler, 2007, Lee and Lan, 2007). Every participant has the opportunity to freely provide information on particular subject domains, to interact with others, to share and access information and to collaborate on common interests in open communities with other Internet users. Essentially, social media facilitate a flexible web design with creative reuse and updates; they provide a rich, responsive user interface facilitating collaborative content creation and modification; and they establish social networks of people with common interests supporting collaboration and gathering collective intelligence (Murugesan, 2007). All these activities are based on the premise that users add value; they are integrated into the content creation process, thereby adding value to that process and its outcomes (Rollett et al., 2007). Related concepts include peer production, where the actual content is created by distributed peers not by a central authority, and co-creation, where multiple people work on the same creative activity (Rollett et al., 2007). Furthermore, by adding annotations and social tagging to resources, users add valuable metadata. Tagging leads to continually evolving superimposed structures, which are called folksonomies, whose statistical analysis and interpretation leads to tag clouds, networks and clusters, which show dominant tags, interconnections of tags and tag groups (Rollett et al., 2007). Social media applications can, therefore, harness collective intelligence through diverse contributions from which an overall greater knowledge pool can emerge.

The overarching aspect of social media is therefore, the fact that the more users a service or a site has the more valuable it is to its users. This is in accordance with Metcalfe's law, which states that the value of a telecommunications network is proportional to the square of the number of connected users of the system (n^2) (Hendler and Golbeck, 2008). A social media application should therefore integrate and take advantage of the long tail, which means that it is not the top sellers and the most popular topics that make up the majority of the web, but rather a huge number of specialised topics and small communities (Rollett et al., 2007). As a result, social

media become about peripheral many-to-many activities that enable transparency and cause disruption (Cook, 2008).

2.1.1.2 Benefits and Challenges

Some of the benefits and challenges of social media are embedded in the design of their structure. Blogs, usually written by a single user, can also enable interaction with others through the availability of comments. Established blogs can have a strong influence over networks of loyal readers leading to various means of leveraging that influence, including the power to mobilise communities, the increased visibility and reputation that can be leveraged in mainstream outlets (such as ad placements or product recommendations), and the signalling of expertise and quality that can enhance prospects of a parallel career (such as journalism, consulting, politics, arts, and academia) (Parameswaran and Whinston, 2007).

Collaborative tools such as wikis enable joint and simultaneous creation of content by multiple users making them probably the most democratic manifestation of user-generated content (Kaplan and Haenlein, 2010). Although the wiki concept makes the development of content highly flexible and establishes a system as versatile, the quality standards can suffer (Kolbitsch and Maurer, 2006). Everyone can modify the content of a wiki, inserting incorrect information and wrong data, and deleting existing content, questioning thus the credibility of wikis and making them susceptible to vandalism. The mass collaboration aspect of this tool, however, means that for popular wikis this unwanted behaviour can be eliminated by correcting these modifications relatively quickly, and after several evolutionary cycles articles in certain wikis can become authoritative with a high level of accuracy and completeness (Kolbitsch and Maurer, 2006). The option, however, to not provide any real names when authoring content, harms further the process of authenticating the information given. The longevity of relationships built through social media, however, enables the development of a network of trust that can improve some of the issues, including the lack of accuracy and accountability that exist in online communities.

Nevertheless, wikis, blogs, podcasting, and other content sharing communities can respond faster to events and new developments than conventional infrastructures,

making the web more independent from traditional information providers (Kolbitsch and Maurer, 2006). People capture things as they happen around them, and update blogs and wikis continuously when new information arises. It becomes about instant availability of information and content as opposed to traditional news services that undergo fact-checking and editorial processing prior to publication, and to traditional encyclopaedias that require an editorial cycle in order to incorporate new information (Kolbitsch and Maurer, 2006). Providing, therefore, platforms and facilities for users to generate and share content, collaborate, communicate and publish details about their lives, interests and behaviours, which is typical for social software, implies that users trust application providers (Rollett et al., 2007). Such platforms therefore must be open to the outside, must enable mashups and connections to other platforms, but most importantly they must respect the users and the data they provide.

These enabled participation behaviours, however, have given rise to information overload and search costs due to the noise and information clutter, leading to degradation in the ability of processing information (Parameswaran and Whinston, 2007). While page ranking and relevance of pages can reduce noise when searching on the web, in social media platforms reputation and trust are key determinants and have the potential to implement strong governance structures as in Amazon and eBay. Security is also a significant issue in social media, which can easily distribute viruses and other threats to large numbers of users. Given that these platforms are highly decentralised, weakly governed and encourage easy access, the risk of malicious activity is significant (Parameswaran and Whinston, 2007).

In the organisational space, the high popularity of content communities and social networking sites makes them a very attractive contact and distribution channel for many firms (Kaplan and Haenlein, 2010). This involves reach and access to a vast consumer base, their personal information, interests and preferences. Some of the impacts of social media on the open web, however, can have potential drawbacks for organisations as well. Customers who turn out to be dissatisfied or disappointed with a company's offerings may decide to engage in virtual complaints in the form of protest websites or blogs (Ward and Ostrom, 2006), which results in the availability of potentially damaging information in the online space. Social media therefore, can

potentially erode brand loyalty and replace it with loyalty to the community and peers. Customers trust their peers more and tend to become more independent and critical in their assessment of product offerings (Parameswaran and Whinston, 2007), evident in the rise of product reviews and recommendations. These can cause pressure to organisations from external expectations for more customisation and more openness to participative design, incorporating customer feedback in the product development. Organisations, however, can see these as opportunities rather than as drawbacks and adapt their product development and marketing efforts to leverage their own communities, bring the conversation closer and find ways to engage and satisfy their customers through the creation of brand communities (Algesheimer et al., 2005, Fuller et al., 2008). The competitive advantage does not emerge from Web 2.0 technologies and social media, but from adopting new business paradigms, with more ‘edge’ competencies, higher trust and looser control, and a systematic eye to harness the contributions of the cluster of business and social networks the corporation is trying to emulate (Bughin, 2008).

2.1.2 Online Communities

Online or virtual communities portray a well-established structure of social organisation in the World Wide Web. Rheingold’s (1993) explanation appears to be one of the first established definitions that view online communities as “social aggregations that emerge from the Net when enough people carry on public discussion long enough, with sufficient human feeling, to form webs of personal relationships in cyber-space”. A virtual community is a group of people who may or may not meet one another face to face, and who exchange words and ideas through the mediation of computer bulletin boards and networks (Rheingold, 1994). Also, according to Leimeister and Krcmar (2004), a virtual community consists of people who interact together socially on a technical platform; the community is built on a common interest, a common problem or a common task that is pursued on the basis of implicit and explicit codes of behaviour, and the technical platform enables and supports the community’s interaction and helps to build trust and shared common feelings among its members. Whittaker et al. (1997) identify the core attributes of online communities

as having (1) a shared goal, interest, need, or activity which is the primary reason for belonging to the community; (2) a repeated, active participation, and often, intense interactions, strong emotional ties, and shared activities among participants; (3) access to shared resources, and policies determining the access to those resources; (4) reciprocity of information, support, and services among members; and (5) a shared context of social conventions, language, and protocols.

More definitions are given in the literature including this one from Hagel III and Armstrong (1997), who describe online communities from a business perspective, as having a purchasing power due to the establishment of a group with a critical mass that allows members to exchange information on things including product prices and quality. Another from Balasubramanian and Mahajan (2001), defines virtual communities from an economic perspective, as being any entity that is composed by an aggregation of people, who are rational utility-maximisers, interact with one another without physical collocation, engage in a social-exchange process that includes mutual production and consumption, and the social interaction between them revolves around a well-understood focus that comprises a shared objective (e.g. environmental protection), a shared property/identity (e.g. national culture or lifestyle choice), or a shared interest (e.g. a hobby).

2.1.2.1 Community Types

It becomes apparent that online communities centre on the individual members, who are perceived to have an essential role in these social structures mainly pursuing some form of need. According to Wang et al. (2002), these needs can be grouped under the functional, social and psychological dimensions (See Figure 2.2). Functional needs include transaction, information, entertainment, convenience and value; social needs include relationship, interactivity, trust, communication and escape; and psychological needs include identification, involvement, belonging, relatedness and creativity.

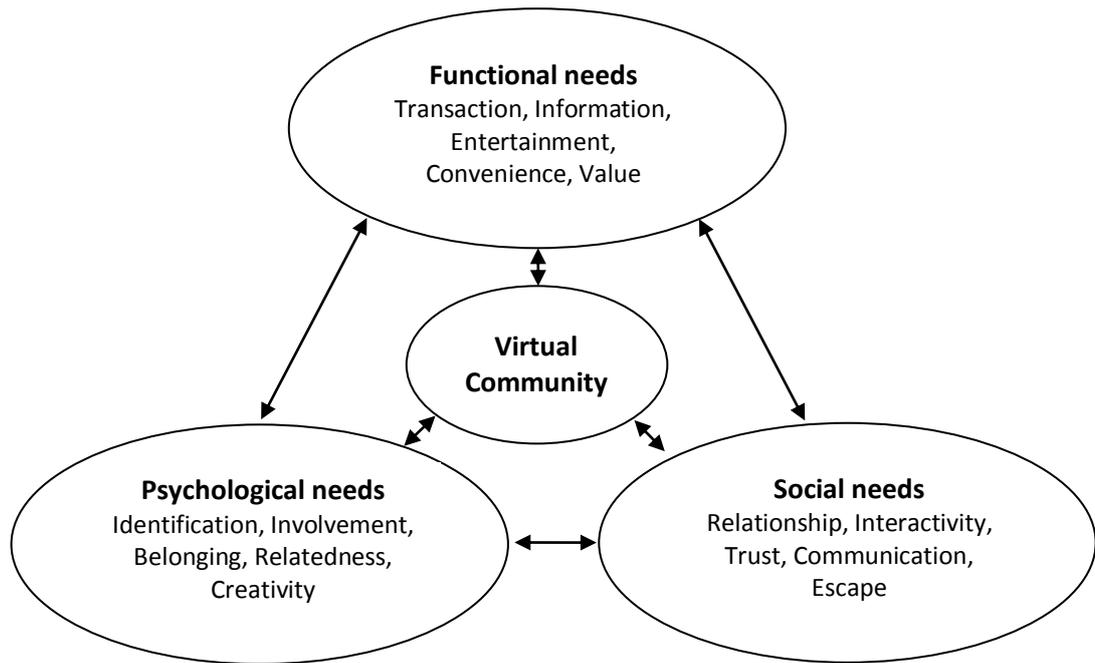


Figure 2.2: *The functional, social and psychological needs of users in virtual communities that affect their online activities (Wang et al., 2002)*

Online communities therefore, take a number of forms to satisfy different user needs and literature includes a range of classifications and typologies to categorise the different types of online communities that exist. Armstrong and Hagel III (1996) identify four broadly-defined types; namely, communities of *transactions*, which are characterised by the fact that they facilitate buying and selling as well as auctioning; communities of *interest*, which commonly centre on specific topics; communities of *relationships*, which are organised around life experiences; and communities of *fantasy*, which are based on imaginary environments and game playing. These authors developed a further categorisation separating the consumer and business environment, stating that community development can take place in the geographic, demographic or topical direction (Hagel III and Armstrong, 1997). Geographic communities are formed around a physical location in which all the community's participants have a common interest, generally because they are physically located there; demographic communities focus on gender, life stage or ethnic origin, examples include communities for teens, single parents, empty-nesters and seniors; and topical communities centre on topics of interest and include communities focused on hobbies

and pastimes such as painting, music or gardening and on issues of interests such as politics or spiritual beliefs (Hagel III and Armstrong, 1997).

Lazar and Preece (1998) also present a classification schema based on (1) attributes of online communities such as a shared goal or interest, shared activities among community members, access to shared resources, support among community members, social conventions, language or protocols, and population size; (2) on the supporting software that a community incorporates, (Listserv, Newsgroups, Bulletin boards, Internet relay chat, Multi-User dungeons, etc); (3) on the relationship an online community has to physical communities (communities based on physical communities like electronic village, communities somewhat based on physical communities like hobby-based communities including those for sports, teams or collectors, and purely online communities where members prefer anonymity like role playing communities and support communities); and finally (4) on the sociological concept of boundedness, i.e. whether the community members are tightly or loosely bound.

Another categorisation is given by Kozinets (1999), who classifies online communities based on group focus, i.e. whether they are based on information exchange or social interaction, and whether they have a loose or tight social structure (See Figure 2.3).

		SOCIAL STRUCTURE	
GROUP FOCUS		Loose	Tight
Information Exchange		Bulletin Boards	Listserv
Social Interaction		Chat Rooms	Multi-user Dungeons

Figure 2.3: *Types of virtual communities (Kozinets, 1999)*

In addition, Markus (2002) developed a framework for classifying online communities by firstly making a distinction between the social, professional and commercial orientation of online communities (See Figure 2.4). Socially-oriented

virtual communities are the original community type from which all types have evolved, and are subdivided further into relationship building and entertainment. A professionally-oriented virtual community is geared toward professionals and as such discusses subjects from a professional perspective; professionals participate in this type of community in order to contact and exchange information with people outside their own team or organisation, who require similar information to carry out their duties. Commercially-oriented communities aim to make a profit or gain a financial advantage. The decision as to whether a commercially-oriented virtual community is a success or failure can be measured by profit-oriented factors, such as whether the community has generated direct or indirect sales, or whether savings have been made in other specified business activities.

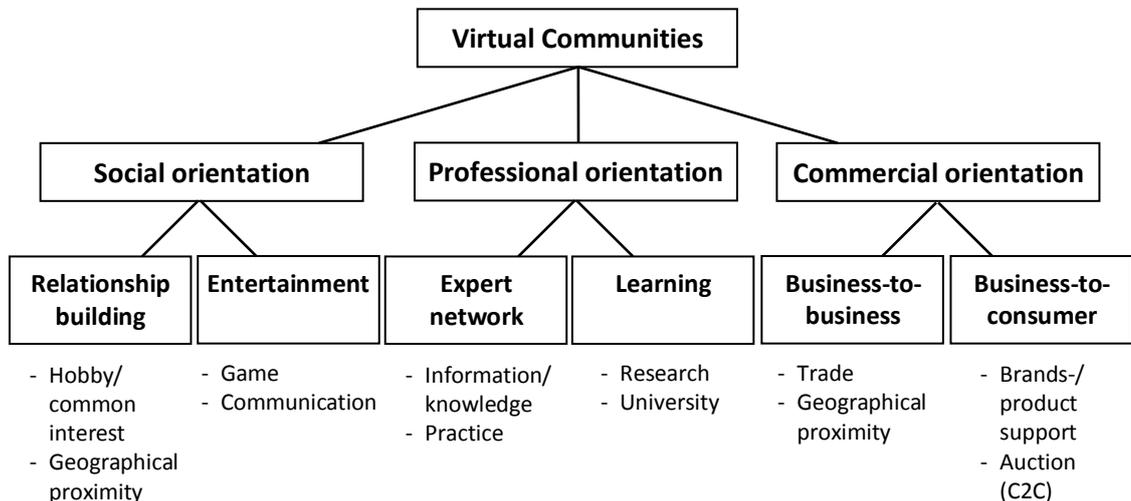


Figure 2.4: *A categorisation of virtual community types indicating that online communities are created along social, professional and commercial orientations (Markus, 2002)*

Drawing upon the categorisation defined by Markus (2002), Porter (2004) proposed a typology by classifying online communities based on whether they are established by members or organisations (See Figure 2.5). The reasoning behind this distinction is evident in the fact that organisation-sponsored communities, either commercial or non-commercial, usually have key stakeholders and/or beneficiaries that have an integral part in sponsoring the organisation's mission and goals, as opposed to member-initiated communities, which are managed by members. The second-level classification of this typology is based on the general relationship

orientation that is fostered among community members. Member-initiated communities foster either social or professional relationships among members, while organisation-sponsored communities foster relationships both among members (e.g., customers, employees) and between individual members and the sponsoring organisation.

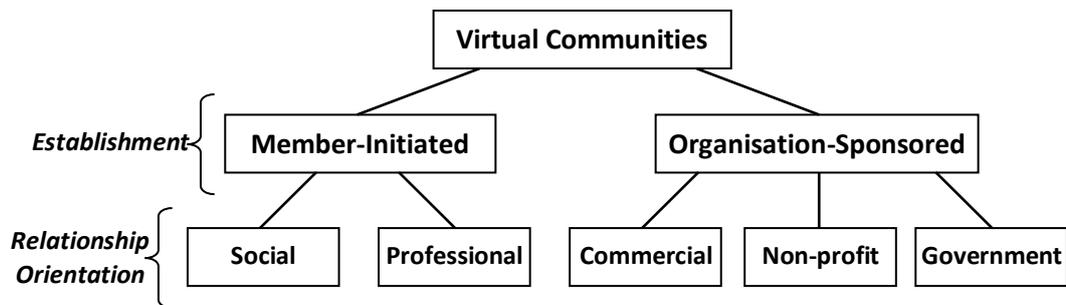


Figure 2.5: *A typology of virtual communities (Porter, 2004)*

As with the definition of online communities, there is no single widely-supported classification or categorisation for the vast array of online community types that exist. The reason for this is that different authors tend to categorise online communities based on a different perspective; namely, the supporting communication technology used (Kozinets, 1999, Lazar and Preece, 1998); the needs of the individual members (Armstrong and Hagel III, 1996), the direction the community takes based on content (Hagel III and Armstrong, 1997, Lazar and Preece, 1998), or the purpose of the online community emphasising mainly a distinction between commercial and non-commercial activities (Markus, 2002, Porter, 2004). As a result, the definitions and classifications offered by different authors and researchers tend to be overlapping and complaisant.

2.1.2.2 Success and Value

To measure the success of an online community, the metrics used usually fall in one of three dimensions (See Figure 2.6); namely economic metrics that measure the ongoing financial value or ROI for the community; activity metrics that describe the general health of the community and aid in managing the community on a day-to-day

basis; and topic metrics that assess the ongoing insights that the community offers in terms of information and products (Cothrel, 2000).

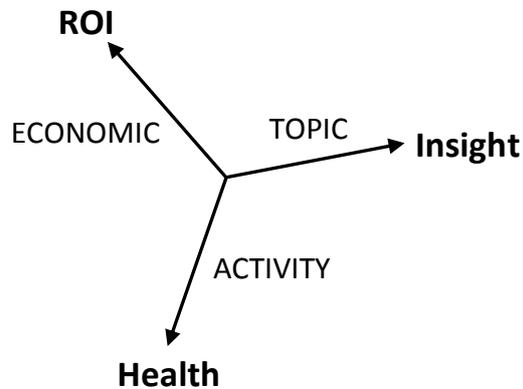


Figure 2.6: *Metrics for online communities in terms of return on investment, insight and health (Cothrel, 2000)*

There are four elements that are common to all successful online communities, according to Preece (2000); and these consist of (1) people, who interact socially as they strive to satisfy their own needs or perform special roles, such as leading or moderating; (2) a shared purpose, such as an interest, need, information exchange, or service that provides a reason for the community; (3) policies, in the form of tacit assumptions, rituals, protocols, rules, and laws that guide people's interactions; and (4) computer systems, to support and mediate social interaction and facilitate a sense of togetherness. Determining success of an online community involves sociability and usability measures according to Preece (2001). Sociability describes the nature of social interaction in an online community, whereas usability describes the nature of human-computer interaction. A community's purpose, the people who belong to it, and the policies that guide social interaction are key components of sociability, while dialogue and social support, information design, navigation and accessibility are key components for good software usability (Preece, 2001). Table 2.3 outlines some examples of the determinants of success along the sociability and usability measures.

Table 2.3: *Determinants and measures of success for online communities (Preece, 2001)*

Framework	Design criteria	Examples of determinants of success
<i>Sociability</i>	<i>Purpose</i>	How many and what kinds of messages or comments (or comments per member) are being sent? How on-topic is the discussion? How much interactivity is occurring? How much and what kind of reciprocity occurs? What is the quality of the peoples' contributions and interactions?
	<i>People</i>	How many and what kinds of people are participating in the community? What do they do and what roles are they taking? How experienced are they? What are their ages, gender and special needs, etc.?
	<i>Policy</i>	What policies are in place? For example, registration and moderation policies to deter uncivil behaviour. How effective are the policies? How is relationship development being encouraged? For example, what kinds of policies encourage trustworthiness and how effective are these policies?
<i>Usability</i>	<i>Dialogue & Social Support</i>	How long does it take to learn about dialogue and social support? How long does it actually take to send or read a message, or perform some other action, etc.? Are users satisfied? How much do users remember about dialogue and social support, and how many errors do they make?
	<i>Information design</i>	How long it takes to learn to find information (e.g., Help)? How long does it take to achieve a particular information-oriented goal? How satisfied are users? How much do users remember after using the system? Can users access the information they need without errors?
	<i>Navigation</i>	How long does it take to learn to navigate through the communication software and web site or to find something? Can users get where they want to go in a reasonable time? How much do users remember about navigation? How satisfied are they? How many and what kinds of errors do they make.
	<i>Access</i>	Can users get access to all the software components that they need? Can they download them and run them in reasonable time? Are response times reasonable? What problems do they encounter when trying to download and run software?

The main objective of identifying factors that aid towards the success of an online community is the desire to generate value from this social structure. The constructs of success and value are intuitively inter-twined, as successful communities yield the most value. Gupta and Kim (2004) illustrate that value from an online community can be obtained from different perspectives; namely the technology, business, e-commerce, marketing, sociological, economic and learning perspectives (See Table 2.4). Their analysis has indicated further that these means of value can have implications on how organisations use this social structure. As a result, online communities can be utilised as a relationship marketing channel, as a tool for developing relationship commitment among members, as a channel for building store image, and as a tool for building loyalty among customers (Gupta and Kim, 2004).

Table 2.4: *An analysis of value of online communities along the technology, business, e-commerce, marketing, sociological, economic and learning perspective (Gupta and Kim, 2004)*

Value	Benefit of online communities
<i>Technology perspective</i>	<ul style="list-style-type: none"> • Enhance communication by providing ubiquitous cheap (mostly free) and fast communication. • Provide file sharing, public access services, voice chat facilities, audio and video conferencing, and virtual reality experience.
<i>Business perspective</i>	<ul style="list-style-type: none"> • Help establish a leading brand. • Increase barriers to entry by developing critical mass. • Raise interest among customers for available products and services. • Help business benefit from word-of-mouth experiences. • Become an advertising, sales and distribution vehicle.
<i>e-Commerce perspective</i>	<ul style="list-style-type: none"> • Have trust building capabilities and hence can be a good tool for e-commerce. Members engender trust through ongoing interactions.
<i>Marketing perspective</i>	<ul style="list-style-type: none"> • Offer member-customers reduced search costs, access to a broad range of information from fellow customers, economic benefits like special price, customised offers and better services. • A sponsor benefits from reduced search costs, access to target group with known preferences, and a global reach. • Marketers can understand each member-customer as an individual in addressing promotional messages, provide all related services at a single point, and make the community a new marketing channel for the consumers. • Consumer-goods companies can enhance their brand through online communities, which can extend customer relationships, support a virtual workforce, aid information management and act as an engine for

	thought leadership.
<i>Sociological perspective</i>	<ul style="list-style-type: none"> • Individuals can either give information (by posting conversations) or get information (browsing or soliciting information by posting questions or comments). • As members interact in the online community, over time it emerges as the most authoritative and influential source of knowledge.
<i>Economic perspective</i>	<ul style="list-style-type: none"> • Create economic value by charging usage fees, content fees, transactions and advertising fees and can create synergy with other parts of the business.
<i>Learning perspective</i>	<ul style="list-style-type: none"> • Contribute to learning by stimulating continued learning and nurturing a sense of fellowship and identity, thereby distinguishing themselves from the temporary spaces of a virtual classroom. • Provide educational institutions the ability to enhance the learning process by improving access: to special simulations and demonstrations; to a variety of knowledge databases and experts; to continuous contact with those who can contribute to the learning process and to moments for better exploration & utilisation of learned material.

Value from online communities can be also derived from more specific structures such as communities of practice. These are groups of people informally bound together by shared expertise and passion for a joint enterprise (Wenger and Snyder, 2000). The members of these communities are from within or across organisations, and they share a concern, a set of problems, or a passion about a topic, and they strive to deepen their knowledge and expertise in this area by interacting on an ongoing basis (Wenger et al., 2002). As a result, communities of practice are important social learning units because they enable their members to define what constitutes learning in a given context through a joint enterprise, mutual engagement and a shared repertoire (Wenger, 1998, 2000). The value of such structures is defined in the short- and long-term for both the vendor organisation and the individual members (See Table 2.5). In particular, organisations utilise communities of practitioners to improve their business outcomes through problem solving and improved decision making, while at the same time they develop capabilities in the long-term in terms of retaining professional expertise and executing strategic plans (Wenger et al., 2002). On the other hand, individual members improve their experience by contributing to team work and getting involved in problem solving, while they foster professional development in the long-term in terms of expanding their skills and

expertise, and enhancing their professional network and reputation (Wenger et al., 2002).

Table 2.5: *Short-term and long-term value of communities of practice to organisations and community members (Wenger et al., 2002)*

SHORT-TERM VALUE		LONG-TERM VALUE
IMPROVE BUSINESS OUTCOMES		DEVELOP ORGANISATIONAL CAPABILITIES
Benefits to Organisation	<ul style="list-style-type: none"> • Arena for problem solving • Quick answers to questions • Reduced time and costs • Improved quality of decisions • More perspectives on problems • Coordination, standardisation and synergies across units • Resources for implementing strategies • Strengthened quality assurance • Ability to take risks with the backing of the community 	<ul style="list-style-type: none"> • Ability to execute a strategic plan • Authority with clients • Increased retention of talent • Capacity for knowledge-development projects • Forum for 'benchmarking' against rest of the industry • Knowledge-based alliances • Emergence of unplanned capabilities • Capacity to develop new strategic options • Ability to foresee technological developments • Ability to take advantage of emerging market opportunities
IMPROVE EXPERIENCE OF WORK		FOSTER PROFESSIONAL DEVELOPMENT
Benefits to Community Members	<ul style="list-style-type: none"> • Help with challenges • Access to expertise • Better able to contribute to team • Confidence in one's approach to problems • Fun of being with colleagues • More meaningful participation • Sense of belonging 	<ul style="list-style-type: none"> • Forum for expanding skills and expertise • Network for keeping abreast of a field • Enhanced professional reputation • Increased marketability and employability • Strong sense of professional identity

2.1.2.3 Firm-hosted Online Communities

Firm-hosted online communities are defined as aggregations of customers who collectively co-produce and consume content about a commercial activity that is central to their interest by exchanging intangible resources (Wiertz and de Ruyter,

2007). The structure of online communities have been long adopted by firms in order to build brands, support product use and collect feedback and ideas on organisational products (Jeppesen and Frederiksen, 2006). The participation of customers in this respect has initiated a fundamental transformation in the customer-producer relationships in many industries leading to the creation of value in several ways (See Figure 2.7). Jantunen et al. (2009) identified two dimensions, namely targeted stakeholders and nature of objectives, along which different uses of firm-hosted online communities can be situated. These include user involvement, community-based products, open source product development, product maintenance and peer support, brand building, internationalisation and distributed product development.

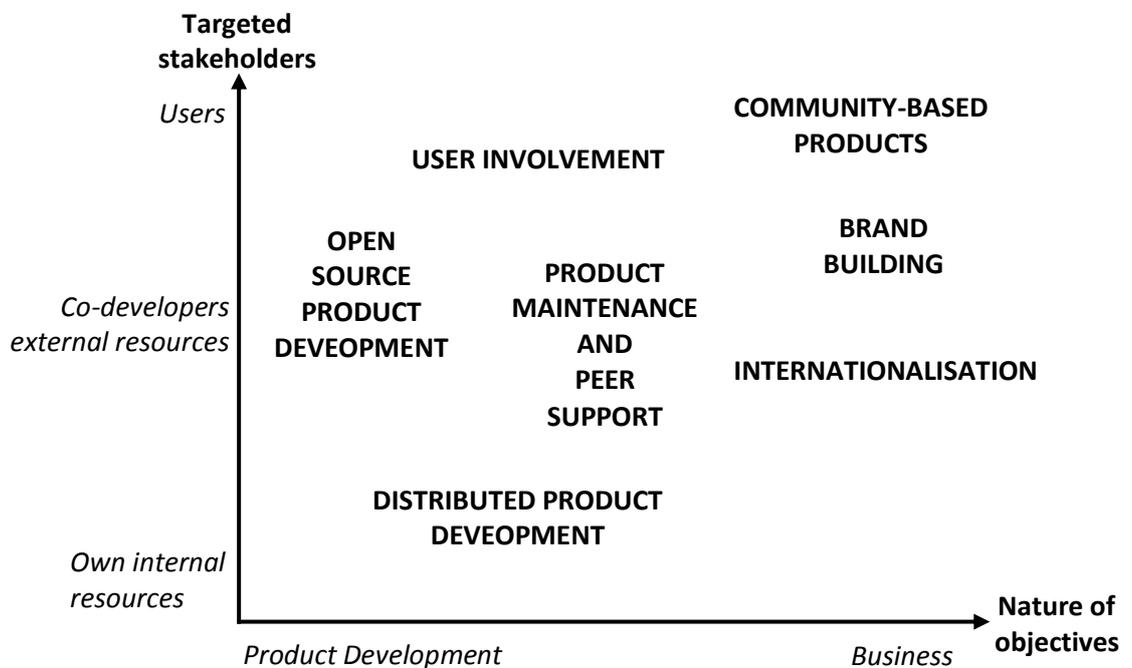


Figure 2.7: *Dimensions of utilising firm-hosted online communities (Jantunen et al., 2009)*

This bi-dimensional view of firm-hosted online communities illustrates the opportunities that emerge for organisations building open networks around their brand and engaging with their customer base in various ways. In particular, organisations can gain a competitive advantage from the effects of having a community of users connected to their products and by enabling end users to provide peer support, problem solving and information exchange (Jeppesen and Frederiksen, 2006). Organisations can also have international reach by gaining access to potential customers and co-

developers from all over the world (Preece, 2000), with some firms beginning to explore the idea of utilising online communities to guide their product development (Lewis, 2008, von Hippel, 2005).

In addition, online communities have proved to be useful as a brand-building medium enabling organisations to sense market forces with unprecedented accuracy and efficiency, and facilitate their response to nuances in conversations that hint at unarticulated needs (McWilliam, 2000). Furthermore, brand communities celebrate the brand and the affiliation with other brand enthusiasts (Wiertz and de Ruyter, 2007). What seems to be common in different types of firm-hosted online communities is that they have the potential to develop into a strategic asset as an imperfectly imitable resource that can hardly be purchased but can evolve from user involvement over time (Jeppesen and Frederiksen, 2006). Organisational social media platforms can be therefore classified under this branch of communities, where a firm hosts the platform, but the activity is user-driven and has the potential to reach value-laden opportunities for both the firm and the platform users.

2.2 Theories of Social Organisation

A number of relevant theories have been developed to explain the dynamics of social collectives. When individuals organise themselves in teams, groups or communities, the connections and interactions developed create a critical mass that leads to network effects and social capital. Traditional ideas of value creation, adoption and diffusion are challenged, and opportunities for open source and open innovation emerge. By exploring these theories, a foundation for open organisational social media platforms is established that informs the behaviours and activities explored in this thesis.

2.2.1 Critical Mass

Collective action usually entails the development of a critical mass; ‘a small segment of the population that chooses to make big contributions to the collective action while the majority do little or nothing’ (Oliver et al., 1985). In social science,

critical mass refers to ‘the idea that some threshold of participants or actions has to be crossed before a social movement explodes into being’ (Oliver et al., 1985). This definition suggests that critical mass is the basis for producing collective actions. Markus (1987) indicates that by applying the theory of critical mass to interactive media, the use by the members of a community creates a public good that is independent of the individuals who produce it, and it entails reciprocal interdependence, where the outputs of one user are the inputs to another and vice versa. As a result, in order to initiate a sustainable interactive discourse, such as in online communities for example, a critical mass of users is needed (Preece, 2000, Schoberth et al., 2003).

Rogers (1995), also defines critical mass as the point at which a certain minimum number of users have adopted an innovation so that the rate of adoption of the new communication technology suddenly takes off. This definition indicates that achieving a critical mass of users is key for successful acceptance, adoption and diffusion of a particular technology or innovation. Lou et al. (2000) applied the theory of critical mass to the adoption of groupware technologies and showed that the perception of a critical mass of users affects their perception of the technology’s usefulness and ease of use, as the utility that can be derived from groupware applications increases dramatically as more and more people use the technology. Slyke et al. (2007), also indicate that critical mass influences the adoption and diffusion of interactive communication innovations, both through network externalities and through sustainability of the innovation.

Critical mass is hence, defined as the minimal number of adopters of an interactive innovation for the further rate of adoption to be self-sustaining (Mahler and Rogers, 1999) (See Figure 2.8). Essentially, what the critical mass theory postulates is that a certain number of users need to be involved before the use of a new tool takes off and begins to deliver value to the users involved. This can be seen in social media tools as well, where a certain threshold of individuals need to be involved for a tool to be broadly adopted and to reach a self-sustained state that delivers valuable content (Boulos and Wheeler, 2007, Chui et al., 2009, O’Reilly, 2007).

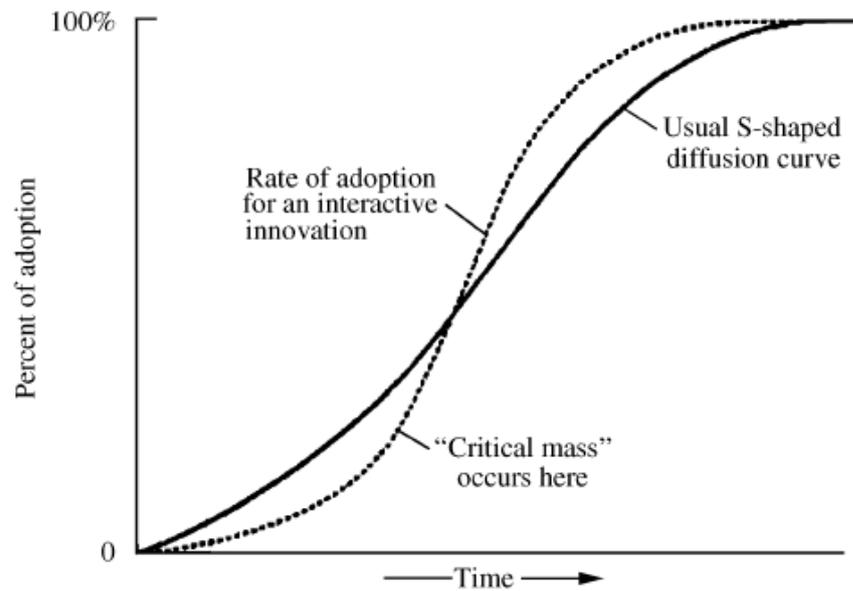


Figure 2.8: *The rate of adoption for a non-interactive innovation (solid line) and for an interactive innovation (dotted line) (Mahler and Rogers, 1999)*

Critical mass, therefore, becomes a crucial part for organisational social media platforms, where a certain level of engagement needs to be established before the social collective begins to yield valuable outcomes. Even though it is difficult to measure the actual critical mass threshold for any collective action or innovation technology (Markus, 1990), the perception that a particular online community or social media environment has reached that level of users, affects and essentially increases the number of people that get involved; prospective subscribers perceive more value as the subscriber pool grows (Allen, 1988).

2.2.2 Network Effects

Network effects represent positive network externalities, where a good or a service becomes more valuable to a user as the number of users increases. A classic example is the telephone that would have had little value to the first individual, but with each additional telephone adopter, this innovation became more valuable to all of its users. Economides (1991) states that network externalities occur when the buyer of the last unit of a good has a higher benefit than the buyer of the first unit because the sale of the earlier units has created some benefits in a related dimension. This is true

when use of a product or a service requires a sufficient number of users to generate value, i.e. it needs to reach a critical mass of users.

In particular, the network effect describes the value of a service to a user that arises from the number of people using the service (Hendler and Golbeck, 2008). At its core, it emphasises that value increases as the number of users increases, because the potential links increase for every user as a new person joins. This is best quantified by what has come to be known as Metcalfe's Law, who hypothesised that while the cost of the network grew linearly with the number of connections, the value was proportional to the square of the number of users [$n(n-1) = O(n^2)$]. Metcalfe's law has been used to explain the growth of many technologies ranging from the telephone, cell phones, and faxes to web applications, online community networks, and social networking sites. The intuition clearly holds that as the number of people in the network grows, the connectivity increases, and if people can link to each other's content, the value grows at an enormous rate (Hendler and Golbeck, 2008).

The value of organisational social media platforms therefore, arises from the connections between the communicating agents of these networks and the potential opportunities that emerge from these connections. These social linkages arguably result to the development of social capital, and the coordination for open source and open innovation, modifying thus the value chain and essentially the way value is generated in specific industries that tend to be affected by content creation and social interaction.

2.2.3 Adoption and Diffusion

The adoption and diffusion of any new technology is vastly understood as the function of an individual's willingness to try new products or innovations. Successful usage of a technology or innovation depends on its vast adoption and diffusion across users (DeLone and McLean, 2003, Karahanna et al., 1999). This has been extensively researched in the IS literature resulting to an array of pre- and post-adoption determinants (Agarwal and Karahanna, 2000, Davis, 1989, Igarria and Tan, 1997, Jackson et al., 1997, Moore and Benbasat, 1991, Orlikowski, 1992, 2000, Orlikowski and Gash, 1994, Venkatesh et al., 2003). Essentially, information systems research

implies a top-down adoption and diffusion of technologies in organisational contexts, whereby senior level staff decide to introduce a new tool or technology, and end-users have to accept and use it as part of their working routine in order to increase their productivity.

Organisational social media adopt the structure of online communities and incorporate social media tools in their functionality, which substantially challenges this top-down process. Adopting a broadly bottom-up approach, use and participation in these social structures becomes voluntary, open and flexible. Even though, this adoption process is concerned with a different set of determinants including emerging benefits and motivational factors, there are still some correlations with the diffusion of innovation and technology acceptance literature.

The top-down and bottom-up models of adoption and diffusion provide a directional perspective to the process. Moore and Benbasat (1991), however, take the individual perspective of technology acceptance by adapting the Innovation Diffusion Theory and introducing seven constructs that aim to determine how a new technology is adopted. These are relative advantage, ease of use, image, visibility, compatibility, results demonstrability, and voluntariness of use. Furthermore, Rogers (2003) defines a number of theories that focus on the individual adopters and the specific innovation or product to explain how individual users adopt innovations. These include the theories of Innovation Decision Process, Individual Innovativeness, Rate of Adoption and Perceived Attributes (See Table 2.6). Each of these gives a slightly different view on the process of innovation diffusion focusing on how an individual decides to adopt a new product or technology.

Table 2.6: *Theories of adoption/diffusion of innovation (Rogers, 2003)*

Innovation Adoption/Diffusion Theories	
<i>Innovation Decision Process Theory</i>	<p>Potential adopters of a technology progress over time through five stages in the diffusion process. The focus is on the user or adopter as:</p> <ul style="list-style-type: none"> • they must learn about the innovation (knowledge) • they must be persuaded of the value of the innovation (persuasion) • they must decide to adopt it (decision) • the innovation must then be implemented (implementation) • the decision must be reaffirmed or rejected (confirmation)

<i>Individual Innovativeness Theory</i>	Individuals who are risk takers or otherwise innovative will adopt an innovation earlier in the continuum of adoption/diffusion.
<i>Rate of Adoption Theory</i>	Diffusion takes place over time with innovations going through a slow, gradual growth period, followed by dramatic and rapid growth, and then a gradual stabilisation and finally a decline.
<i>Perceived Attributes Theory</i>	There are five attributes upon which an innovation is judged: <ul style="list-style-type: none"> • that it can be tried out (trialability) • that results can be observed (observability) • that it has an advantage over other innovations or the present circumstance (relative advantage) • that it is not overly complex to learn or use (complexity) • that it fits in or is compatible with the circumstances into which it will be adopted (compatibility)

The traditional adoption/diffusion continuum recognises five categories of participants (Carr, 1999); namely, *innovators* who tend to be experimentalists and ‘techies’ interested in the technology itself; *early adopters* who may be technically sophisticated and interested in technology for solving professional and academic problems; *early majority* who are pragmatists and constitute the first part of the mainstream; *late majority* who are less comfortable with technology and are the sceptical second half of the mainstream; and *laggards* who may never adopt a technology and may be antagonistic and critical of its use by others. The distribution of these groups within an adopter population typically follows the familiar bell-shaped curve (See Figure 2.9). Moore (1991) sees these groups as significantly different markets in the promotion of an innovation to adopters. He suggests that the transition from the early adopters to the early majority is essential to an innovation’s success. In a successful innovation or collective action, a large number of people need to follow the early adopters, i.e. cross the chasm, leading to greater adoption and diffusion.

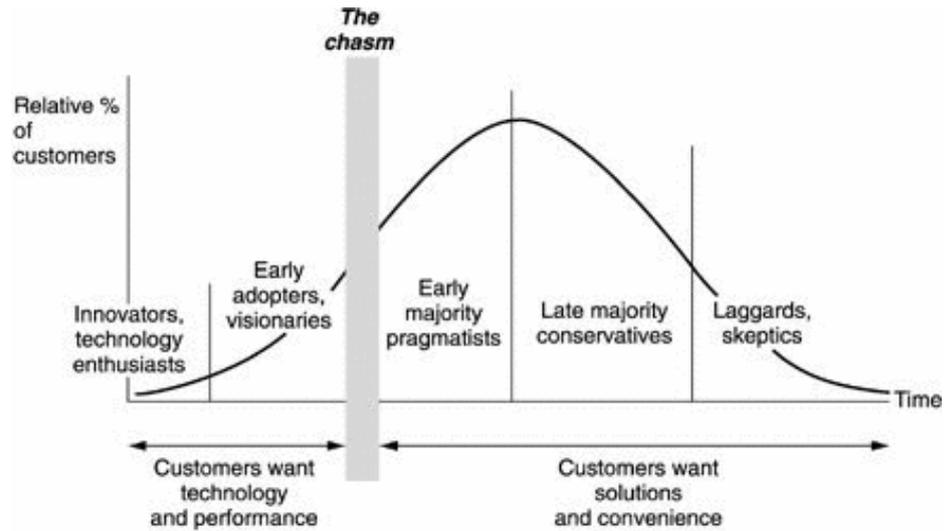


Figure 2.9: *The technology adoption life cycle model indicating the different groups of innovation adopters (Moore, 1991)*

What becomes apparent from this analysis is that adoption of interactive communications differs from that of previous innovations (Rogers, 1986, Rogers and Allbritton, 1995). A critical mass of adopters is needed to convince the mainstream of the technology's efficacy; regular and frequent use is necessary to ensure success of the diffusion effort; and web-based tools can be applied in different ways and for different purposes in a dynamic process that may involve change, modification and reinvention by individual adopters.

2.2.3.1 Technology Acceptance

A branch of the technology adoption and diffusion literature is concerned with the extensively researched area of technology acceptance, whose findings are built on the behavioural intention to use a system (Ajzen, 1991, Sheppard et al., 1988, Taylor and Todd, 1995). This defines the basic Theory of Reasoned Action (TRA) under which a desired behaviour emerges from the attitude towards that behaviour and the subjective norm that surrounds that behaviour (Fishbein and Ajzen, 1975). In other words, the positive or negative feelings about performing a particular behaviour together with the perception of other people that the individual should or should not perform the behaviour in question can influence the intention of that individual to perform that behaviour. The Theory of Planned Behaviour (TPB) extends TRA further,

by introducing a third construct, namely perceived behavioural control, under which the perceived ease or difficulty of performing the behaviour becomes a determinant of intention in performing that behaviour (Ajzen, 1991).

Davis (1989) based his Technology Acceptance Model (TAM) on TRA and identified the constructs of perceived usefulness and perceived ease of use to influence user acceptance of information systems. Perceived usefulness is defined as the degree to which a person believes that using a particular system would enhance his or her job performance; while, perceived ease of use refers to the degree to which a person believes that using a particular system would be free of effort (See Figure 2.10). Since then the basic model has been extended to include a variety of antecedents and variables adding thus more understanding into the process of how and why people use a specific technology (Dickinger et al., 2008, Jackson et al., 1997, Venkatesh and Davis, 2000). In particular, Venkatesh and Davis (2000) extended the model with two sets of antecedents, namely social influence processes (subjective norm, voluntariness, and image) and cognitive instrumental processes (job relevance, output quality, and results demonstrability) (See Figure 2.10). This extended version of the model has been used to explore users' intentions and behaviours to use Web 2.0 websites, showing that Web 2.0 has been extensively accepted by general users and that these constructs will influence the users' perception of the degree of interaction and sharing enhanced by Web 2.0 (Wu et al., 2008). Such a perception determines whether users will continue to use Web 2.0 websites and further increases the frequency of using these websites (Wu et al., 2008).

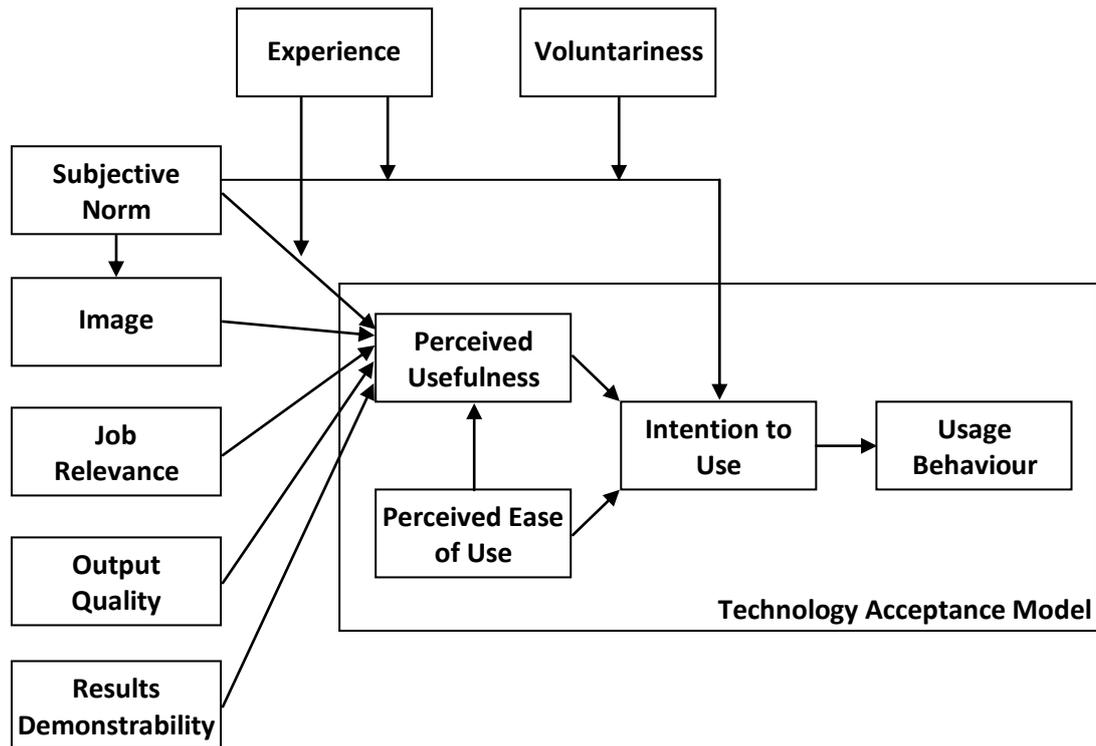


Figure 2.10: *The extended Technology Acceptance Model (Davis et al., 1989, Venkatesh and Davis, 2000)*

Collectively, these models and theories inform the process of adoption and diffusion of new products or technologies focusing on the individual user. This forms a foundation for organisational social media platforms that require participation and contribution by individual users in order to yield benefits and deliver valuable content. This entails understanding of the uptake process from their point of view and formalising their usage patterns.

2.2.4 Social Capital

The concept of social capital is introduced to highlight the importance of networks of strong, personal relationships developed over time across groups that provide the basis for trust, cooperation, and collective action in communities (Jacobs, 1965). Social theorists offer a number of definitions on social capital (See Table 2.7). Adler and Kwon (2002) claim that these definitions vary depending on whether they focus on the substance, the sources, or the effects of social capital, and they proceed to categorise them based on whether their focus is primarily on the structure of relations

among actors within a collectivity focusing on the collective actors' internal characteristics, the relations an actor maintains with other actors tying externally an actor to other actors, or both types of linkages (See Table 2.7).

Table 2.7: *Definitions of Social Capital from the internal and external perspective (Adler and Kwon, 2002)*

Perspective	Definitions of Social Capital	Author (s)
Internal	"The web of cooperative relationships between citizens that facilitate resolution of collective action problems."	(Brehm and Rahn, 1997)
	"Social capital is defined by its function. It is not a single entity, but a variety of different entities having two characteristics in common: They all consist of some aspect of social structure, and they facilitate certain actions of individuals who are within the structure."	(Coleman, 1990)
	"The ability of people to work together for common purposes in groups and organisations." "Social capital can be defined simply as the existence of a certain set of informal values or norms shared among members of a group that permit cooperation among them."	(Fukuyama, 1995, 1997)
	"A culture of trust and tolerance, in which extensive networks of voluntary associations emerge"	(Inglehart, 1997)
	"Those expectations for action within a collectivity that affect the economic goals and goal-seeking behaviour of its members, even if these expectations are not oriented toward the economic sphere."	(Portes and Sensenbrenner, 1993)
	"Features of social organisation such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit."	(Putnam, 1993)
	"Those voluntary means and processes developed within civil society, which promote development for the collective whole."	(Thomas, 1996)
External	"A resource that actors derive from specific social structures and then use to pursue their interests; it is created by changes in the relationship among actors."	(Baker, 1990)
	"An individual's personal network and elite institutional affiliations."	(Belliveau et al., 1996)
	"The aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalised relationships of mutual acquaintance or recognition...made up of social obligations ('connections') which is convertible, in certain conditions, into economic capital and may be institutionalised in the	(Bourdieu, 1985)

	form of a title of nobility.”	
	“The sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalised relationships of mutual acquaintance and recognition.”	(Bourdieu and Wacquant, 1992)
	“The number of people who can be expected to provide support, and the resources those people have at their disposal.”	(Boxman et al., 1991)
	“Friends, colleagues, and more general contacts through whom you receive opportunities to use your financial and human capital.” “The brokerage opportunities in a network.”	(Burt, 1992, 1997)
	“The process by which social actors create and mobilise their network connections within and between organisations to gain access to other social actors' resources.”	(Knoke, 1999)
	“The ability of actors to secure benefits by virtue of membership in social networks or other social structures.”	(Portes, 1998)
Both	“Naturally occurring social relationships among persons which promote or assist the acquisition of skills and traits valued in the marketplace...an asset which may be as significant as financial bequests in accounting for the maintenance of inequality in our society.”	(Loury, 1992)
	“The sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit. Social capital thus comprises both the network and the assets that may be mobilised through that network.”	(Nahapiet and Ghoshal, 1998)
	“The web of social relationships that influences individual behaviour and thereby affects economic growth.”	(Pennar, 1997)
	“The set of elements of the social structure that affects relations among people, and are inputs or arguments of the production and/or utility function.”	(Schiff, 1992)
	“The information, trust, and norms of reciprocity inhering in one's social networks.”	(Woolcock, 1998)

Essentially, social capital theorists advocate that increased social capital promotes beneficial social outcomes, such as access to knowledge and expertise, motivation and capability to collaborate, and the potential for economic gains. This impacts positively the operational outcomes of creativity, innovation, decision-making, collaboration and coordination of work that improves the quality and efficiency of implementation and strategic decision-making (Cohen and Prusak, 2001). Social

networks foster the connections required for social capital to be built and utilised under which networked individuals interact and exchange information. Social capital, thus, refers to the collective value of all social networks and the inclinations that arise from these networks to do things for each other (Putnam, 1993). As a result, individuals engage in interactions and networking in order to generate some form of profit (Lin, 2001).

The social capital concept has been offered as an explanation for a variety of pro-social behaviours, including collective action and community involvement, with the key difference being that social capital is embedded in the social realm (Wasko and Faraj, 2005). While other forms of capital are based on assets or individuals, social capital resides in the fabric of relationships between individuals and in individuals' connections with their communities (Putnam, 1995). With social capital translated into the resources embedded in a social structure that are accessed and/or mobilised in purposive action (Lin, 2001), the benefits that emerge from information, influence, social credentials, and recognition indicate that the accumulated social capital enables individuals to gain competitive advantages in the labour market as a result of their privileged access to resources located on their social networks. Having access to diverse contacts and information can help people overcome many situations and reach some form of self-actualisation.

Online communities and social media networks, therefore, can flourish given that they provide their members connections, influence, a chance to grow their reputation, access and potential access to ideas, talent and resources, ways to display their accomplishments, and essentially access to those people with increased social capital of their own. Organisational social media platforms arguably constitute the space for social capital to develop as individuals form connections and build relationships with others, and exchange information and resources developing social capital assets that can be utilised by the individuals themselves, the other community members and the organisation that hosts this environment.

2.2.5 Value Creation

In the traditional sense, the way value is created is best illustrated through the structure of the value chain, where a set of primary activities, namely inbound logistics, operations, outbound logistics, marketing and sales, and service, turn inputs into outputs developing thus value for the organisation (Porter, 1985). Figure 2.11 depicts this structure where the sequencing and arrow format of the diagram underlines the sequential nature of the primary value activities. The support activities, namely firm infrastructure, human resource management, technology development and procurement, potentially apply to each of the primary activities. The layered nature of the support activities indicates that they are performed in parallel with the primary activities and the margin at the end of the value chain arrow underlines that the chain activities are all cost elements that together produce the value delivered at the end of the chain (Stabell and Fjeldstad, 1998). New sources of value are, therefore, generated through novel deployments of resources, especially through new ways of exchanging and combining resources (Tsai and Ghoshal, 1998).

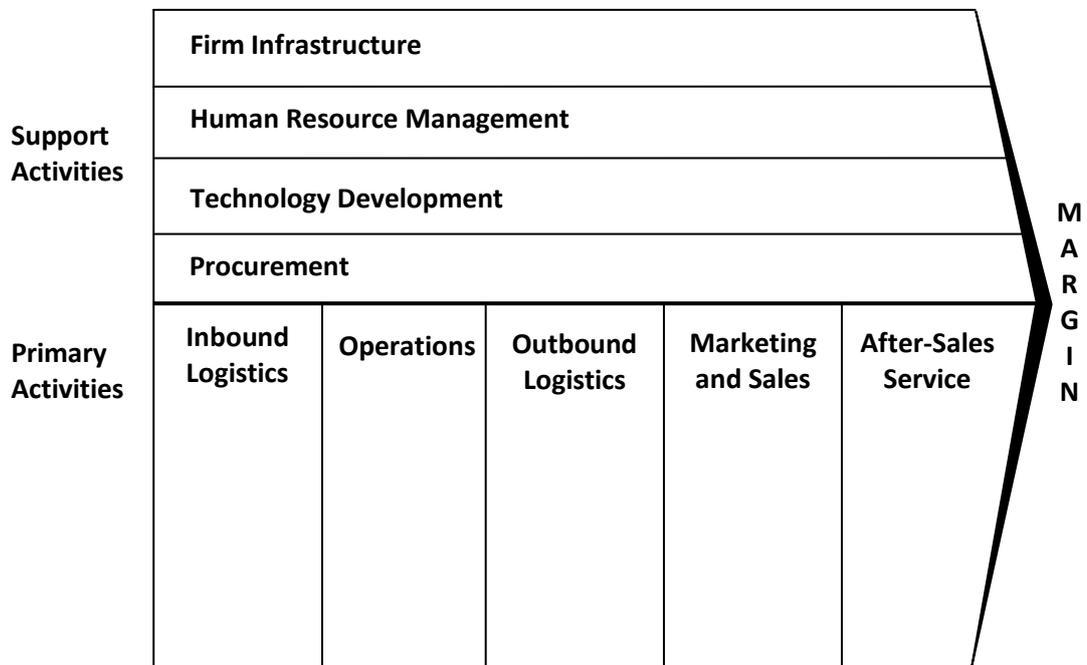


Figure 2.11: *The value chain structure indicating how the primary and support activities are arranged in an organisation to deliver value and convert inputs to outputs (Porter, 1985)*

There is, however, an evident transition from the way value creation is understood in the industrial era, rapidly shifting from a product- and firm-centric view to personalised consumer experiences. Informed, networked, empowered and active consumers are increasingly co-creating value with the firm, where the interaction between the firm and the consumer is becoming the locus of value creation and value extraction (Prahalad and Ramaswamy, 2004). As value shifts to experiences, the market is becoming a forum for conversation and interactions between consumers, consumer communities, and firms. The roles of producers and consumers in the traditional sense of the value chain converge, resulting to the emergence of the prosumer (Toffler, 1970, 1980), and the processes of prosumption (Tapscott, 1996) and produsage (Bruns, 2007).

What this means is that the locus of value creation in new business models shifts away from the product itself, and toward the relationships that the product has with the consumer and with other products, shifting also to the relationships that people around a product forge with each other (Briggs, 2009). In this transition state, caused largely by the emergence of a participatory culture, organisations need to be built from the ground up with integrating customer interactions as the core strategy of value generation. Web 2.0 and social media allow organisations to listen to their direct customers, who create a conversation of value. This type of conversation or communication medium energises the customer base to be more than just consumers, but rather an engaged part of the business (Stephens, 2009). Table 2.8 illustrates some example business models that are utilising the consumer base to create value.

Table 2.8: *Examples of decentralised Web 2.0 value creation (Briggs, 2009)*

Company	Description of means
Twitter, Yahoo!, Google, YouTube	Have released APIs which allow outside commercial and non-commercial developers to execute functions as well as to pull and push data to and from their systems.
Facebook, Salesforce, MySpace	Have created platforms which allow outside commercial and non-commercial developers to build entire applications within the system.
Digg, OhMyNews, Wikipedia	Have allowed users to create a large amount of the content within the system.

CrowdSpring, Threadless, Widgetbox	Have allowed users to self-organise to create products individually or in groups through the system.
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Given the current upward trajectory of device ubiquity, end-user literacy, online participation in content creation, socialising, commerce and collective action, it appears that business models will continue to develop decentralised value creation systems as a means of competitive advantage (Briggs, 2009). Organisational social media platforms constitute one way for organisations to open up their boundaries, and allow customers and partners in, to foster conversations and create value collectively. This social organisation structure represents an emerging business model for large established organisations that need to re-establish the relationships with their external environment in order to be part of this trajectory and not to be left behind as static, monolithic and inflexible institutions.

2.2.6 Open Source

Open source is characterised as a fundamentally new way to develop software that involves geographically distributed developers working in arbitrary locations, rarely or never meeting face-to-face, and coordinating their activity almost exclusively by means of email and bulletin boards (Mockus et al., 2002). The Open Source Initiative claims that software developed in this way has better quality, higher reliability, more flexibility, lower cost, and poses an end to predatory vendor lock-in, due to the transparency of the process and the power of distributed peer review (OSI, 2011).

The outcomes from open source software development are often claimed to be equivalent, or even superior to software developed more traditionally, where “given enough eyeballs all bugs are shallow” and code is written with more care and creativity, because developers are working only on things for which they have a real passion’ (Raymond, 1999). The most prominent cases of open source software development are the Apache web server, the Linux operating system and the Mozilla browser, where the coordination, selection and assignment of work was organised in a

sufficiently different way compared to commercial software development (Mockus et al., 2002). Open source software projects have essentially led to innovation, development and consumption communities run completely by and for users (von Hippel, 2001). The performance level of these user developments can be explained by the fact that innovations are often made by lead users, that is, users who are ahead of the trend in terms of demand and who have significant incentives to solve a given problem (Jeppesen and Frederiksen, 2006).

Open source can, therefore, be seen as a movement, where communities of highly skilled programmers collectively develop software, often of a quality that outperforms commercial proprietary software (Ljungberg, 2000), posing a serious challenge to the commercial software businesses that dominate most software markets today (Mockus et al., 2002). Contributors in these social structures are motivated by the personal benefit of using an improved software product and by social values such as altruism, reputation, and ideology (Markus et al., 2000). In many respects, open source is mostly about the ideology of how software should be developed; the norms, beliefs and values formed by the individuals involved in these largely volunteer-based social organisation structures (See Table 2.9).

Table 2.9: *The tenets of Open Source Ideology in terms of norms, beliefs and values (Stewart and Gosain, 2006)*

Open Source Ideology	
Norms: behavioural expectations	<p>Forking: there is a norm against forking a project, which refers to splitting the project into two or more projects developed separately</p> <p>Distribution: there is a norm against distributing code changes without going through the proper channels</p> <p>Named Credit: there is a norm against removing someone's name from a project without that person's consent</p>
Beliefs: understandings of causal relationships	<p>Code Quality: open source development methods produce better code than closed source</p> <p>Software Freedom: outcomes are better when code is freely available</p> <p>Information Freedom: outcomes are better when information is freely available</p> <p>Bug fixing: the more people working on the code, the more quickly bugs will be found and fixed</p> <p>Practicality: practical work is more useful than theoretical discussion</p>

	Status Attainment: status is achieved through community recognition
Values: preferences for some behaviours or outcomes over others	Sharing: sharing information is important Helping: aiding others is important Technical knowledge: technical knowledge is highly valued Learning: there is a value on learning for its own sake Cooperation: voluntary cooperation is important Reputation: reputation gained by participating in open source projects is valuable

Open source is, therefore, challenging some concrete notions of traditional software development in terms of motivation, co-ordination, governance and diffusion. The production of open source software is a form of intellectual gratification with an intrinsic utility similar to that of a scientific discovery, involving elements other than financial remuneration (Bonaccorsi and Rossi, 2003):

- It is regarded as an *art form*, where open source programming is an artistic satisfaction associated to solving complex computer problems.
- In the new paradigm of development, programmers frequently rediscover the *pleasure of creativity*, which is being progressively lost in the commercial world, where the nightmare of delivery deadlines is transforming production into an assembly line.
- Commercial software is primarily perceived as not being very reliable produced by a restricted group of programmers in obedience to market laws. Therefore, the reasons for open source are not purely ideological but also, *technical*.
- Working on open source projects provides the prestige and visibility that often gives programmers the chance to be noticed by software firms, hence working freely for the open source movement would be an investment activity aimed at increasing the *signalling of quality* of human capital.
- Many open source projects take shape because the people promoting them have looked in vain for a programme to perform a particular function, resulting thus to

self-production, in an attempt to satisfy a demand for which there is no corresponding supply.

In an open source community, one measure of competitive success is one's reputation among one's peers, which is gained by giving away or sharing with others high quality software, knowledge or solutions to problems (Ljungberg, 2000). Good reputation is a primary reward in itself, but it is also a way to attract attention from others; this attention may eventually also give credit outside the gift economy of the open source culture, such as in terms of status, job opportunities or money (Ljungberg, 2000, Stewart, 2005). Benbya and Belbaly (2010) advocate that open source environments are settings where economic, social, and psychological motives can coincide leading to a vast list of motivational factors that affect, influence and drive participation and contribution in open source projects (See Table 2.10).

Table 2.10: *A list of empirically-tested motives for open source software development (Benbya and Belbaly, 2010)*

Open Source Motivational Factors	
Altruism, identification, future rewards (selling products, human capital, self-marketing, peer-recognition), personal needs	(Hars and Ou, 2002)
Career concerns, ego-gratification	(Lerner and Tirole, 2002)
OSS community, promoting free software, reputation, fun	(Zeitlyn, 2003)
Learning	(Ye and Kishida, 2003)
Identification, norm and social motives, hedonic and pragmatic	(Hertel et al., 2003)
Problem-solving time, learning	(Lakhani and von Hippel, 2003)
Enjoyment, user needs, programming skills	(Lakhani and Wolf, 2005)
Extrinsic (pay, status, use-value) Intrinsic (enjoyment, satisfaction for competence, control and autonomy)	(Roberts et al., 2006)
Need for software, reciprocity	(Shah, 2006)
Attitude, emotions, identification	(Bagozzi and Dholakia, 2006)
Signalling, need for software, the fun of play, gift culture	(Bitzer et al., 2007)
Helping, human capital, career benefits, personal needs	(Wu et al., 2007)
Ideology, social identification	(Ke and Zhang, 2009)

Reputation, self-development, altruism	(Oreg and Nov, 2008)
Interpersonal relationship, software need, ideology, leadership	(Xu et al., 2009)
Situated learning, identity construction	(Fang and Neufeld, 2009)
Learning, reciprocity, career benefits, ideology	(Benbya and Belbaly, 2010)

Open source can be, therefore, characterised as a gift economy as opposed to scientific knowledge sharing, where an improved software development process with participatory user-driven design and virtual organising, develops new hybrid business models (Ljungberg, 2000). Open source software has been *pulled* into the marketplace due to demand for reduced development costs, enhanced product margins, and technical superiority; while it has also been *pushed* into the marketplace by organisations in order to capture customers, disrupt markets, and achieve social and economic development goals (Perr et al., 2010). These value creation dynamics arguably fuel the proliferation of open source software, resulting to the establishment of seven business models according to Perr et al. (2010); namely, professional services, support, subscription, dual license, hybrid/proprietary extensions, device, and community source/consortia. These are further grouped into deployment, hybridisation, complements and self-service models (Chesbrough and Appleyard, 2007) (See Table 2.11).

Table 2.11: *Open source business models (Chesbrough and Appleyard, 2007, Perr et al., 2010)*

Open Source Business Models		
Deployment	Professional services	Revenue derived from professional services, training, consulting or customisation of open source software.
	Support	Revenue derived from sale of customer support contracts.
	Subscription	Revenue derived from annual service agreements bundling open source software, customer support and certified software updates delivered via the internet.
Hybridisation	Dual license	Vendor licenses software under different licenses (free 'public' or 'community' license vs. paid 'commercial' license) based on customer intent to redistribute.

	<i>Hybrid/proprietary extensions</i>	Firms broadly proliferate open source application and monetise through sale of proprietary versions or product line extensions. Variants include mixed open source/proprietary technologies or services with free trial or 'community' versions.
Complements	<i>Device</i>	Vendor sells and supports hardware device or appliance incorporating open source software.
Self-service	<i>Community source/consortia</i>	Consortia or end-user organisations or institutions jointly develop application to be used by all.

The open source movement and ideology, where cooperation takes place in the absence of a central authority, proposes a different social organisation structure; one which organisational social media platforms can relate to, in terms of decentralised innovation and community collaboration. Some vital differences exist however, that subsequently affect the underlined motives compared to open source. Firstly, the fact that a specific organisation hosts and supports a social media platform means that the content is influenced and the outcomes are utilised by that organisation. Secondly, the fact that no particular projects are pre-defined with tasks readily available for users to undertake means that the participation process is sufficiently different. What this means is that even though the motives behind open source can be related to participation in organisational social media platforms as both environments cater for professional users and the development of professional content, their structural and content differences require different user participation and contribution activities. There are similarities, however, in terms of ideology, particularly the value of sharing, learning, technical knowledge and reputation.

2.2.7 Open Innovation

Open innovation is defined as the “use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively” (Chesbrough and Schwartz, 2007). A paradigm shift has been observed in the way companies commercialise industrial knowledge; rather than relying entirely on internal ideas to advance their business, an ‘open’ approach to innovation leverages internal and external sources of ideas and knowledge

(Chesbrough, 2003). It, therefore, becomes about systematic encouragement and exploration of a wide range of internal and external sources for innovation opportunities, consciously integrating that exploration with firm capabilities and resources, and broadly exploiting those opportunities through multiple channels (West and Gallagher, 2006). What this introduces is a business model that promises to achieve a greater return on innovative activities and intellectual property of organisations by loosening the control over both.

Gassmann and Enkel (2004) summarise the open innovation process by identifying three archetypes: the outside-in process, where a company is enriching its own knowledge base through the sourcing of knowledge from suppliers, customers and other external sources to increase a company's innovativeness; the inside-out process, where a company is earning profits by bringing ideas to market, selling intellectual property and multiplying technology by transferring ideas to the outside environment; and the coupled process, where the outside-in and inside-out processes are coupled by working in alliances with complementary partners in which give and take is crucial for success (See Figure 2.12).

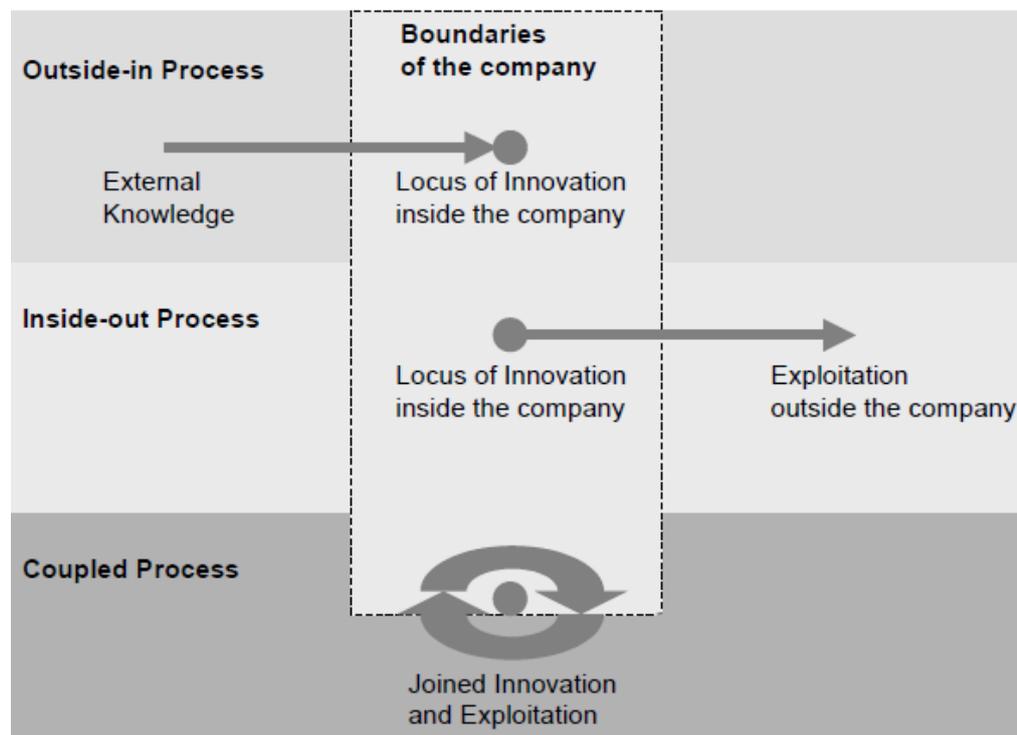


Figure 2.12: *The three core processes of open innovation (outside-in, inside-out and coupled) indicating the locus of innovation (Gassmann and Enkel, 2004)*

According to West and Gallagher (2006), there are three fundamental challenges for organisations applying an open innovation strategy; namely, finding creative ways to exploit internal innovation, incorporating external innovation into internal development, and motivating outsiders to supply an ongoing stream of external innovations. Comparing open innovation to both proprietary and external innovation models emphasises these challenges and indicates that different management techniques are required to address them, including the provision of intrinsic rewards to external contributors and the giveaway of intellectual property to the outside context (See Table 2.12).

Table 2.12: *Comparison of the different innovation models and their respective challenges and techniques (West and Gallagher, 2006)*

Innovation Model	Management Challenge	Management Technique
Proprietary (internal or closed)	1. Attracting 'best and brightest'	1. Provide excellent compensation, resources, and freedom
	2. Moving research results to development	2. Provide dedicated development functions to exploit research and link it to market knowledge
External	1. Exploring a wide range of sources for innovation	1. Careful environmental scanning
	2. Integrate external knowledge with firm resources and capabilities	2. Developing absorptive capacity, and/or using alliances, networks, and related consortia
Open	1. Motivating the generation and contribution of external knowledge (motivating)	1. Provide intrinsic rewards (e.g. recognition) and structure (instrumentality) for contributions
	2. Integrating those sources with firm resources and capabilities (incorporating)	2. As above
	3. Diversifying the exploitation of intellectual property (IP) resources (maximising)	3. Share or give away IP to maximise returns from entire innovation portfolio

One example of the open innovation model is the proliferation of open source development within software and technology organisations. With the rise of open source through the success of Apache, Linux and Mozilla, the process of software development has been greatly challenged. As a result, many high-tech organisations

are incorporating an open source element as part of their open innovation strategy. West and O'Mahony (2008) explored a number of firm-sponsored open source communities and identified three dimensions of the participation architecture, namely production, governance and intellectual property, along which openness was affected in terms of transparency and accessibility compared to proprietary software development (See Table 2.13). What they found further was that sponsor organisations were more likely to offer transparency than accessibility indicating the control versus growth tension that organisations face when designing an open source community. They seek, in particular, to maintain control over the community's strategic direction to leverage their investment in it, but by restricting access to community processes, they in turn limit their community's ability to attract new members and grow, affecting thus, the benefits gained from developing an external community (West and O'Mahony, 2008).

Table 2.13: *The effect of the dimensions of participation architecture on transparency and accessibility compared to proprietary software development (West and O'Mahony, 2008)*

		Form of Openness		Proprietary Model
		Transparency	Accessibility	
Dimensions of Participation Architecture	Production – <i>The way that the community conducts production processes</i>	Ability to read code and observe or follow Production processes	Ability to change code directly	Production remains within a single corporation
	Governance – <i>The processes by which decisions are made within the community</i>	Publicly visible governance, observers can understand how decisions are made	Ability to participate in governance	The corporation makes all decisions at its own discretion
	Intellectual Property – <i>The allocation of rights to use the community's output</i>	Rights to use code and access source code	Ability to reuse and recombine code in the creation of derivative code	Limited use rights are granted by the corporation for a licensing fee

Comparing the attributes of proprietary and open source software development models, it becomes apparent that the differences in these models not only concern how software is developed, but also how it is marketed, with the managing of external contributors and users becoming a crucial element of the process (See Table 2.14). If companies, however, cannot find ways to profit from their innovation activities in open initiatives through deployment, hybridisation, complements, or self-service, they cannot sustain their participation in those initiatives over time (Chesbrough and Appleyard, 2007). Open strategy – the strategic use of innovation communities, ecosystems, networks, and their implications for competitive advantage – essentially, balances the powerful value creation forces that can be found in creative individuals, innovation communities, and collaborative initiatives, with the need to capture value in order to sustain continued participation and support of those initiatives (Chesbrough and Appleyard, 2007).

Table 2.14: *Comparison of attributes between proprietary and open source software development models (Perr et al., 2010)*

Attribute	Proprietary Software	Open Source Software
Software development model	<ul style="list-style-type: none"> • Closed – within boundaries of vendor and designated partners • Customers/users may use/see only under non-disclosure 	<ul style="list-style-type: none"> • Open to external input • Project definition and pre-releases made available • Global development via internet-connected community
Typical software development process	<ul style="list-style-type: none"> • Product/project idea • Research/validate idea • Build prototype, pre-releases • Announce to world • Ship final product 	<ul style="list-style-type: none"> • Product/project idea • Announce to world to build developer community and customer interest • Iterative releases of early versions and source code • Ship and refine
Sales and marketing process	<ul style="list-style-type: none"> • Traditional demand generation cycle • Awareness/lead generation • Up-front investment in sales and marketing programs and staff • Vendor-guided pilot or trial programmes 	<ul style="list-style-type: none"> • Customer-self-selection (download free open source application) • Monetise large installed base of free users • Sales and marketing costs/headcount limited
Examples	<ul style="list-style-type: none"> • Microsoft, Adobe, Lotus 	<ul style="list-style-type: none"> • Red Hat, Novell (SuSE), Jboss, Mozilla, OpenOffice

Online communities and social media environments enable to a certain extent this sourcing of external competencies by serving as an external resource pool. This can affect the production and multiplication of intellectual capital allowing knowledge sharing and information centralisation in the context of external user networks. A number of open innovation companies, including Innocentive, yet2.com, Nine Sigma, IdeaWicket, IdeaConnection and YourEncore, indicate that this business model creates a global market for scientific knowledge, where everyone can contribute their own developed technology (Cardoso et al., 2009). Innocentive, perhaps the most widely known crowd sourcing company, connects a global network of solution seekers and problem solvers, allowing companies to spot and hire necessary skills in order to deal with complex technical challenges, something that might be difficult to find internally (Cardoso et al., 2009). As a result, socially-oriented networks play a critical role in the pursuit of both quality and innovation, and it is by providing a means to leverage these social networks that social media tools can provide an innovative advantage. Such networks exist in a variety of forms all serving the same purpose, to connect diverse, independent users for the prospect of innovative outcomes and opportunities (Radziwill and DuPlain, 2009):

- *Idea networks* describe the linkages between concepts held by one or more people within a network of collaborators.
- *Information networks* describe the connections between individuals that are in place to share or disseminate knowledge.
- *Energy or affect networks* describe connections between people that either generate or inhibit enthusiasm and creativity.
- *Media networks, supply chains and distribution networks* represent connections between suppliers, producers and consumers that are essential for the wide diffusion of innovative products, services, and technologies.
- *Social networks* also play a role, because people often learn from and listen to the knowledge and recommendations provided by their friends and acquaintances.

When such networks and open innovation collide potentials for new product development emerge giving rise to more flexible production processes that enable some organisations to respond to new information, such as user feedback, resulting in a better-performing product development cycle (Jeppesen and Frederiksen, 2006, Nambisan, 2002). This essentially affects the customer role at each phase of the cycle in terms of ideation, design and development, and product testing and support when customers act as a resource, as creators and as users (See Table 2.15). When customers contribute to firm-hosted communities by freely revealing their innovations to a firm's product platform, it can place the firm in a favourable position as new product features become available to all product users, and can enable the firm to pick up promising innovations, integrate them in future versions of the products, and benefit by selling them back to all users (Jeppesen and Frederiksen, 2006).

Table 2.15: *Customer roles in new product development (NPD) (Nambisan, 2002)*

Customer role	NPD Phase	Key Issues/Managerial Challenges
<i>Customer as a resource</i>	<i>Ideation</i>	<ul style="list-style-type: none"> • Appropriateness of customer as a source of innovation • Selection of customer innovator • Need for varied customer incentives • Infrastructure for capturing customer knowledge • Differential role of existing (current) and potential (future) customers
<i>Customer as creator</i>	<i>Design and development</i>	<ul style="list-style-type: none"> • Involvement in a wide range of design and development tasks • Nature of the NPD context: industrial/consumer products • Tighter coupling with internal NPD teams • Managing the attendant project uncertainty • Enhancing customers' product/technology knowledge
<i>Customer as user</i>	<i>Product testing</i>	<ul style="list-style-type: none"> • Time-bound activity • Ensuring customer diversity
	<i>Product support</i>	<ul style="list-style-type: none"> • Ongoing activity • Infrastructure to support customer-customer interactions

Open organisational social media platforms can arguably constitute a network of professional users that exchange and create content on product issues. This structure

can potentially evolve into an open innovation/open source model, where community-driven projects can emerge that are coordinated and managed by members of such platforms and subsequently utilised by the host organisation, affecting thus new product development. Such an arrangement not only introduces opportunities for the host organisation, but also challenges in terms of intellectual property, economic returns and compensation for external contributions. On the whole however, it introduces interesting new behaviours that can potentially impact this hybrid social organisation structure, affecting working routines and practices, delivering value in terms of user-generated content and creating imbalances between consumer and producer roles.

2.3 Behaviours of Social Organisation

In social organisation structures, user-driven behaviours shift the focus to the individuals and their intention to participate, contribute and share content. Individuals undertake a range of participation and contribution roles that affect their sharing behaviour, largely driven by emerging benefit and value, and underlined by motivation and desire for online presence and activity. In this respect, exploring organisational social media platforms means focusing on the individual users and understanding their conscious decision to actively participate and contribute by sharing content and information, creating in this way value for themselves, the online platform and the host organisation.

2.3.1 Participation and Contribution

Participation in an online community determines community success in the long term (Koh and Kim, 2004), as it promotes long-lasting relationships among community members (Algesheimer et al., 2005). Greater participation implies a higher level of involvement with the online community, which may reinforce the feelings that bind each other, improve instruction on communal values, encourage conjoint behaviours and information sharing, and enable stronger group cohesion (Casaló et al., 2010). Ongoing participation in joint activities in an online community thus helps the

group achieve collective goals (Bagozzi and Dholakia, 2006), and is a crucial factor for community endurance (Koh and Kim, 2004).

In a world of connected individuals, participation can be a signal of competency, a way to feel more engaged or even an effective way to reinforce social networks (Bughin, 2008). Social participation refers to members' interpersonal and affiliate behaviours that involve active engagement in social interaction activities to facilitate interpersonal and social contact among members (Van Dyne et al., 1994). Behaviours such as communication and interaction in online communities and social media environments, are essential in generating intended informational and social benefits such as strong interpersonal ties and a sense of belonging that leads to higher network strength (Kang et al., 2007).

In such settings, participation and contribution essentially results to information and content creation. Compared to firm-based, community-based information spans countless boundaries, and as such it needs to be understood as an evolutionary process of learning driven by constant review and criticism (Lee and Cole, 2003) (See Table 2.16). Free and public information is created as a result, involving largely volunteer-based computer-mediated participation and contribution.

Table 2.16: *Firm-based versus Community-based knowledge creation models (Lee and Cole, 2003)*

Organising Principles	Firm-based model	Community-based model
<i>Intellectual Property Ownership</i>	Knowledge is private and owned by the firm.	Knowledge is public but can be owned by members who contribute it as long as they share it.
<i>Membership Restriction</i>	Membership is based on selection, so the size of the firm is constrained by the number of employees hired.	Membership is open, so the scale of the community is not constrained.
<i>Authority and Incentives</i>	Members of the firm are employees who receive salaries in exchange for their work.	Members of the community are volunteers who do not receive salaries in exchange for their work.
<i>Knowledge Distribution Across Organisational and Geographical Boundaries</i>	Distribution is limited by the boundary of firm.	Distribution extends beyond the boundary of the firm.

Dominant Mode of Communications	Face-to-face interaction is the dominant mode of communication.	Technology-mediated interaction is the dominant mode of communication.
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The process of content creation in online communities and social media environments forms a range of roles that individuals undertake whether they actively or passively participate. Forrester research categorises social media participation into a ladder with seven levels of participation (Bernoff, 2010) (See Figure 2.13). With each step up the ladder, individuals contribute more and advance from being inactive to being spectators, joiners, collectors, critics, conversationalists and finally creators. The aim, therefore, becomes to establish and maintain a large percentage of top participants, i.e. creators, conversationalists, and critics, in order to ensure ongoing generation and linking of content that ultimately results to community value.

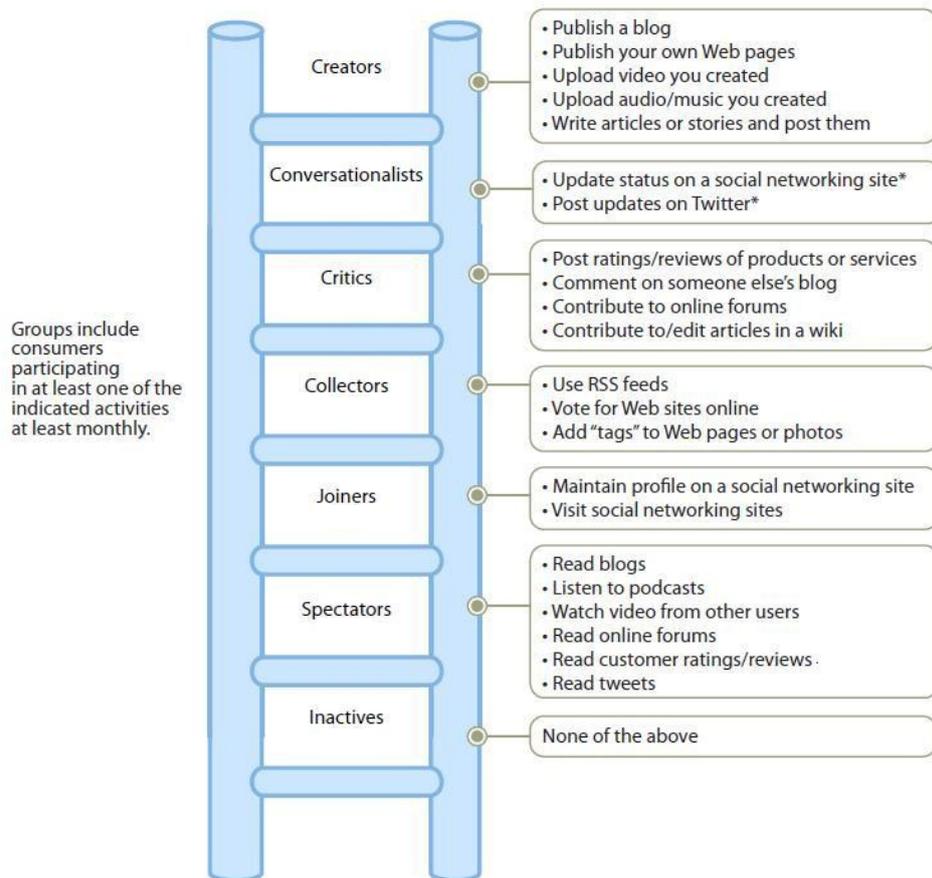


Figure 2.13: *Forrester’s Social Technographics ladder indicating seven levels of social media participation with ascending degrees of contribution (Bernoff, 2010)*

Users of large-scale communities, however, follow the 1-9-90% distribution rule according to Nielsen (2006), where 90% of users are inactive participants who read and observe but never contribute, 9% of users only contribute from time to time, and 1% of users are highly active and account for almost all the content. This distribution of user roles and contributions creates an inequality in the content created, where the 90% of users create no content, the 9% of users create 10% of the content, and the 1% of users creates the 90% of the content (See Figure 2.14). This rule is supported in a variety of contexts including Wikipedia, where a great level of inequality was found for every language edition processed; less than 10% of the total number of authors were responsible for more than the 90% of the total number of contributions (Ortega et al., 2008).

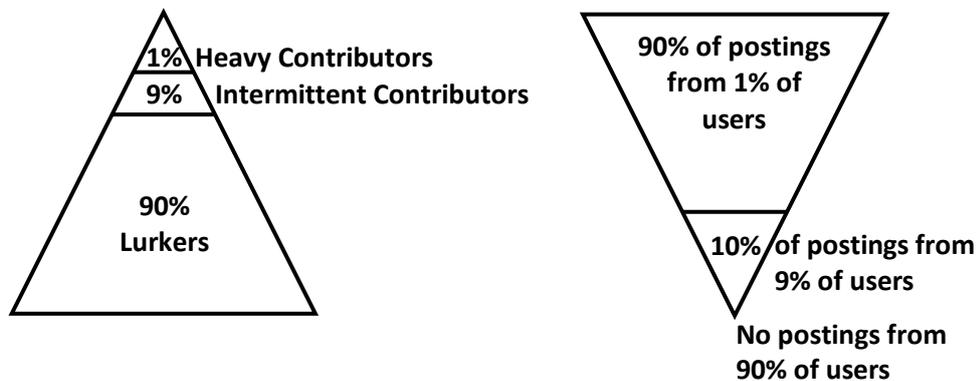


Figure 2.14: *The 1-9-90% rule of user contribution indicating participation inequalities in online communities (Nielsen, 2006)*

User participation, however, has the potential to transform from one role to the next as contribution increases. Initial participation and contribution involves searching for and reading content, and then over time, involvement can gradually increase as some of these individuals return to specific communities and start contributing. For that reason, participation can be seen through different learning trajectories that individuals undertake within specific social contexts. Lave and Wenger (1991), in particular, identify five trajectories of users that can exist in any community indicating the level of engagement of individuals that ranges from being an observer to being a mentor (See Table 2.17). This demonstrates that as an individual's learning in a particular context evolves so does their participation behaviour. As the beginner or novice moves from the periphery of a community to its centre, he or she becomes more

active and engaged within the culture and eventually assumes the role of an expert (Lave and Wenger, 1991).

Table 2.17: *Participation trajectories applied to You Tube behaviours (Lave and Wenger, 1991)*

Participation Trajectories	
<i>Peripheral (i.e. Lurker)</i>	An outside, unstructured participation. User observes the community and views the content; does not add to the community content or discussion. <i>You Tube: User occasionally views videos that they have been directed to.</i>
<i>Inbound (i.e. Novice)</i>	Invested in the community and heading towards full participation. User just begins to engage with the community and starts to provide content; tentatively interacts in a few discussions. <i>You Tube: User has started to comment on videos and may have uploaded a video themselves.</i>
<i>Insider (i.e. Regular)</i>	Fully committed community participation. User consistently adds to the community discussion and content; interacts with other users. <i>You Tube: Regular posting of videos either found or created by the user. User also comments and reviews videos of others.</i>
<i>Boundary (i.e. Leader)</i>	Sustained membership of participation and brokering of interactions. User is recognised as a veteran participant and connects with regulars to make higher concept ideas. Community grants their opinion a greater consideration. <i>You Tube: Now as a recognised user, will not watch a video without commenting and will reprimand other users for inappropriate behaviour.</i>
<i>Outbound (i.e. Elder)</i>	Process of leaving the community due to new relationships, new positions, new outlooks. User's interests have changed so he decides to leave the community. <i>You Tube: User has developed another hobby and no longer has time to maintain a constant presence on the site.</i>

This evolving process is based on the theoretical underpinnings of Legitimate Peripheral Participation, which indicates how peripheral participation can evolve into continuous contribution as individuals become more engaged and the meanings and motivations of their role in that space change gradually (Lave and Wenger, 1991).

Bryant et al. (2005) in particular, use this theory to describe the activity systems in which newcomers transform their participation in online collaborative projects and become established Wikipedians. Over time their participation becomes more central and frequent, and participants in Wikipedia adopt new goals, new roles, and use different tools. Their perceptions of Wikipedia also change as they identify the site, not as a random collection of articles, but as a community of co-authors who play distinct roles and have distinct talents as they build a resource (Bryant et al., 2005). They move from a local focus on individual articles to a concern for the quality of the Wikipedia content as a whole and the health of the community. As Wikipedia users move from legitimate peripheral participation to full community involvement, the activities and structures that mediate them necessarily become more complex.

Preece and Shneiderman (2009) illustrate this process in their reader-to-leader framework (See Figure 2.15). In this theoretical framework, as individuals become aware of online communities and social media environments, they start by reading the content available. Then some of them decide to contribute, to collaborate and finally to assume a leading role in the community. Under each level different activities take place. Readers venture in, browse, search, and might decide to return; contributors rate, tag, review, post, and upload; collaborators develop relationships, work together and set goals; and leaders promote participation, mentor novices, and set and uphold policies (Preece and Shneiderman, 2009). This process is not strictly sequential as individuals can behave in a non-linear fashion and participate in different ways by assuming any of these roles at any point in time (Preece and Shneiderman, 2009).

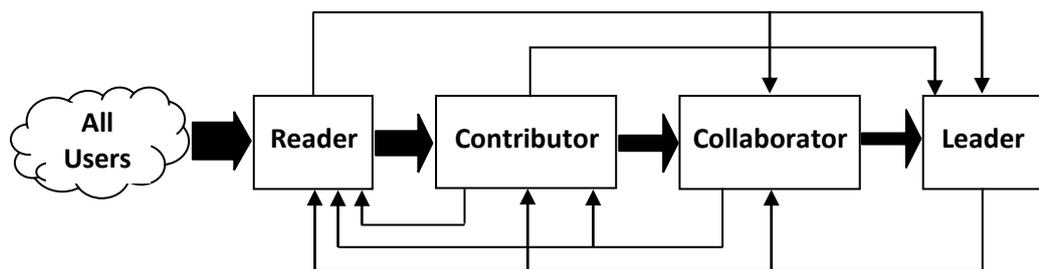


Figure 2.15: *The reader-to-leader framework indicates that the number of users decreases while progressing through the levels (illustrated by the decreasing size of block arrows) and that participation roles are non-sequential (illustrated by the overarching arrows) (Preece and Shneiderman, 2009)*

Fogg and Eckles (2007) identified that successful online websites share a pattern of target behaviours in what they termed as a behavioural chain framework of online participation (See Figure 2.16). In the first phase of the chain, discovery of the website takes place, where users visit the site and learn more about it. Then a level of superficial involvement takes place, where users decide to try the site and get started usually by creating an account. True commitment and value from user participation is established in the third and final phase, where users build up their contributions and develop loyalty to the site. As users move along the behaviour chain, the target behaviours become more demanding; engagement increases and users perform more valuable activities towards the website's viability. The behaviours in the final phase, when users create value and content and when they involve others, essentially contribute to the website's appeal to new users. It is what influences them to follow the behaviour chain and begin to discover the site for themselves (Fogg and Eckles, 2007). Online community and social media vendors accordingly, are therefore, trying to establish these target behaviours and ensure the long-term viability of their online space.

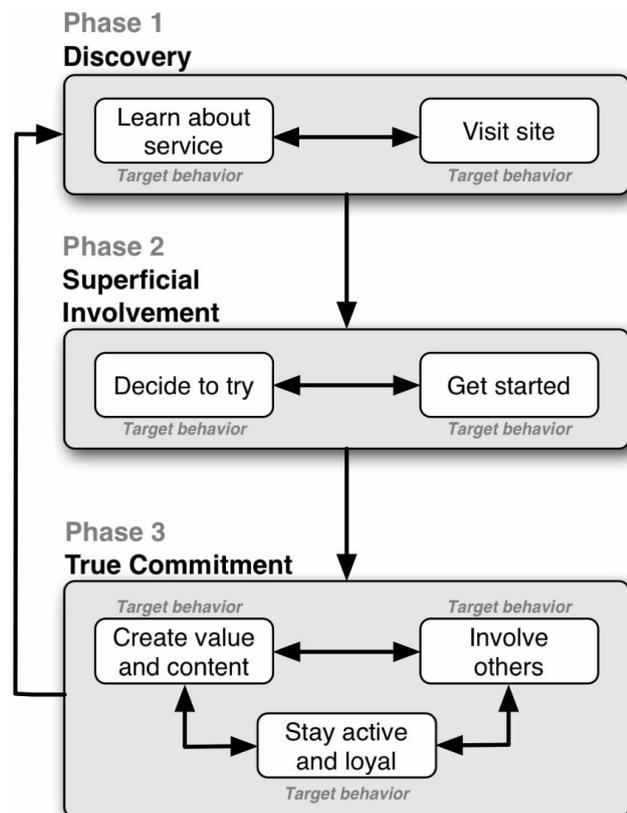


Figure 2.16: *The behaviour chain of online participation (Fogg and Eckles, 2007)*

It is undisputed that the majority of community members in these contexts are ‘lurkers’ or ‘free-riders’ for a variety of reasons including anonymity, privacy and safety, time and work-related constraints, message volume and quality, and shyness over public posting (Nonnecke and Preece, 2001, Preece et al., 2004). A portion of them, however, will gradually move on to undertake contributing activities that are vital for the growth and health of online communities and social media environments. Lurkers, therefore, are an essential part of any community as contributors emerge from that group of participants (Marett and Joshi, 2009). Community vendors are, therefore, constantly trying to drive participation levels whereby individuals are encouraged to make initial contributions and to maintain an active participation role thereafter.

2.3.2 Sharing Behaviours

As online participation often requires individuals to contribute and seek knowledge and information on a particular subject, it can be, hence, viewed as a form of information sharing and knowledge exchange (Wasko and Faraj, 2000). Sharing behaviours centre upon the communications and interactions of participants to generate specific content that enables the participants to perform common functions and to learn from, contribute to, and collectively build upon that content (Lee et al., 2003). While in organisational contexts, information sharing refers to members providing the information required for problem solving by other organisational members (Davenport and Prusak, 1998), online information interaction exists in cooperative forms and shows the strong willingness of members to share their own experience and information even if the parties do not know each other (Wang and Fesenmaier, 2004).

The process of knowledge sharing, by which an individual imparts his or her expertise, insight, or understanding to another individual so that the recipient may potentially acquire and use the knowledge to perform his or her task better, is an essential part of the contemporary knowledge-intensive economy (Yu et al., 2010). While, knowledge sharing can be viewed as a transaction process of knowledge markets, where the knowledge buyers and sellers need to have reciprocal benefits from the exchange (Davenport and Prusak, 1998), knowledge embedded in a community is

conceptualised as the social practice of knowing, which includes the routines and commonly shared languages of a community (Wasko and Faraj, 2005).

Social exchange involves a series of interactions that generate obligations, which are usually seen as interdependent and contingent on the actions of another person, and have the potential to generate high quality relationships (Blau, 1964, Emerson, 1976). Constant et al. (1994) built on the social exchange theory to advance the theory of information sharing, under which attitudes about information sharing depend on the form of the information. While, sharing information in the form of a tangible artefact may depend on pro-social attitudes and norms of ownership, information in the form of expertise contributes towards the formation of a person's identity and the sharing of this expertise arises from the need for self-expression (Constant et al., 1994). Thus, sharing expertise can give personal benefits such as heightening of self-esteem and pride, increased sense of self-efficacy, increased personal identity within the group, and gaining of respect and reputation (Constant et al., 1994).

The theory of 'the strength of weak ties' proposed by Granovetter (1973), which suggests that relative strangers could offer an advantage over friends and colleagues in obtaining useful information, is also relevant in these contexts where most sharing occurs between strangers. He argues that strong-tie relationships occur among people who are similar in many respects; similar people are likely to know the same things and are unlikely to know dissimilar things (Granovetter, 1973, 1982). When information is unavailable through strong ties, people may obtain it through weak ties, where relationships are characterised by absent or infrequent contact, lack of emotional closeness, and no history of reciprocal services (Granovetter, 1973, 1982). Weak ties serve as information bridges across cliques of strong ties and can offer people access to resources that are not found in their strong-tie relationships (Constant et al., 1996).

On the whole, sharing behaviour concerns the willingness of individuals in any context to share with others the information and knowledge they have acquired or created. A sharing culture can be essentially manifested in the beliefs, values and attitudes of any social organisation structure by influencing individuals to share what

they know. Such a culture of sharing can ultimately help visualise the benefits that are attributed to knowledge sharing behaviour (Bock et al., 2005, Davenport and Prusak, 1998). By encouraging the free flow of knowledge, individuals are encouraged to share more of their knowledge with each other, thereby increasing the quantity and quality of the knowledge pool (Jarvenpaa and Staples, 2000, Raban and Rafaeli, 2007).

The perception that information is a source of power and indispensability is shifting (Jarvenpaa and Staples, 2000). With the rise of social media tools, the movement towards openness, flexibility and dynamic content (Parameswaran and Whinston, 2007) also creates an information sharing culture that incorporates these characteristics deeply rooted in the preference towards making content freely available without many expectations for rewards. As a result, the context in which sharing takes place also affects how and why information is shared. A major presupposition based on the context, is the level of voluntariness involved. Trying to explain online participation motivation where many contributors face no monetary gain from their input, Kollock (1998) explains that in such cases individuals participate and contribute in online communities in anticipation of reciprocity, to increase their online reputation, to feel efficacious and to establish a sense of belonging (See Table 2.18).

Table 2.18: *Motivations for contributing in online communities (Kollock, 1998)*

Contribution Motivations	
<i>Anticipated Reciprocity</i>	A person is motivated to contribute valuable information to the group in the expectation that one will receive useful help and information in return. It was reported that individuals who regularly offer advice and information seem to receive more help more quickly when they ask for something.
<i>Increased Reputation</i>	High quality information, impressive technical details in one's answers, a willingness to help others, and elegant writing can all work to increase one's prestige in the community. It can make users key figures in communities and is often regardless of physical world situations or status.
<i>Sense of efficacy</i>	Users may contribute to a community because that contribution results in a sense of involvement and effect in the community, normally driven by a user's belief in their ability to benefit the community either through expertise or group participation.
<i>Sense of community</i>	Many people are directly motivated by the desire to have people respond to their contributions, referred to as a 'sense of community'.

A number of contexts have been explored in the literature identifying a variety of factors that affect sharing behaviours, including organisational contexts, online communities, peer-to-peer sharing systems and social media environments (See Table 2.19). Different authors chose different perspectives to explore intention to share and sharing behaviours, including social capital, social cognitive theory, the intrinsic-extrinsic dichotomy, social exchange theory and knowledge management. This indicates the multi-faceted perspective of volunteer-based sharing and develops a foundation from which sharing in organisational social media platforms can be understood.

Table 2.19: *A comprehensive list of sharing behaviour factors explored in a variety of contexts*

Sharing Behaviour Factors	Context explored	Author(s)
Information culture, organisational information ownership, propensity to share, task interdependence, computer comfort, and characteristics of computer-based information	Organisational Collaborative Electronic Media	(Jarvenpaa and Staples, 2000)
Tangible and intangible returns, reciprocity, moral obligation and community interest	Electronic Communities of Practice	(Wasko and Faraj, 2000)
Extrinsic motivation (reward and personal need), intrinsic motivation (altruism and reputation), and interpersonal factors (liking and affiliation)	Peer-to-peer Subscription Systems	(Lui et al., 2002)
The perception of knowledge being a public good, not owned personally but belonging to the whole organisation or community accordingly	Communities of Practice	(Ardichvili et al., 2003)
Group norms and social identity	Virtual Communities	(Dholakia et al., 2004)
Consumers' desire for social interaction, desire for economic incentives, their concern for other consumers, and the potential to enhance their own self-worth are the primary factors leading to eWord-of-Mouth behaviour	Web-based consumer opinion platforms	(Hennig-Thurau et al., 2004)
Collective action and social network ties	Electronic Networks of Practice	(Wasko et al., 2004)
Economic (anticipated extrinsic rewards), social-psychological (anticipated reciprocal relationships and sense of self-worth), sociological (fairness, innovativeness, and affiliation)	Organisational Environments	(Bock et al., 2005)
Knowledge self-efficacy and enjoyment in helping	Electronic	(Kankanhalli)

others, contextual factors (generalised trust, pro-sharing norms and identification) moderate the impact of codification effort, reciprocity, and organisational reward on usage	Knowledge Repositories	et al., 2005)
Professional reputations, experience to share, and structural embeddedness in the network	Electronic Networks of Practice	(Wasko and Faraj, 2005)
Individual needs (social, order, existential, vengeance and creative)	Online Communities	(Bishop, 2007)
Social cognitive theory: self-efficacy, outcome expectations and trust	Virtual Communities	(Hsu et al., 2007)
Support for member communication, perceived community value, recognition for contribution, freedom of expression, and interactive communication	Online Communities	(Kang et al., 2007)
Knowledge self-efficacy, subjective norms, feedback, and personal outcome expectations	Blogosphere	(Lu and Hsiao, 2007)
Relational social capital (reciprocity, commitment to community and commitment to host firm) and individual attributes (informational value, sportsmanship and online interaction propensity)	Firm-hosted Commercial Online Communities	(Wiertz and de Ruyter, 2007)
Altruism and reputation	Blogosphere	(Hsu and Lin, 2008)
Extrinsic reward, reciprocity, image and exchange ideology	Global Virtual Teams	(Chen et al., 2009)
Social capital, online community characteristics and sense of community	Online Communities	(Chu, 2009)
Contextual factors (norm of reciprocity and trust), and personal perceptions (knowledge sharing self-efficacy, perceived relative advantage and perceived compatibility)	Professional Virtual Communities	(Lin et al., 2009)
Social interaction ties, reciprocity, trust and shared vision	Learning Online Communities	(Li and Li, 2010)
Achievement motive leads to intentions to participate, recommend the community, and remain loyal to the brand, strengthened when members have more trust in others	Online Brand Communities	(Wu and Sukoco, 2010)
Community sharing cultural factors: fairness (a trusting climate), identification (a climate characterised by pro-social norms), and openness (a climate where information flows freely)	Blogosphere	(Yu et al., 2010)

2.3.2.1 Motivation theories

The sharing behaviour factors outlined in Table 2.19 are predominantly underlined by traditional motivation theories that come to explain why individuals behave in certain ways and offer understanding of the factors that motivate them (See Table 2.20).

Table 2.20: *Traditional theories of motivation*

Motivation Theories		
<i>Reinforcement Theory</i>	Reinforcement theory is concerned with controlling behaviour to increase the probability of a consequence to occur in the future.	(Skinner, 1953)
<i>Social Exchange Theory (SET)</i>	Social exchange theory proposes that social behaviour is the result of an exchange process between parties. The motivation behind social exchanges is considered as a process of cost-benefit analyses in which people make decisions based on their individual satisfaction level within the relationship.	(Blau, 1964)
<i>Expectancy Theory</i>	Expectancy theory views behaviour as purposeful and is largely based on conscious intentions. When applied to the workplace, it considers employees to rationally evaluate various on-the-job work behaviours (e.g. working harder) and then choose those they believe will lead to their most valued work-related rewards and outcomes (e.g. a promotion).	(Vroom, 1964)
<i>Self-determination Theory (SDT)</i>	Self-determination theory differentiates between intrinsic and extrinsic motivation. Intrinsically motivated behaviours are those that are freely engaged out of interest. Extrinsic motivation, in contrast, requires an instrumentality between the activity and some separable consequences, such as tangible or verbal rewards.	(Deci and Ryan, 1980, 2002)
<i>Goal-orientation Theory</i>	Goal theory is based on the premise that people are motivated to reach goals. They will thus direct their behaviour in pursuit of these goals.	(Nicholls, 1984)
<i>Social Cognitive Theory (SCT)</i>	Social cognitive theory is based on the model of triadic reciprocity, under which three major factors (behaviour, environmental situations, cognitive and other personal factors) are affected by each other. SCT incorporates two sets of expectations and advances them as the major cognitive force leading behaviour, namely,	(Bandura, 1986)

	outcome expectations, and expectation related to self-efficacy. SCT advocates that both expectations basically determine user behaviour. Individuals tend to undertake behaviours that they believe will result in a better outcome.	
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Traditional motivations, according to Pink (2010), are challenged as they have become incompatible with the way individuals organise and think about the way they do things especially in social collective environments. Engagement as opposed to compliance is a powerful force when individuals organise themselves beyond economic transactions to create artefacts in volunteer-based systems that are then made freely available for everyone, such as in the case of Apache, Linux, Mozilla and Wikipedia. Essentially, people are restructuring what they do along new organisational lines and atop different motivational ground shifting from profit to purpose maximisers (Pink, 2010). This is also underlined by the fact that the work that goes into such social collective artefacts is usually more heuristic than algorithmic, essentially more creative and less routine, which makes it more enjoyable. For that reason, he proposes a different set of motivations to explain these behaviours that come to challenge the traditional ‘carrot and stick’ assumptions of rewards and punishments. His new approach to motivation has three elements; autonomy, the desire to direct our own lives; mastery, the urge to get better and better at something that matters; and purpose, the yearning to do what we do in the service of something larger than ourselves (Pink, 2010) (See Table 2.21).

Table 2.21: *Definition of autonomy, mastery and purpose as a new approach to understanding motivation (Pink, 2010)*

Autonomy	Task: the ability to create something outside your job description
	Time: the link between how much time somebody spends and what that somebody produces is irregular and unpredictable
	Technique: freedom in how a job is performed
	Team: freedom over those you work with
Mastery	Mindset: the belief in incremental theory that with learning mastery is possible
	Pain: perseverance and passion for long-term goals
	Asymptote: mastery is impossible to realise fully

Purpose	Goal: the goal is to pursue purpose and to use profit as a catalyst rather than the objective
	Words: humanise what people say and you may well humanise what you do
	Policies: create policies to turn words into goals as a way of injecting purpose

Based on these emerging assumptions of motivation, the social organisation of organisational social media platforms arguably introduces notions of empowerment and flexibility to allow for creative thinking to emerge. Autonomous motivation involves behaving with a full sense of volition, whereas controlled motivation involves behaving with the experience of pressure and demand toward specific outcomes that comes from forces perceived to be external to the self (Deci and Ryan, 1987). As a result, intrinsic motivation is conducive to creativity, while controlling extrinsic motivation is detrimental to creativity (Amabile, 1983, 1993, 1997). Since the purpose of organisational social media platforms is the open and dynamic communication, collaboration, and content creation of individuals in the wider organisational environment, then these emerging notions should apply as participants enter a social organisation space than has no expectations of them. They get to participate, contribute and share in the way they choose and for the reasons that make sense to them.

2.3.3 Altruism – Self-interest Continuum

Albeit the need to free individuals from the search for profit to be able to motivate them towards creative outcomes, any social context functions along a continuum that ranges from engaging in altruistic activities to ensuring self-interest gains. According to economic exchange theory, individuals will behave by rational self-interest (Constant et al., 1994), thus, sharing will occur when its rewards exceed its costs. Altruism, on the other hand, exists when people derive intrinsic enjoyment from helping others without expecting anything in return (Krebs, 1975, Smith, 1981). Although there may be very few instances of absolute altruism involving lack of self-concern in the motivation for an act, relative altruism where self-concern plays a minor role in motivating an act is more prevalent (Smith, 1981).

Social exchange theory explains human behaviour in social exchanges (Blau, 1964), which differ from economic exchanges in that obligations are not clearly specified. Social exchange theory posits that individuals engage in social interaction not only for economic rewards (e.g., pay, bonus), but for social rewards, such as approval and respect (Blau, 1964). In such exchanges, people do others a favour with a general expectation of some future return but no exact clear expectation of that return. As a result, social exchange assumes the existence of relatively long-term relationships of interest as opposed to one-off exchanges (Kankanhalli et al., 2005). The benefits involved do not have an exact price in terms of a single quantitative medium of exchange, and the nature of the return cannot be bargained about (Bock and Kim, 2002). This is why social exchange tends to engender feelings of personal obligation, gratitude and trust. Also in social exchange, resources given away by individuals can be seen as costs, while resources received as positive outcomes of exchange can be seen as benefits (Chen et al., 2009). Combining the two extremes, perception of high economic and social benefits received from exchange will enhance the individuals' social interaction behaviour (Cropanzano and Mitchell, 2005), where information on one hand can be seen as a gift and on the other, the outcome of the exchange can result to the gaining of recognition, reputation, status and prestige in a social organisation structure.

2.3.3.1 Gift economy and Gift-giving Culture

A gift is defined as the obligatory transfer of inalienable objects or services between related and mutually obligated transactors (Carrier, 1991). The fundamentals of gift economies are the obligation to give, the obligation to receive and the obligation to make a return for gifts received (Mauss, 1990). A gift transaction, thus, involves a usually unstated obligation to repay the gift at some future time without any bargaining or demands that the gift should be repaid or reciprocated (Kollock, 1998). Gifts are also unique in contrast to commodities, and are exchanged between individuals who are part of an ongoing interdependent relationship, as opposed to transactions of commodities, where the individuals are self-interested, independent actors (Carrier, 1991, Kollock, 1998). In a gift economy, benefits arise from improving the 'technology of social relations', while in commodity economies, the benefits arise

from making improvements in the technology of production (Bell, 1991). Thus, gift economies are driven by social relations, while commodity economies are driven by price (Bell, 1991). It is important to note that gift exchange and commodity transactions are ideal extreme types, and any economy will be a combination of these two types of exchange as well as many intermediate cases between them (Kollock, 1998).

In the setting of organisational social media platforms, the gift economy involves a set of behaviours that centre on the social rediscovery and reinvention of the rituals of sharing for the digital society (Hyde, 1983). The exchange is thus, different from the traditional idea of gift-giving. The people involved in the transaction are strangers, may never meet face-to-face and may never encounter each other in that setting again. As a result, there is no obligation to repay or reciprocate the gift of information, but still individuals freely provide content expecting that someone will reciprocate the gift in the future, not particularly the one they helped. This is referred to as generalised reciprocity, in which a gift given to a person is reciprocated not by the recipient but by someone else in the group (Ekeh, 1974). In contrast to dyadic exchange characterised by direct reciprocity and accountability, generalised exchange is based on indirect reciprocation and interest-based contribution. It is, therefore, typically characterised by unilateral resource giving because one's giving is reciprocated not by the recipient, but by a third party (Takahashi, 2000). The existence of generalised exchange is considered a dilemma because any member of the exchange system can free ride as there is no guarantee or obligation for reciprocity.

A vital feature of the gift economy is that these behaviours are not oriented around financial transactions, but on the gaining of status and particularly reputation in a group of peers based on the history of their participation (Raymond, 2000). In a gift culture, social status is determined not by what you own or control, but by what you give away. The giving of gifts is therefore, a way to gain power and control (Ljungberg, 2000). One example is the open source communities that are often analysed as a form of gift economy or gift culture (Kollock, 1998, Raymond, 1999). After giving away source code, information or knowledge, the gift is still in possession of the giver as it is an infinite resource (Ljungberg, 2000). Gifts of information and

advice are often given to groups or communities as a whole, rather than to individuals based on loose reciprocity.

2.3.3.2 Recognition, Reputation, Status, Prestige

Participation, contribution and sharing do not happen in a vacuum; individuals' interpersonal relationships create different motives, which affect how they invest their time and effort to create and share content. Recognising and rewarding participation in a social setting is one of the more crucial factors (Bughin, 2008). The desire for status and prestige are key motivations of individuals' participation and contribution (Rheingold, 1993). Recognition, thus, occurs when members create a reputation for themselves through their postings (Blanchard and Markus, 2002). Status accrues to past contributions and translates into a higher probability of future leadership (Lee and Cole, 2003). The visibility gained through participation in online communities provides recognition for a person's expertise on a subject and gives rise to psychological payoffs such as self-efficacy and self-esteem (Butler et al., 2008). Peer recognition is also another form of extrinsic reward for participating in online communities and it is also derived from the desire for fame and self-esteem (Hars and Ou, 2002).

As a result, there are different forms of recognition in any online community, identified in terms of identity, expertise and tangible recognition (Chan et al., 2004). When explored in their totality, the effects of these forms of recognition include a sense of community, obligation, self-efficacy and self-esteem, which in turn encourage participation moderated by the effect of time and interest on the topic of discussion (Chan et al., 2004) (See Figure 2.17). This process model contextualises the theory of information sharing in online communities and illustrates one way of encouraging participation by emphasising the effects of recognition.

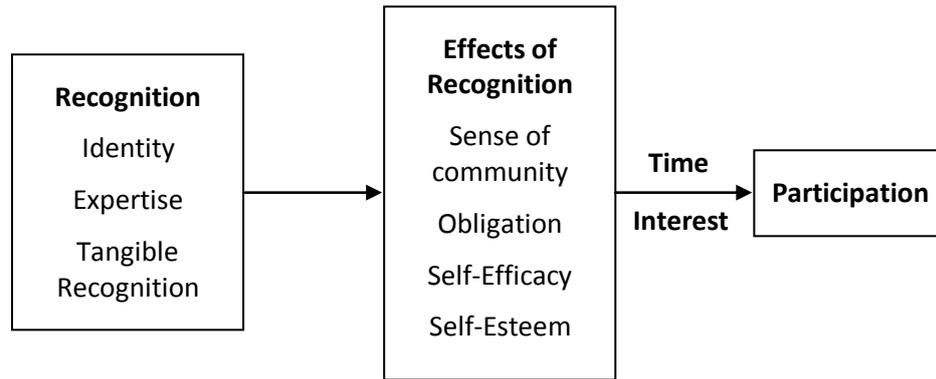


Figure 2.17: *A process model on recognition on virtual community participation (Chan et al., 2004)*

Both financial and non-financial rewards can be used as forms of recognition to encourage participation in an online community (Andrews, 2002). In open source software settings, the programmers' voluntary innovative efforts and free revealing can be rooted in peer recognition outcomes; the gained reputation capital is ultimately a means of enhancing a provider's position in the job market (Lerner and Tirole, 2002). The signalling of competence is one of the main drivers of efforts in community settings of this type of software production, and as such users can easily signal their abilities to a large number of peers and may easily gain reputation this way (Lerner and Tirole, 2002).

A more relevant indication of recognition takes place in firm-hosted user innovation communities, where the users' motivation to participate as well as innovate can be related to a wish to be recognised by the host firm (Jeppesen and Frederiksen, 2006). Users generally honour the product, the firm, and its developers. Innovative users may therefore feel proud when the firm acknowledges their innovative work openly in the community and perceive this recognition as an additional benefit of creating an innovation (Jeppesen and Frederiksen, 2006). Firm recognition explains why innovative users are drawn to this type of community and why they openly show their innovations in precisely this domain. If innovative users did not respond to firm recognition, they would have no particular incentive to reveal their innovations in the organisational domain (Jeppesen and Frederiksen, 2006), because of the contextual implications that exist as the host organisation tends to utilise the most value from such endeavours.

2.4 Organisational Social Media Platforms

After reviewing the relevant literature, it became apparent that organisations are becoming more and more interested in connecting with their external environments to not only disseminate information and influence purchasing decisions regarding new products, but to also form opportunities for engagement, collaboration and advancement of customer and partner relationships. The establishment of organisational social media platforms is one way to achieve this, whereby external conversations are brought to an open hybrid online community and combined with internal and external information, resources and expertise. Such a platform is oriented towards the entire organisational ecosystem, under the perception that every user can contribute to and gain something of value and relevance from the emerging asset pool.

From the analysis on the social organisation structures of social media and online communities a definition emerges on organisational social media platforms. Such a structure combines functionality and characteristics from both social media and online communities, generating this definition:

“An organisational social media platform is a publicly open online community hosted by a particular organisation, and incorporating in its functionality a variety of social media tools to foster the interaction of individuals connected by an interest in the organisation, its products and its people.”

Organisational social media platforms are emergent structures in organisations in that their functionality is not pre-determined. In the software and technology sector they may evolve from the service support of organisations (i.e. technical problem solving discussion forums), but in effect are manifested to respond to the social media movement in organisational environments. This constitutes one way of engaging, enabling internal-external communication and interaction. Through these structures presumably, organisations not only appear to be open to their external environment, but they also foster an online community where they can bring both their internal and external ecosystem together to create social collective opportunities.

From the categorisations and typologies given in the literature (Armstrong and Hagel III, 1996, Hagel III and Armstrong, 1997, Kozinets, 1999, Lazar and Preece,

1998, Markus, 2002, Porter, 2004), this type of community blurs the organisation-sponsored and member-initiated distinction. Organisational social media platforms in this case are developed initially as a form of online service support, but use and behaviour evolve as individual members obtain leadership roles in terms of content creation. Additionally, through the social media tools that are incorporated, autonomy and control are at a constant struggle, with organisations pushing for things they are interested in and individual users creating a self-regulated space where the collective preference prevails in many respects. The opportunities, challenges and benefits of both social media and online communities, mentioned in the analysis above, illustrate the significance of these structures in organisational environments, and necessitate an in depth exploration into their particular workings.

For this reason an exploratory approach is undertaken regarding the data collection in order to understand how these structures function in terms of the user behaviours involved, the value outcomes generated, the motivations required and the implications developed. These issues framed in the research questions are supported by the literature review through both the contextual and behavioural theories reviewed.

2.4.1 Contextual Theories

Theories on use of interactive communication technologies postulate that in order for organisational social media to deliver value to both the individual members and the host organisation, a critical mass of users needs to be established in order to yield network effects that increase the value of interaction and connectivity as the number of users increases (Hendler and Golbeck, 2008, Markus, 1987). The interactions and connections between individual users create social capital that forms the basis of collective actions in communities of users (Cohen and Prusak, 2001, Putnam, 1995). The value of organisational social media platforms therefore, arises from the connections between the communicating agents of these networks and the potential opportunities that emerge from these connections. There exists, however, an iterative vicious circle with this arrangement, where the more people involved the greater the value as the number of possible connections increases, but until a critical mass is achieved there is no substantial expectation for adoption and broad diffusion.

In terms of organisational social media platforms, what this means is that an initial source of value needs to be established in order to drive participation. The fact that these platforms are hosted by a particular organisation means that the responsibility of the initial push falls with them. However, early adopters and enthusiasts can be involved from the early/beta stages to assist in the value creation of community content from an external point of view. From the early stages therefore, organisational social media platforms challenge the traditional adoption and value creation processes (Prahalad and Ramaswamy, 2004, Rogers, 2003). Adoption centres on the individual as he/she needs to make the decision to join by being convinced and motivated that such an environment can yield some form of benefit. While value creation requires a collaborative approach, individual members need to be involved from day one in order for organisations to avoid creating content that is only of interest to the organisation and does not cater for external users.

Once the internal-external connections have been established, organisational social media can yield many opportunities along the open source/open innovation paradigm. By examining some of the success stories and their underlined motives, a specific outlook on expectations for organisational social media platforms is formed. There are, however, fundamental structural and content differences between these social organisation structures that require for substantially different participation and contribution behaviours, imposed largely by the active presence of an organisational vendor in an open user community.

2.4.2 Behavioural Theories

Social media can be seen as a list of tools to be deployed in an organisational environment in order to achieve for example, a development, support or marketing goal. Focusing, however, on the audience an organisation is trying to target can essentially determine the kind of relationship they want to build with them. As a result, organisational social media platforms are targeted online spaces established to cater for the needs of a specific organisational ecosystem. This research study focuses on large software and technology organisations and the social media communities they

established to respond to the information needs of their ecosystem in terms of access, exchange and creation.

The process of social media adoption and diffusion in internal and external organisational environments appears to be largely bottom-up challenging traditional information system adoption patterns. The non-compulsory aspect of use means that an intrinsic process occurs whereby individual users assume certain participation roles under which they contribute content and interact with one another. For this reason, this research centres on the individual unit of analysis as their activity drives both the success and viability of these social media platforms. With that aim, we need to understand their rationale for participating, by revealing how they use the particular tools, what benefits they gain, what drivers underline their participation, and how they understand their impact.

The literature reviewed therefore, supports the four main research questions as outlined in Figure 2.18. In particular, contextual theories provide understanding in terms of social media use and impact, while behavioural theories come to support the benefits and value outcomes revealed and the drivers and motivations explored. The main gap identified in this literature review is the identification of such contexts where social media come to enhance the functionality of firm-hosted online communities both in terms of tools and the corresponding behaviours. The theories reviewed enable understanding of the social collective dynamics (critical mass and network effects), the bottom-up use (adoption and diffusion), the impact and outcome potential (social capital, value creation, open source, open innovation), the user roles and the trajectory of participation (participation, contribution and sharing behaviours), and the spectrum of behaviours and their underlined drivers (motivation theories, altruism – self-interest continuum, gift-giving culture, recognition, reputation). Essentially, the literature is intertwined in both the data collection and analysis framing the interpretation of findings.

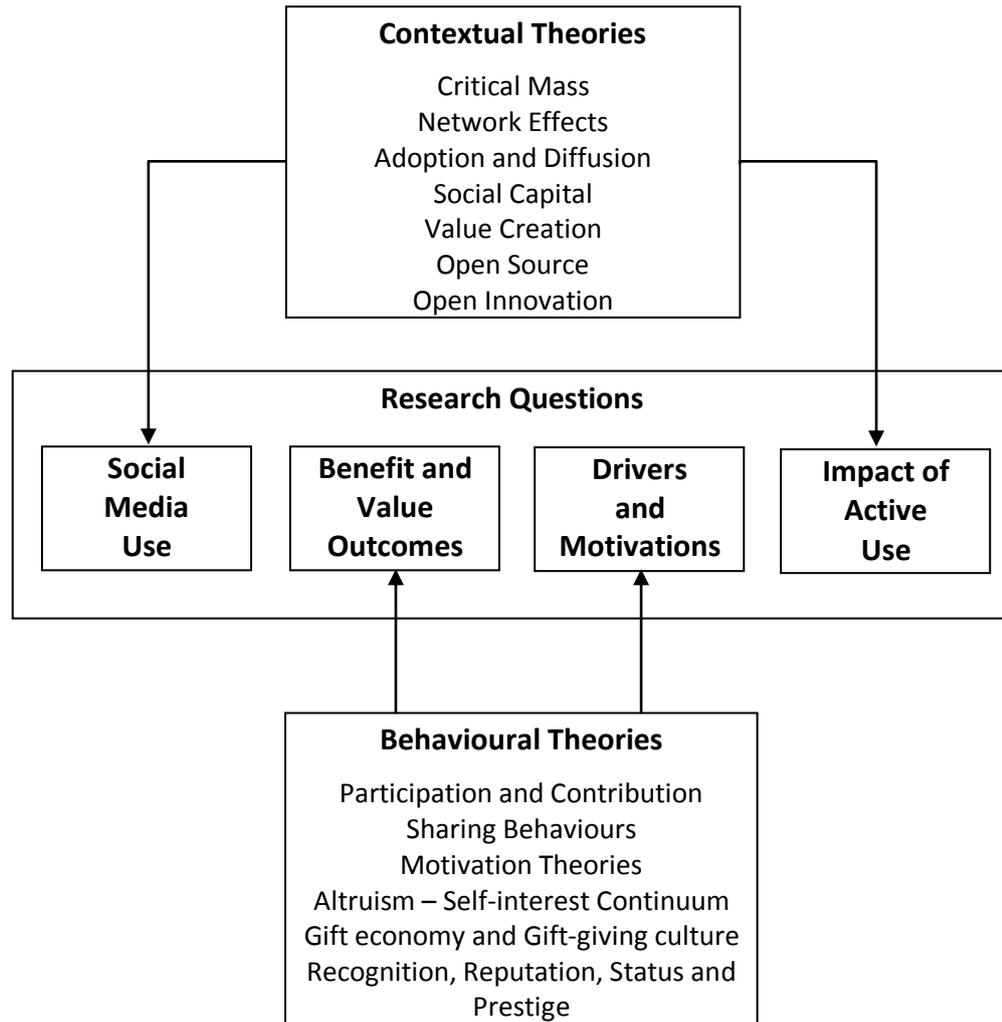


Figure 2.18: *Literature summary indicating the links between the theories reviewed and the research questions*

2.5 Summary

In this chapter, a review of the relevant literature is outlined developing a theoretical foundation for organisational social media platforms and identifying the focus of exploring user participation behaviours in that context. The literature indicates that organisational social media platforms are a broadly unexplored context, but with a variety of similar relevant contexts already explored including firm-hosted online communities, peer-to-peer systems and open source software development environments. Drawing from theoretical concepts in information systems, organisational, social and psychology literature, enables description, analysis and

understanding of the behaviours that take place in organisational social media platforms. Participation, contribution and sharing behaviours have been reviewed to inform and situate this research within community and organisational literature.

The following chapter outlines the research methodology undertaken by defining the underlined philosophical standpoint, presenting the research design and methods followed, and addressing the limitations involved.

CHAPTER 3

Research Design and Methodology

This chapter outlines the research design and methodology undertaken in this study to provide answers to the research questions. A broadly qualitative research is undertaken underlined by interpretive notions and presuppositions that view the behaviours in organisational social media platforms to be subjective phenomena understood in terms of the meaning ascribed by the participants themselves. An account of the research process is outlined indicating how the findings are obtained in terms of the data collection and analysis methods, the sample of participants and the iterative process of reflection that generates contribution to both theory and practice. Although weaknesses and limitations are inevitable in any research project, this study is designed in such a way to best address the constraints that are already known.

3.1 Philosophical Standpoint

In this research an interpretive approach is undertaken to provide a deep insight into “the complex world of lived experience from the point of view of those who live it” (Schwandt, 1994). Interpretive studies assume that people create and associate their own subjective and “intersubjective” meanings as they interact with the world around them. Interpretive researchers thus attempt to understand phenomena through accessing the meanings participants assign to them (Orlikowski and Baroudi, 1991). The researcher’s interpretations play a key role in this kind of study, bringing “such subjectivity to the fore, backed with quality arguments rather than statistical exactness” (Garcia and Quek, 1997). Understanding social processes therefore involves getting inside the world of those generating it, and as such the researcher can never assume a value-neutral stance, as he/she is always implicated in the phenomena being studied

(Orlikowski and Baroudi, 1991). The interpretive nature of social reality means that knowledge developed is based on the interpretations of participants of the phenomena being studied.

The aim of interpretivist approaches in social sciences is to understand the subjective experiences of those being studied, how they think and feel, and how they act in their natural contexts. Unlike the natural sciences which seek to explain non-intentional phenomena by discovering their causes, the social sciences aim to understand intentional phenomena by interpreting their meaning (Fay, 1996). The concept of *Verstehen* – interpretive understanding – is also important in developing knowledge by understanding human behaviour. This concept includes inferences that meaningfully explain overt behaviour, while also involves explanatory understanding in order to meaningfully explain an action by making explicit inferences about its motives and its relation to certain assumed goals (Weber, 1968). Such a commitment to *verstehen* is premised upon the idea that to follow the approach of the natural sciences in the study of the social world is an error because human action, unlike the behaviour of non-sentient objects in the natural world, has an internal subjective logic which must be understood in order to make it intelligible; there is, therefore, an ontological discontinuity between the natural and social sciences (Laing, 1967).

In accepting these “intersubjectively” created meanings as an integral part of the subject matter, the facts and data collected are describing not only the purely objective, publicly observable aspects of human behaviour, but also the subjective meaning this behaviour has for the human subjects themselves (Lee, 1991). According to Schutz (1973), the postulate of subjective interpretation has to be understood in the sense that all scientific interpretations of the social world *can*, and for certain purposes, *must* refer to the subjective meaning of the actions of human beings from which social reality originates.

Research under this standpoint focuses upon people’s understandings and interpretations of their social environments, part of which has been termed a phenomenological approach to researching the social world (May, 2001). According to Husserl (1970) phenomenology is primarily concerned with the systematic reflection on and analysis of the structures of consciousness, and the phenomena which appear in

such acts of consciousness. It is essentially a method of reflective attentiveness that discloses the individual's "lived experience". When referring to people's consciousness the concern is with what takes place in terms of thinking and acting. These subjective states refer to the 'inner' world of experiences, rather than the world 'out there', which essentially focuses on the meaning that people give to their environment, not on the environment itself (May, 2001).

As a result, the meaningful nature of social reality postulates actions of social actors to be underlined with meaning and value. Research into this meaningful reality requires the researcher to understand such meanings and values ascribed by research participants in order to portray knowledge that reflects insightful social behaviour. As a result this research aims to provide understanding of the phenomena that take place in organisational social media platforms from the perspective of the participants. The emphasis on this particular type of context presupposes an interpretive approach so as to take into account how the behaviours explored influence and are influenced by the context in which they occur (Walsham, 1993). The belief in the importance of the context in this research takes the investigation beyond objective cause and effect activities based on strict rules, making interpretivism a suitable standpoint to allow for flexible themes and patterns to emerge from the data. This enables for a critical reflection between theory and data, which is where contribution develops. In addition to interpretive understanding, a layer of critical inquiry is also involved, where the meanings of behaviours ascribed by the participants are then critically analysed to develop a logical inference on the subject.

3.2 Methodological Approach

Under such an interpretive lens, this doctoral study undertakes exploratory research whereby qualitative data has been collected and analysed to provide understanding on the user participation behaviours that take place in organisational social media platforms. One of the main reasons for conducting a qualitative research is that the study is exploratory; not much has been written about the topic or the population being studied, and the researcher seeks to listen to informants and build a picture based on their views (Creswell, 1994). Qualitative research is a situated activity

that locates the observer in the world deploying a set of interpretive practices that make the world visible (Denzin and Lincoln, 2008). At this level, qualitative research involves an interpretive, naturalistic approach to the world by which qualitative researchers study things in their natural settings, attempting to make sense of and interpret phenomena in terms of the meanings people bring to them (Denzin and Lincoln, 2008).

There are three major components of qualitative research, namely data, often collected through interviews and observations, interpretive or analytical techniques to conceptualise and analyse the data in order to arrive at findings or theories, and a written report of the process and the outcomes (Miles and Huberman, 1994, Strauss and Corbin, 1990). Qualitative research is a mixture of the rational, explorative and intuitive, where the skills and experience of the researcher play an important role in the analysis of data (Ghauri and Gronhaug, 2005). The skills needed to do qualitative research are thinking abstractly, stepping back and critically analysing situations, recognising and avoiding biases, obtaining valid and reliable information, having theoretical and social sensitivity, and the ability to keep analytical distance while at the same time utilising past experience, and having a shrewd sense of observation and interaction (Strauss and Corbin, 1990, van Maanen, 1983).

Ideally or not, qualitative research is often defined along the lines of what quantitative research is *not*, compared against it along the way (See Table 3.1). Qualitative methods are flexible and unstructured, and compared to quantitative methods they employ a limited number of observations and try to explain different aspects of the problem area. Qualitative methods are therefore, most suitable when the objectives of the study demand in-depth insight into a phenomenon.

Table 3.1: *The difference in emphasis in qualitative versus quantitative methods (Ghauri and Gronhaug, 2005)*

Qualitative methods	Quantitative methods
Emphasis on understanding	Emphasis on testing and verification
Focus on understanding from respondents'/informants' point of view	Focus on facts and/or reason for social events
Interpretation and rational approach	Logical and critical approach
Observations and measurements in natural	Controlled measurement

settings	
Subjective 'insider view' and closeness to data	Objective 'outsider view' distant from data
Explorative orientation	Hypothetical-deductive; focus on hypothesis testing
Process oriented	Result oriented
Holistic perspective	Particularistic and analytical
Generalisation by comparison of properties and contexts of individual organism	Generalisation by population membership

In qualitative research there is a strong emphasis on describing the world as it is perceived by different observers. It is thus, concerned with how actors define situations, and how they explain the motives which govern their actions. The intentions and perceptions of actors convey further understanding by providing access to the meanings of certain activities. In particular, social actors perceive and define situations, including their own intentions, according to their understanding of their own motivations, and of the context in which they act. As social researchers, allowing for these dimensions to exist in the data results to rich descriptions of behaviour understood from the point-of-view of the participant and interpreted by the researcher. This encompasses the ability of the researcher to carry out qualitative research, and involves the relationship developed between researcher and participant that influences the outcome of the data collected (See Table 3.2). As a result, qualitative researchers see through the eyes of the people being studied with a flexible and unlimited structure, emphasising the context and developing theoretical concepts grounded in data (Bryman and Bell, 2007).

Table 3.2: *The main preoccupations and characteristics of qualitative research and qualitative researchers (Marshall and Rossman, 2006)*

Characteristics and Preoccupations	
Qualitative Research	<ul style="list-style-type: none"> • Takes place in the natural world • Uses multiple methods that are interactive and humanistic • Focuses on context • Is emergent rather than tightly prefigured • Is fundamentally interpretive
Qualitative Researcher	<ul style="list-style-type: none"> • Views social phenomena holistically

	<ul style="list-style-type: none"> • Systematically reflects who he/she is in the inquiry • Is sensitive to his/her personal biography and how it shapes the study • Uses complex reasoning that is multifaceted and iterative
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3.3 Research Process

The focus of this research is on the context in which the participation and contribution behaviours take place. From the literature review and a preliminary research study (undertaken at a master's level), it became apparent that the context of organisational social media platforms is an emerging structure combining notions of organisational online communities and social media environments. Being therefore a largely unexplored space of professional interaction and knowledge creation, the context in which these behaviours occur is interpreted by assessing their social and organisational significance.

To begin with, suitable platforms that qualified under the definition generated in this thesis have been identified in order to enable the selection of a sample of participants and carry out the data collection based on the research questions. The research process however, was to a large extent non-sequential and as such designed in a flexible and iterative manner incorporating continuous reflection at each analysis stage to illustrate well-grounded contributions to both theory and practice.

The qualitative nature of this research study incorporates to some extent the underlying concept of a 'structured-case' methodology, which presents a coherent and integrated framework for building theory from interpretive research (Carroll and Swatman, 2000). It is 'structured' in reference to the use of a formal process model comprising three structural components; namely a conceptual framework, a pre-defined research cycle and a literature-based scrutiny of the research findings, to assist the researcher in theory building (See Figure 3.1). The conceptual framework represents the aims, understanding and theoretical foundations, and the research cycle guides data collection, analysis and interpretation. Together, these structures make the research process visible, record its dynamics and document the process by which theory is induced from field data. The literature-based scrutiny compares and contrasts

the outcomes of the research process with a broad range of literature to support or challenge the theory built. It is also a ‘case’, but the term is used in the broad sense of what is being studied, rather than the narrower sense of the case study research method (Stake, 1994). The case in this research is the organisational social media platform as a structure established by organisations and used by individuals in both the internal and external organisational environment.

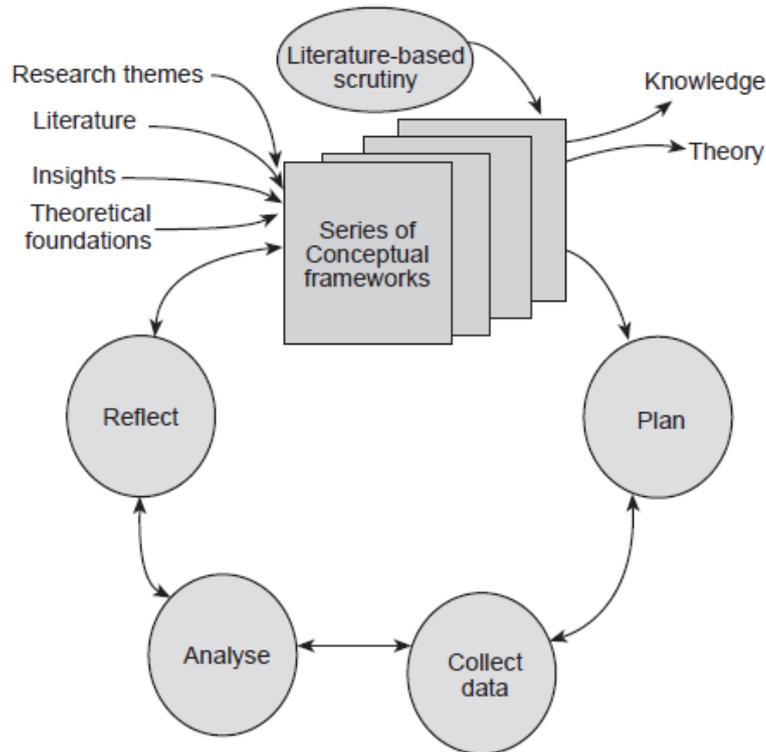


Figure 3.1: *Structured-case research method (Carroll and Swatman, 2000)*

The structural elements involved are integrated into a single methodological framework providing an effective roadmap for interpretive research, and allowing for critical evaluation of the research outcomes (Carroll and Swatman, 2000). Figure 3.1 illustrates this framework including an explicit statement of the initial conceptual framework and the series of conceptual frameworks that document the process of building theory and knowledge; a formal research cycle of planning, collecting data, analysing and reflecting; and scrutiny of the theory built using the weight of the existing literature. On the whole, the structured-case framework is seen as a vehicle for thoroughness, soundness and transparency of method within a chosen approach, which

explicitly addresses common requirements relating to evidence, links with the data and the plausibility of explanations (Carroll and Swatman, 2000).

What this research has taken mostly from this model is the strong presence of theory throughout the different stages of the research process and the emphasis on reflection when data is analysed. Regardless of philosophical stance, the role of theory in organisational research is critical (Walsham, 1995). According to Eisenhardt (1989) there are three distinct uses of theory throughout the research process, as an initial guide to design and data collection, as part of an iterative process of data collection and analysis, and as a final product of the research. This essentially enables for conceptual models to emerge from the richness of qualitative data with strong literature links making explicit theoretical as well as practical contributions. The plan for this research was first to identify suitable contexts and explore their functionality in terms of the social media tools used and the participation taking place from internal and external organisational sources. Three organisational social media platforms were gradually chosen from the software and technology sector, namely the:

1. SAP Community Network – SAP Developer Network (SDN) and Business Process Experts (BPX)
2. Oracle Community Site – Oracle Technology Network (OTN), Oracle Blogs, Oracle Wiki, and Oracle Mix
3. Microsoft Professional Communities – Microsoft Developer Network (MSDN) and TechNet for IT Professionals

From each platform, a sample of participants was selected and interviewed either face-to-face, over the phone or through synchronous communication media tools (Skype, Google Talk and Microsoft Online Live Meeting). The recorded data was then transcribed and coded following a categorisation based on the research questions and their corresponding themes. When data saturation was reached for each context, the data was analysed to understand the breadth and depth of answers given for each question and then interpreted to reflect on anticipated and emerging issues and concepts with regards to theory. Figure 3.2 outlines the research process indicating the different stages of identifying each of the three contexts, collecting and analysing data

from each, and then reflecting in relation to theory and across the three contexts explored, to develop a grounded account on the participation and contribution behaviours that take place in such contexts. The following sections elaborate further on the stages of the research process.

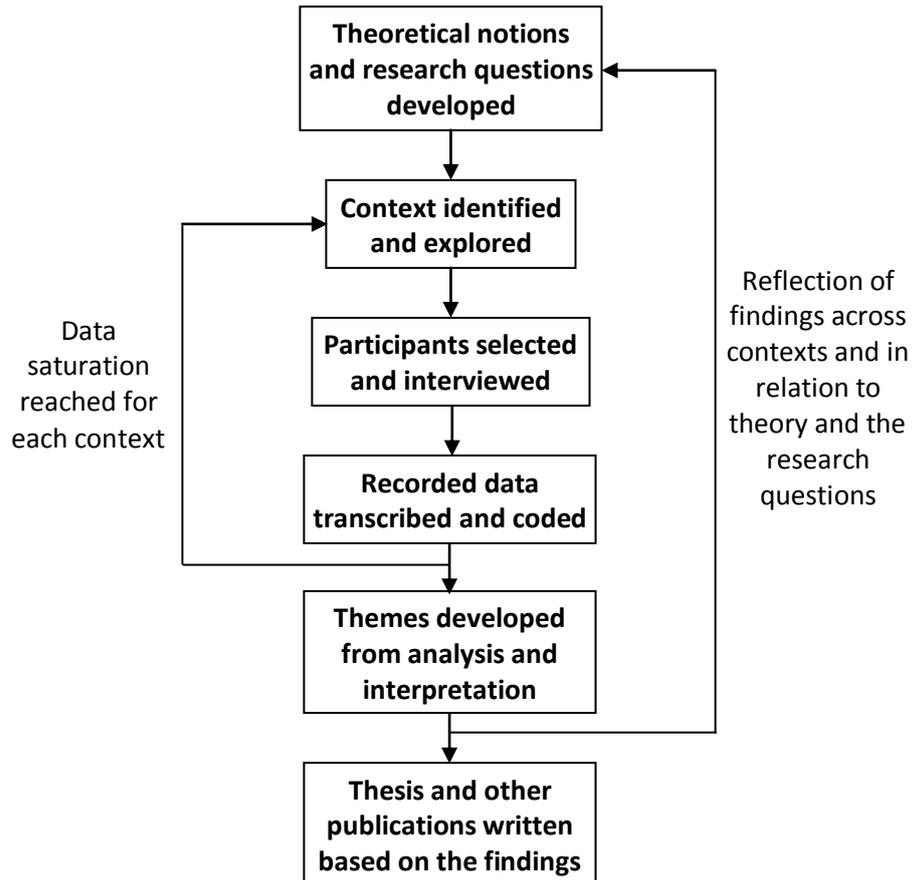


Figure 3.2: *The research process followed for this doctoral study*

3.3.1 Research Questions and Themes

As the dynamics of introducing social media in an organisational environment substantially challenge traditional deployments of information systems, adoption and use is broadly voluntary and requires a balance between autonomy and control. It, therefore, becomes about user-driven adoption and emerging benefits with users identifying motivational drivers to participate, while realising the impact of their contributions. For this reason four themes are developed from the main research questions, building in this way interpretive understanding from the accounts of participants on the behaviours that take place in organisational social media platforms:

1. **Social Media Use:** How do organisational social media platforms function? What types of participation and contribution take place? How are social media tools used in this type of environment?
2. **Benefit and Value:** What benefit and value is derived from participation and contribution in organisational social media platforms? What are any observable outcomes from the use of social media tools in this environment for the internal and external people that use them, the organisation that hosts this environment, and the community that emerges?
3. **Drivers and Motivations:** What are the drivers and motives behind this behaviour? Why do internal and external users participate and contribute in organisational social media platforms?
4. **Impact:** What is the role of the most highly active participants and top contributors in organisational social media platforms on the individual, community and organisational level?

These themes and their corresponding questions allow for anticipated as well as emerging issues, concepts and topics to surface from the data. There is therefore, a built-in flexibility by which open-ended questions build on a theme rather than follow a strict schema of specific questions (See Appendix A for the interview schema and questions). Data collected on these themes, therefore, enables the development of conceptual frameworks that serve as abstract notions of the behaviours in question. This aids understanding further, by conceptualising users' accounts on the activities that take place, the benefit and value they gain, the underlining reasons for participating, and the multi-level impact of their participation activities.

By asking these questions and exploring these themes, a comprehensive view of the activity and behaviour in organisational social media platforms can be developed. The emphasis is on the individual users and their subjective meanings of behaviour. By looking into the usage patterns, the emerging benefits, the underlined drivers and the resulting impact, a deeper understanding can be built on the individual rationale for participating and contributing there. These themes essentially, enable investigation as well as critical analysis of a broadly unexplored context. Undoubtedly,

however, part of the role of the user can be hidden as it is in the participants' discretion to reveal specific aspects of their behaviour. The approach for the user perspective has therefore this limitation as participants choose which aspects they want to reveal during discussion.

3.3.2 Participant Sample

After some initial exploration into each identified context, it became apparent that four different types of participants needed to be interviewed in order to obtain a comprehensive picture of the range of behaviours that take place. As a result the sample of participants is made up of four groups of users from the corresponding internal and external organisational environments, namely:

1. Company employees supporting, monitoring and moderating content and activity in organisational social media platforms.
2. Company employees participating, contributing and interacting in organisational social media platforms.
3. Non-company employees participating, contributing and interacting in organisational social media platforms.
4. Non-company employees officially recognised for their participation and contribution as highly active top contributors in organisational social media platforms under the corresponding recognition contribution programs, namely SAP Mentors, Oracle ACEs and Microsoft MVPs.

A total of 78 semi-structured open-ended interviews were conducted across the three contexts and the four types of participants. Table 3.3 gives a breakdown of the sample in terms of the total number of participants interviewed for each user type, and the rounded percentage of each type against the total sample. Two categorisations are given with the first one following the four types of users identified in these platforms, and the second one providing a breakdown in terms of the relationship these participants have with the corresponding organisation, namely how many of them are employees, customers, partners or other individuals in the external environment.

Table 3.3: *Sample breakdown*

Participant Sample (total number = 78)		
<i>Participant Type</i>	<i>Number of participants</i>	<i>Percentage</i>
<i>Company employees – platform support team members</i>	16 (SAP: 5, Oracle: 5, Microsoft: 6)	20%
<i>Company employees – platform users</i>	13 (SAP: 5, Oracle: 3, Microsoft: 5)	17%
<i>Non-employees – platform users</i>	15 (SAP: 5, Oracle: 7, Microsoft: 3)	19%
<i>Non-employees – platform recognised users</i>	34 (SAP: 11, Oracle: 11, Microsoft: 12)	44%
<i>Employees – all the employee participants from each company</i>	29 (SAP: 10, Oracle: 8, Microsoft: 11)	37%
<i>Customers – all the customer participants from each company</i>	21 (SAP: 7, Oracle: 8, Microsoft: 6)	27%
<i>Partners – all the partner participants from each company</i>	18 (SAP: 5, Oracle: 7, Microsoft: 6)	23%
<i>Others – industry analysts/bloggers, retired IT professionals, software training providers, freelancers</i>	10 (SAP: 4, Oracle: 3, Microsoft: 3)	13%

A combination of random and snowball sampling has been used to select the participants of this research. In each category identified, a number of participants were selected to represent platforms users that were either employee platform support team members, employee platform users, non-employee platform users, or non-employee platform recognised users. From the participants interviewed, a breakdown for employees, customers, partners and others is also given to depict the different relationships the participants have with the host organisation. In terms of population validity, however, it is near impossible to know the number of the entire ecosystem. Lurkers in particular are difficult to measure as they usually do not provide any information in online communities where registration is not required to view content.

The participant numbers therefore represent an indicative sample of users across these four relationships with the host organisation.

3.3.3 Data Collection and Analysis Methods

Data collection and analysis follow the qualitative research paradigm. Qualitative methods are essentially an umbrella term covering an array of interpretive techniques which seek to describe, decode, translate, and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world (van Maanen, 1983). Qualitative data is therefore attractive for many reasons. It is rich, full, earthly, holistic, and real; its face validity seems impeccable, it preserves chronological flow where that is important, and suffers minimally from retrospective distortion; and in principle, it offers a far more precise way to access causality in organisational affairs than arcane efforts like cross-lagged correlations (Miles, 1979).

Each context in terms of data collection and analysis is treated as a case study developing thus understanding initially within and then across each context. Case studies as empirical inquiry methods investigate a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident (Yin, 2003). Case studies are also considered to be a useful mean of interpretive research according to Hartley (1994) when these specific situations in organisational research are addressed to a certain extent:

- Understanding how the organisational and environmental context is having an impact on or is influencing social processes;
- Capturing the emergent and changing properties of life in organisations;
- Understanding everyday practices and their meanings to those involved; and
- Understanding what concepts mean to people, the meanings attached to particular behaviours and how behaviours are linked.

Parts of these organisational situations are incorporated into this study as the understanding of participant behaviour in organisational social media platforms indicates a social behaviour emerging in the life of organisations, incorporating significant value and meaning to the people involved. This in turn is captured by conducting semi-structured open-ended interviews through various means based on the geographic location of participants, and their knowledge and familiarity with certain communication tools freely available. For that reason, some of the interviews were conducted face-to-face, some over the phone and the majority through synchronous communication media tools (Skype, Google Talk and Microsoft Online Live Meeting) because of the geographic dispersion of the interviewees.

The mode of understanding through qualitative research interviews can be outlined in terms of twelve main aspects, according to Kvale (1983). In his respect, interviews are (1) centred on the interviewees' life-world, and (2) seek to understand the meaning of phenomena in that life-world; they are (3) qualitative, (4) descriptive, (5) specific, (6) presupposition-less, (7) and focused on certain themes; they are open to (8) ambiguities, and (9) changes; they depend upon the (10) sensitivity of the interviewer; they take place in (11) an interpersonal interaction, and they may be (12) a positive experience for both the researcher and participant when the theme of discussion is of interest to both (Kvale, 1983). So a research interview provides a purposeful discussion between two people to allow the gathering of valid and reliable data (Kahn and Cannell, 1957), while constituting "a social relationship, a short-term, secondary social interaction between two strangers with the explicit purpose of one person obtaining specific information from the other" (Neuman, 1994).

The collected data was analysed following the data analysis process outlined by Dey (1993) through which some form of structure is generated from largely unstructured textual data that forms the findings of this research study (See Table 3.4). Each interview was recorded using a digital recording device to aid the analysis process by providing an exact transcription of the interview, while making direct quotes available for the write-up stage of analysis (Walsham, 2006). The transcribed text was then annotated with a number of tags and codes to categorise the responses to the research questions and organise the unstructured text into anticipated and emerging

themes (See Appendix B for the tags and codes used). From this coding process the range of responses to the research questions were identified developing corresponding patterns that evolved into emerging conceptual models describing the behaviours involved. On the whole, both the collection as well as the analysis process of the data was to a large extent subjective and greatly contingent on the researcher's skills, experience, presuppositions and value biases.

Table 3.4: *Data analysis process (Dey, 1993)*

Data Analysis Process	
1. Finding a focus	<i>Questions to find a focus:</i> What kind of data are we analysing? How can we characterise this data? What are our analytic objectives? Why have we selected this data? How is this data representative/exceptional? Who wants to know? What do they want to know?
2. Reading and Annotating	<i>Techniques for interactive reading and annotating data:</i> Transposing data, Making comparisons, Free association, Shifting focus, Shifting sequence, Writing memos, Linking memos to data, Relating data to key themes, Mapping ideas to data within and across cases, Relating two ideas.
3. Creating categories	<i>Resources for generating categories include:</i> Inferences from data, Initial or emergent research questions, Substantive, policy or theoretical issues, Imagination, intuition and previous knowledge.
4. Assigning categories	<i>Decisions in assigning categories:</i> What generally constitutes a bit of data? Whether and what to use as an initial category set? Where to begin? Cases by order or randomly? Whether to categorise sequentially or selectively?
5. Splitting and Splicing	<i>Issues in subcategorising data bits:</i> Do the subcategories make sense conceptually? Are they instantiated empirically? <i>Issues in splicing categories:</i> How much overlap is there between categories? What steps in analysis let to their emergence? How much data do these categories encompass? How do they interrelate?
6. Linking data	<i>Assigning links:</i> Look out for link words in the data, Only identify links pertinent to the analysis, Stay as close as possible to the data, Use caution in inferring links, Specify 'rules' governing link decisions.
7. Making connections	<i>Retrieval procedures:</i> Concurrence – do data bits concur? Overlap – do data bits overlap? Sequence – are the data bits consecutive? Proximity – are the data bits within a given distance? Precedence – does one data bit precede another?
8. Corroborating evidence	<i>Techniques include:</i> Encouraging confrontation with the data and Choosing between rival explanations.
9. Producing an	<i>Techniques include:</i> Engage interest through description and

account	dramatisation, Trace the evolution of your account, Develop overall coherence, Select key themes, Use simple language, and Make concepts and connections explicit.
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In particular, the process of analysis involved interpretation of raw textual data, in terms of understanding and categorising the participant responses in anticipation for emerging behaviour patterns. At the initial stages of coding, each transcribed interview was structured according to content and annotated with tags based on the four research questions (e.g. the tag *<benefits-value-outcomes>* was used to tag content about the experience of the participant regarding the benefits and value outcomes they realised by participating in the corresponding organisational platform) (See Table 3.5).

Table 3.5: *Question tags used to annotate transcribed text for data analysis*

<i><organisational social media initiative></i>	data about the tools and programs an organisation runs as part of their social media initiative
<i><usage behaviour-activities></i>	data about the use of the platform and its corresponding tools
<i><benefits-value-outcomes></i>	data about the perceived benefits, value and any other outcomes obtained by a participant when using a corresponding platform
<i><usage behaviour-motivation></i>	data about the perceived underlined drivers and motivations that encourage participants to use a corresponding platform
<i><usage behaviour-impact></i>	data about the perceived effects of on-going participation in a corresponding platform

Once each interview was annotated with these tags, categories for each tag are created where each piece of the data is assigned to resulting to four main data files, namely USAGE_BEHAVIOUR, BENEFIT_AND_VALUE, MOTIVATION, and IMPACT, with numerous categories in each. Each of these categories was supported with the corresponding participant quotes from all three case studies and all interviews. Each quote in these files is organised according to the case study and annotated with the participant tags to indicate the spread of participant responses in each category (See Table 3.6). For example, the tag PR means that the quote is given by a participant who is a company partner and recognised user, the tag ES means that the quote is given by

a participant who is a company employee and in particular a member of the community support team, the tag OM means that the quote is given by a participant who is in the other category and is also a forum moderator user.

Table 3.6: *Tags for the data quotes indicating the participant relationships with host organisation and the specific role in the platform*

Relationship with organisation	E = company employee
	C = company customer
	P = company partner
	O = other (e.g. freelancers, retired IT professionals, industry analysts/bloggers, software training providers)
Specific role in the platform	M = moderator user
	R = formally recognised user
	S = community support user

The necessary splitting and splicing of categories took place in the subsequent stages of analysis resulting to the final set of categories for each of the four main themes as outlined in chapter 4. The quotes included in the thesis are a representative sample from all quotes collected for each category. The emphasis was on breadth of responses from different participant categories to ground the underlined behaviours across contexts and user types. From then on, behavioural patterns emerged by identifying links between categories resulting to the construct correlations shown in Table 4.25. Further analysis created connections among data bits developing the models and frameworks discussed in section 5.1. To complete the analysis and interpretation stage use of the literature was required to corroborate the findings and identify the areas of contribution, discussed extensively in chapter 5. The final stages of interpretation involved reflective analysis on the findings under critical inquiry to identify unanticipated issues and implications that may be part of the participation process resulting to the themes discussed in section 5.3, developing thus the overall thesis account.

3.4 Research Contexts

The focus on companies in the software and technology sector is based on substantial growth of social media initiatives in this sector combined with opportunity for access. The inherent affiliation with technology as part of standard working practice means that interest and curiosity in new tools leads to near-immediate engagement with social media in many technology firms. This is not a new adoption pattern as the high-tech sector has set the way for other industries in many previous technological trends, such as communication technologies, knowledge management, and collaborative tools.

Firm-hosted online communities in the software and technology sector, apart from brand building, also involve service support as a free-of-charge support channel that the host organisation offers to its customers, partners and their wider ecosystem. Service support can be defined as the pre- and post-sale service provided to customers to assist them in making product-related decisions, learning to use the product, and solving problems during its use, as software requires knowledge on the consumer's part to install, use, and maintain the product, particularly when products require frequent upgrades and modifications (Dholakia et al., 2009). Such technical communities also provide a vehicle for the exchange of technical information that fosters the accumulation of innovations and enables individuals from different organisational forms to collaborate (West and O'Mahony, 2008). Essentially, online communities are nothing new regarding the software and technology sector but their use has evolved with the integration of social media tools into spaces other than service support, including networking, interaction, community building and content-generation.

The contexts explored have a professional audience with people working for large enterprises, independent consultants or small businesses. These three organisational social media platforms illustrate similar settings and behaviours regarding access to information, sharing and exchange of resources and generation of content (see Table 3.7 and Appendix C):

1. The SAP Community Network (SCN) is an integrated platform with dedicated spaces including the SAP Developer Network (SDN), the Business Process Experts (BPX), and the Business Analytics communities. Across these spaces a number of tools and functionalities exist, including discussion forums, blogs, wiki, articles, eLearning, downloads, code exchange, career centre, and idea place. SAP considers SCN to be able to provide assets to both their internal and external environment in terms of technical articles, whitepapers, software documentation, how-to guides, moderated forums, support notes, expert blogs, software downloads and virtual events.
2. The Oracle Community Site is a launch pad for a number of dedicated areas including the Oracle Technology Network (OTN), Oracle Discussion Forums, Oracle Blogs, Oracle Wiki and Oracle Mix. Some of the more prominent information resources include downloads, documentation, technical articles, sample code, learning library, podcasts and events. Most of the content is fully browse-able without a required login making different activities available for different levels of participation.
3. Microsoft distinguishes its professional audience by establishing two online platforms, Microsoft Develop Network (MSDN) and TechNet, in order to cater for the needs of two broad groups of users, software developers and IT professionals. IT professionals include network administrators, for example, tasked with large scale deployments in enterprises or locking down machines under group policies, while developers focus only on writing software, device drivers and applications. The interface and functionality in both platforms is very similar including discussion forums, blogs, videos, downloads, learning resources and documentation libraries. MSDN also has code samples for developers while TechNet maintains a wiki for IT professionals. There are also specific technology centres including knowledge bases on particular technologies with dynamic updates of information, and automated resources including scripts for fixing problems.

Table 3.7: *Platform characteristics in terms of scale and functionality*

Measure	SAP	ORACLE	MICROSOFT
Platform Size (total number of registered users across spaces)	2.3 million	11 million	~20 million (MSDN and TechNet have ~10 million each)
Platform Type	Integrated spaces	Launch pad to distinct spaces	Distinct spaces
Social Media Tools	<ul style="list-style-type: none"> • Blogs and Wiki • Content sharing through articles, downloads and eLearning materials • Idea generation and voting tool called Idea Place 	<ul style="list-style-type: none"> • Blogs (employee-only) and Wiki • Content sharing through articles, learning library, sample code and documentation • Live audio and video casts called Techcasts • Social networking tool called Oracle Mix with embedded idea generation feature called Idea Factory 	<ul style="list-style-type: none"> • Blogs (employee- and MVP-only) and Wiki (only on TechNet) • Content sharing through articles, downloads, sample code and learning library • Video sharing tool through Channel 9 • Live webcasts
Other features	<ul style="list-style-type: none"> • Open innovation in collaboration with InnoCentive • Open source initiative with Code Exchange program • Links to universities and students through University Alliances • A marketplace of solutions provided by SAP and its partners through Eco Hub 	<ul style="list-style-type: none"> • Dedicated space for partners with Oracle Partner Network • Customer and partner search • Links to Oracle user groups • Customer-only support via My Oracle Support 	<ul style="list-style-type: none"> • Open source projects on CodePlex • User group support services • Online real time live chats • Feedback and beta testing through Microsoft Connect
Recognition Contribution Program	SAP Mentors Launched in 2006 with currently 110 recognised members	Oracle ACEs Launched in 2003 with currently 350 recognised members	Microsoft MVPs Launched in 1995 with currently 4091 recognised members

3.5 Research Ethics

As per the university regulations regarding research ethics, informed consent was obtained from all the research participants. In particular, each participant was informed about the purpose of the study and the way the data was going to be used prior to the data collection, while they were also re-assured about the full anonymity for all quotes used. This was done via email at the stage of setting up each interview; before agreeing to take part each participant understood why the research was undertaken, why the participants' input was required and how it was going to be used. The only information revealed, however, is the relationship between the participants and host organisation through the use of the tags shown in Table 3.6.

3.6 Research Limitations

“There are no perfect research designs; there are always trade-offs” (Patton, 2002). Limitations exist at all stages of the research process; when outlining the topic, defining the research questions, reviewing the literature, exploring the underlined philosophical dispositions, choosing the methodology, collecting and analysing the data, and finally developing contributions in terms of theory and practice. Limitations cannot be removed, but need to be acknowledged and taken into account when claims are made about the findings and the extent of their applicability. Being explicit about the limitations that exist within a research study forms the boundaries of the work undertaken and focuses the study within certain parameters.

The critique of qualitative research is that it is too subjective, difficult to replicate, introduces problems of generalisation and has a lack of transparency (Bryman and Bell, 2007). Also, the sample number is usually low compared to quantitative studies, but several aspects of the problem can be analysed in this way because of the richness of the data collected. Low numbers are also justified because of the need for in-depth studies, and the aim to provide ‘thick description’, which is not possible in cases of numerous observations (Ghauri and Gronhaug, 2005). Collecting and analysing the data is also a highly labour-intensive operation, often requiring much energy to make data systematically ‘comparable’ (Miles, 1979). The multiple ways of

conducting the interviews (face-to-face, over the phone and through synchronous communication media tools) can potentially introduce discrepancies in the data collected. Visual cues and expression gestures were available for only part of the data collected. Also, because of the nature of semi-structured open-ended interviews, the responses were not completely comparable, which make statistical analysis unfeasible, but allow for patterns in the responses given to emerge. On the whole, qualitative data tends to overload the researcher at almost every point; the sheer range of phenomena to be observed, the recorded volume of notes, and the time required for write-up, coding, and analysis tend to be overwhelming (Miles, 1979).

At the core of any research are the evaluation criteria, which often scrutinise the quality of research undertaken. These are primarily defined in terms of validity, reliability and generalisability (Gill and Johnson, 2002). The value of qualitative research, however, resides on the need for depth and richness of contextual data rather than generalisation through repeatable results. This, according to Lincoln and Guba (1985), introduces the need for alternative criteria that are more suitable to qualitative research. Internal validity can be replaced by *credibility* through authentic representations of findings. In this research, this involves exemplar quotes from the raw data to support claims made and add towards transparency of the process. External validity or generalisability can be replaced with *transferability* through the extent of applicability. In this research, this involves understanding the constraints of where similar behaviours can exist or be applied. Reliability can be replaced with *dependability* through minimisation of researcher idiosyncrasies. In this research, this involves making the research process explicit and showing the tagging and coding process from which inferences about the data are built. And finally, objectivity can be replaced with *confirmability* through self-criticism and reflexivity of the researcher. In this research, this involves showing that the findings are shaped by the respondents through rich descriptions and closeness to the data. Researcher bias, however, cannot be completely eliminated as interest in the topic forms a degree of presuppositions, which are then confirmed or challenged when the data is collected.

This research study therefore, is not claiming contributions beyond its reach. The account on user participation behaviours in organisational social media platforms

is therefore developed in an exploratory manner through highly unstructured data of participant views. The common patterns in this account are then conceptualised as abstract notions of behaviour based on the four main themes of this research; use, benefit, motivation and impact. The applicability of these findings in different contexts must also be done with caution as the behaviours observed relate to a knowledge-intensive industry that requires information and resources throughout the product life cycle, affecting thus the degree of user engagement accordingly. What this research aims to do, therefore, is provide actual usage data of social media application in organisational contexts and indicate streams of value, motivation and impact in order to understand the implications involved when external stakeholders engage with firms in firm-hosted social media environments.

3.7 Summary

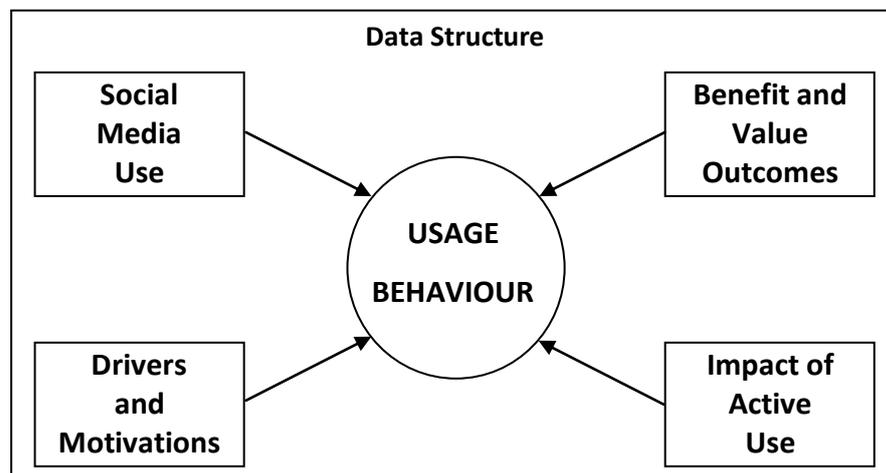
In this chapter, the research process is outlined under the interpretive qualitative paradigm. 78 semi-structured open-ended interviews were conducted with four participant groups from three distinct organisational social media platforms in the software and technology sector. Even though limitations exist regarding the framing of the study, the collection and analysis of data, and the evaluation of the findings, the way this research has been designed gives a representative account of the behaviours that take place in organisational social media platforms.

This chapter sets the scene for the way data is analysed and interpreted in the next chapter. The behaviours explored in these contexts follow the themes of the research questions conceptualising the use of social media tools in these contexts, the value and benefit gained, the drivers that motivate participation and in turn the impact of active participation.

CHAPTER 4

Data Analysis and Interpretation

Chapter 4 presents the resulting findings of the research undertaken. Under the broad sense of exploratory research, largely unstructured data has been collected on the four main themes of the research questions: (1) the integrated social media tools and the subsequent content; (2) the benefits and value individual users realise; (3) the inherent reasons and motivations that drive individuals to participate; and (4) the impact of active use on the individuals, the community and the organisations. These themes collectively built the construct of usage behaviour in organisational social media platforms. For each theme the basic data outcomes are outlined and the most prominent patterns are explored portraying the various processes of the usage behaviour identified.



4.1 Social Media Use

Social media in organisational platforms take the form of professional content creation and management systems. Their use in terms of content and purpose can be

varied, the level of participation can range in terms of the commitment users put in, and their adoption can be integrated into existing routines and practices. On the whole, participation in organisational social media platforms is dynamic, flexible and integrated. In knowledge intensive industries, people seek more information to solve problems and generally to stay informed. Social media are thus seen as a natural fit in this context due to the flexible, dynamic and ongoing generation and distribution of content.

4.1.1 Tools and Content

It has become apparent that social media use in inter-organisational contexts is about the information professional audiences are interested in and the best ways it can be accessed, distributed and represented (See Table 4.1). The different tools available enable different emerging uses with participants claiming to create content on practical topics and issues, current projects and other experiences they face in their day-to-day activities as technology professionals.

Table 4.1: *Data quotes on the use and content of social media tools*⁶

SAP	<p>PR: "I write about things I work on, for example when I work on a project and on a particular technology, things I know well enough to be able to write with skill and understanding. I throw my opinion out there and I learn things as well."</p> <p>CR: "I remember my first blog, I used an SAP product and I thought this might be interesting for other people to use."</p> <p>CR: "On SDN I use the forums and the blogs; I think I have close to 200 blog posts. I'm also using the wiki in both these spaces as well as in my regular work. So the main thing was to move away from strictly email exchanges and try to have more collaborative work spaces so that people aren't having conversations that only they can see."</p>
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⁶ Acronyms of participant quotes: e.g. PR = company partner and recognised user, ES = company employee, community support user, OM = other forum moderator user

Relationship with organisation:	<p>E = company employee C = company customer P = company partner O = other (e.g. freelancers, retired IT professionals, industry analysts/bloggers, software training providers)</p>
Specific role in the platform:	<p>M = moderator user R = formally recognised user S = community support user</p>

ORACLE	<p>CR: “I usually tie information to a project because that means that it is a real life scenario but sometimes it is just some thought that I came across or an idea from someone else that I elaborate on.”</p> <p>PR: “Sometimes it is a very simple ‘how-to’, we had a problem with this, we had this error message and we solved it doing this, which can be really practical.”</p> <p>P: “The content is mostly on discussions or other interesting things I come across or mistakes either I or a customer might have made that are generally applicable or periodic discussions on advice. It is about things I think are technically interesting, and are either new or not well-known.”</p>
MICROSOFT	<p>CR: “Blogs are a great source of content. I read many blogs and contribute as required. Articles (e.g. MSDN/TechNet) are also useful. Wikis are good for short-stab facts and are a good starting point. I read a lot of articles but have also written many, a great number of which have been published. Videos (Channel 9, etc.) are good. I watch some videos and have created a few myself. Podcasts: I listen to a lot of podcasts and have contributed by producing nearly 60 of my own podcasts. Forums can provide answers, however the quality of the questions can be low; similarly flame-wars often arise in forums. I skim a lot of forums and will contribute if I have something to offer – that said, I often look through the “unanswered” questions in forums and will actively write code to provide a solution.”</p> <p>PR: “What I do like on TechNet is these webcasts on demand. The product teams put out webcasts of all different products and you can download/stream them. I think in terms of functionality they have everything I need to be able to do whatever I need to do.”</p> <p>CR: “They [the social media tools] contribute to the bigger picture. I tend to blog about issues that have affected me during my own development activities – any problems that I solved or topics that I found irksome to implement...they are suitable blog entry candidates. Listening to podcasts can help choose which technologies are worth considering for current and future projects – it’s a great way of getting content from the subject matter expert.”</p>

Internal users make content publicly available as a way of responding to customer or partner requests, and to inform the organisational ecosystem about the latest product news and updates available. External users share their mistakes, tips and solutions to practical problems, and discuss their opinions and views regarding product direction and strategy. The community support team is there to structure this content and make sure that the necessary responses are made, linking internal and external users. Essentially, these tools are considered a valuable resource, with some users motivated to contribute and with others not interested in giving back (See Table 4.2).

Table 4.2: *Data quotes on internal and external use*

SAP	<p>PR: “I think some people are quite happy to use it [SCN] as a resource. It does take time to produce stuff, so it can be challenging. Having said that, giving answers to questions can be quite quick; there are several levels of involvement. I think there is care element and not everyone is going to have that. They are happy to consume. But there is a</p>
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	<p>percentage of people that are happy to contribute and enjoy doing so. Personally, I do enjoy it. I answer a few questions in the forums, but I am more of a blog guy. I thought I got a lot of information from the blogs, so I can write a few things myself. So that was my entry point.”</p> <p>C: “I don’t have time to get deep into the issues of other people, so I would like to solve my own issues and get out. I would like to think that if time wasn’t an issue we would have been contributing more, make more comments, and get deeper into the community.”</p>
ORACLE	<p>E: “Every time somebody emails me if I have answered that question before I just point them to the right resource to go read a particular wiki or watch a video or read an article. If there isn’t anything I will respond to them and also go back to any of those mechanisms so in the future somebody can find that by searching for it or I will direct them to it. My approach is to make it easy for people searching for that content to get it. Whenever I am writing something either in a wiki or blog it is always about which way is easier for me to get this information to the readers so they can use it. That is constantly on my mind.”</p> <p>E: “My latest post was on Open Source technology called Open Filer, which is like a network file system that I got running on Oracle specialisation platform, called Oracle VM. So when I was building that I wrote a document so that I could remember if I need to rebuild that I would know how to do it and I put that on the blog because I thought other people may need to do that. So my personal blog even though it is still on Oracle system is really a way for me to record things I do to actually remember in the future. It is like a self-documenting tool. But by putting it on the blog everyone benefits from my knowledge.”</p> <p>CR: “When it comes to forums I am mostly lurking around and reading stuff. I’ve never been a large contributor not because I don’t believe in what they are about but because they take a lot of time. There is quite a big time commitment for a lot of this stuff. I have so many things to do, so much information to stay on top of and in order to do the forums right you need to commit some time every day.”</p> <p>ES: “So it is about tracking the conversations. Part of the overall goal here is to act as a kind of bridge point between internal and external. This is all about conversation, exposing and aggregating conversations for the benefit of the members of the Oracle community.”</p>
MICROSOFT	<p>PR: “It started as a space for me to put all sorts of notes that I had. So I wrote them as a blog post and became useful to other people. It also included things that I came across in my work that presented a challenge so I wrote about the things I had to do to work around it or fix it. More recently it’s been more strategic content, what’s Microsoft’s focus.”</p> <p>CR: “We use MSDN to get the latest software. We use the web to get answers and sometimes it leads us to MSDN articles on the web. MSDN articles sometimes provide information needed to complete a project. MSDN documentation is sometimes required to configure software correctly. I use the forums to post and answer questions. I contribute 1-3 times a week. I am able to find answers and when I see questions I can answer I earn points that help with my MVP status. We need to participate in the community and this is one way of doing it.”</p>

4.1.2 Adoption and Embeddedness

Use of social media tools is adopted in a bottom up approach and embedded in the work routine as shown in the data (See Table 4.3). Individuals actively search for information and content to satisfy their needs and find useful resources in forums, blogs, wikis, technical articles, online documentations, trial videos, expert podcasts, and sample code. This searching of content is inherent in the working routine of many knowledge workers, whereby they integrate different tools to enhance and optimise their access to resources. Social media are thus an addition to the tools professionals use to stay connected and to stay informed. RSS feeds, Twitter tags and Google searches generate links to content in organisational social media platforms, indicating openness of content in the public domain, and manifesting these contexts as reliable sources of professional content.

Table 4.3: *Data quotes on the adoption and embeddedness of organisational social media platforms to working routines*

SAP	<p>ER: "...now we have social networks where we can permanently interact with our peers, our colleagues. This live stream of information has added an interesting new dimension."</p> <p>OR: "So what I do is go on Google Reader and set up RSS feeds to read blog posts and summaries. So when something interesting comes up on RSS I will go to SCN and read more about it. So Google Reader is my main way in SCN but also now through Twitter as well. For instance, people will write something in SCN, tweet about it and tag with #SAP/SCN or something similar and I go looking for those tags."</p> <p>CR: "For me this is a way of helping people get the most out of the blogs because in the community people generate like 10-20 blogs per day. So it is difficult to read them all, so I browse around 2000 blogs and from them I post a blog writing which I found the most useful. I think it is a very good way of helping people get the most out of the content."</p>
ORACLE	<p>C: "For me in terms of getting up to speed with new things I subscribe to a number of blogs using Google Reader including a few that are just aggregators of Oracle blogs. That is how I keep up with the news between that and Twitter. In terms of trying to stay engaged with the people involved in my areas of interest I go back to OTN and I try to see where I can help by answering a few questions there. If I come across something in my work that doesn't seem to be very common I will put up a blog post about what I have been working on. I sort of have my daily routine. I go to the Oracle blogs a couple of times a day just to see if there is anything that hits my interest if it hasn't already been addressed and just trying to keep up with it."</p> <p>PR: "For instance when I look into the OTN forums or when I am in contact with customers, I regularly notice that people are struggling to understand how Oracle works internally and I get the impression that this might be interesting to the public and I try to make a post about it trying to explain these technical workings of the Oracle system."</p> <p>CR: "With Twitter everyday when I wake up I just go over all the tweets and if I find</p>

	<p><i>anything interesting I just read it on the train. I check email then Twitter and then I will start working.”</i></p> <p>PR: <i>“What I can see also is that people will Google the same error message they will end up on our blog and find the solution. It is pretty effective. It is also something I use if I get an error message I will just Google it and I will end up on somebody’s blog and start following that person because he is actually working on the same area.”</i></p>
MICROSOFT	<p>E: <i>“My metric with respect to new technologies and customer satisfaction is producing original content. So these media/platforms are the next best thing. So I am measuring how many people are following me, how many hits my blog posts get, measuring the size of my social network if you will and within that I am looking at the kind of quality that goes into it and I am also trying to help the people who support communities so that they can go on and add onto it like other Microsoft professional or MVPs.”</i></p> <p>PR: <i>“I commute an hour in the morning and an hour in the evening and that is when I do a lot of the responding. If I can also get a sneaky blog post in when the client is not looking I’ll do that as well.”</i></p> <p>O: <i>“I tend to get references to blogs from my Twitter feeds. It is a way of getting more personal information for me rather than control the entire knowledge base. I follow quite a lot of technical people on Twitter and read quite a few technical blogs, and they tend to bring the articles that I will then cross refer and go on and read for more information. If you try to read it all you will be overwhelmed. A quick eyeball of something; the technical feeds help with that. If something catches your eye you will then go on and read it. So you know there is knowledge on that material and you will go to find it when you need it.”</i></p>

4.1.3 Levels of participation

Evidently, different levels of participation exist based on the degree of contribution involved. When participants recalled on how they started contributing it became clear that users are initially consumers of information and content, and then gradually transform into contributors (See Table 4.4). While this step-up from lurking to contributing generates most of the content and activity, only a small percentage of users are reportedly in the highly active segment. In large-scale communities like the ones explored here, however, this segment still involves a large number of users. It reportedly reaches the 10-20 percent out of the registered two, ten and twenty million users respectively. When it moves beyond consumption of content, active participants get to enjoy a range of other benefits that emerge as contribution continues over time and as users become more involved with the particular platform functionalities and the people of the organisational ecosystem.

Table 4.4: *Data quotes on the different levels of participation*

SAP	<p>CR: "Getting involved with the community is a good place for resource and information. So I started as a non-active participant, just reading and getting answers from there. Then eventually I started being active, participating in blogs and projects, and other things like that. As one of the active people I got asked to be part of the mentor program."</p> <p>C: "So overall, I went from a lurker to a contributor fairly quickly. In those early stages I responded to questions I had the answers to and I felt guilty not to, if you have the knowledge why not share it. I also felt guilty because I pushed for this network to happen so I felt that I should be a contributor. It is also assuming an investment for the future, if I do this others will reciprocate and we all be better down the road, knowing that someday there will be information to help me as well. So all those factors kind of got you contributing fairly quickly and then I grew into blogs and formal writing simply because I got tired of repeating myself in the forums and then I enjoyed it."</p> <p>CR: "So you start as a consumer of information, which means you are a lurker, you need information so you usually start with the forums. You first look whether your problem is described somewhere else, if it is not you have to make the choice whether to start a new thread. So to make the choice and jump from lurker to posting a question there is a certain pain threshold. If you don't have any other ways to discover the information you need, can make you take the leap from lurker to participant. There is this leap that you have to take and there is a progression."</p> <p>ES: "There is a general rule of thumb that we find to hold true for us just as it holds true for Wikipedia, or Yahoo! or Facebook or any other Social Media, and that is the 1-9-90% rule. 1% of your membership will be heavily active and they will drive the 9% of people that are somewhat or occasionally active and they would in turn drive and deliver value to the 90% who are passive consumers of content and information. So we certainly focus on this 10% that contributes the vast majority of new content in order to deliver value to everyone."</p>
ORACLE	<p>CR: "In the beginning, when I had a problem I just went there and looked for answers and as time went by I realised that I did stuff that others had problems with and when I came across them I solved them. So I started to also answer to people in the forums."</p> <p>ES: "So we often see OTN as an evangelist machine; we manufacture evangelists by bringing people into the forum and as time goes by and they become more active and interact with us and other members of the network they become more and more converted and move closer and closer to that peak of the pyramid."</p> <p>OR: "That's how I started, you learn Oracle, you start using it and gradually engage in the online communities of Oracle and I was so much engaged that Oracle gave me the title of ACE Director. In short, I am actually well known in the Oracle online community."</p>
MICROSOFT	<p>PRM: "About two years ago I went from consuming from the community, meaning I would read blogs, articles, and forums and consume information only, to giving back and providing for the community. What I realised was that I have been consuming a lot and have never given back and once I found that there was a question I could answer in the forums I tried it and it was rewarding because the person came back and said 'Thank you that was what was I needed, now I can go and get my job done'. That sort of thing inspired me to do it more and that led to a much larger involvement (MVP)."</p> <p>P: "It starts by getting from other people, learning, developing professionally and then reaching a point where you want to give back, help others learn, educate them in what you see yourself being an expert on."</p>

PRM: “When I was looking for an answer I found a thread and saw a question that I knew purely by title. I was afraid because I was new and I always thought to myself I am still learning, never thought that I’ve learnt so much I can now help others. It was a realisation for me because it was something I never thought I would do; I was never involved in newsgroups and forums on a technical site. I answered that question and I was like this is not so bad, then I answered another one and it inspired me to look for questions I could answer. It is the realisation that regular people do this, not just special ones, so why can’t I. So now I spent my time trying to influence others in the community that they can do it because I think it is more of a realisation than a capability issue.”

ES: “It is usually the 80-20% profile where a small number of the community is posting a lot and then there is the larger part of the community that is lurking/looking for answers to solve their problems.”

4.2 Benefit and Value Outcomes

Identifying benefit and value is a significant element in transforming lurking attitudes to contributing activities. The voluntary aspect of social media tools involves acknowledgement of subsequent benefits by potential users as a means of evaluating emerging outcomes in systems where no direct monetary value is involved. This in turn influences use of social media tools as their benefit and value propagates. A number of value categories have emerged from the data classifying the responses given into a series of constructs encompassing a range of selfless as well as selfish gains.

4.2.1 Communication, Reach, Interaction, Connectivity

Some of the more basic outcomes of social media are the ability to reach, communicate, connect and interact with different audiences in the internal and external organisational environment. Users are social beings that like to reach out and make connections with others, potentially morphing into opportunities such as problem solving, feedback and knowledge sharing (See Table 4.5). Internally, it was said to enable the development of a more accurate sense of the market by being part of the conversations the customers and partners are having, and as such responding appropriately. Externally, it was also stated to facilitate networking opportunities among customers and partners that allowed people to become familiar with different areas and different people of the organisational ecosystem.

Table 4.5: *Data quotes on communication, reach, interaction, and connectivity*

SAP	<p>E: "So it is a very effective way to meet customers and partners distributed globally." CR: "You have a wider range of people to work with; you have easier access to the top people compared to trying to get them through your own company."</p>
ORACLE	<p>PR: "I feel more connected to Oracle because I am able to participate with them through social media and engage with people." C: "It is also about networking and making contacts with people who are knowledgeable, you never know when that is going to be helpful." C: "Most of the blogs that I read are from noted experts. I may disagree with some of their views but they are still experts in the field and it is amazing to be able to have access to them. Even though I don't know them personally, I can still speak directly to them by commenting on their blogs and say 'I don't get that' or 'I disagree' and they can clarify things for me. It is incredible. It is such a learning leap." OR: "In my computing life, I don't really interact physically with a lot of people outside of the training classroom or at conferences, so it is an essential aspect of interacting with people in areas that I feel comfortable with. It is a benefit for me because I own my company at this point and I don't have any other colleagues I could bounce ideas off directly in the office. But I have the whole world of colleagues I can bring things to."</p>
MICROSOFT	<p>E: "Specifically and personally, it is very valuable to me in order to build connections and get feedback from the community and move forward by getting content out there that is not static but interactive in a way." PR: "Not only have I met lots of people but they are well known people from Microsoft under the TechNet brand. That gives other networking opportunities as well."</p>

4.2.2 Resources, Problem Solving and Keeping Informed

The software and technology sector follows to a large extent a knowledge-based economy, where knowledge is the means to economic gain. As such, information is essential throughout the different stages of the product life cycle. People need information in order to make informed decisions at the pre-purchase stage; they need to solve any problems or issues they face during use of a product; and they need to be informed in terms of upgrades and new releases in order to make strategic decisions (See Table 4.6). As such, participants stated that the corresponding platforms have rich assets in terms of resources and people, which are perceived to be crucial for individuals to carry out their day-to-day activities as well as to set themselves ahead of the curve. These resources are made available from both internal and external users. Essentially, a certain level of support and service that is traditionally provided by the organisation is now available from a variety of sources at no charge. What this means is that external users are satisfied because they solve their problems and access the

information they need, while internally the organisation enjoys a reported cost reduction in terms of support and service.

Table 4.6: *Data quotes on resources, problem solving and keeping informed*

SAP	<p>P: "We found that one could get answers to one's questions more easily when interacting with the community rather than waiting for the official answer to come from SAP because the community is made of a lot of SAP experts participating."</p> <p>OR: "...another aspect of the community is that it serves as a problem solving forum. You will find that a lot of the contributions are in and around solving customer problems."</p> <p>P: "As a consultant working for a big consulting company, it is easy to go there and solve a problem. While you are there maybe you can answer somebody else's question."</p> <p>E: "Value for customers on the other hand, is about access to information, improved quality of their experience with SAP, support and then in some cases allowing them to understand the opportunities to use software."</p>
ORACLE	<p>ES: "The most popular activities on OTN are what we call the three D's, downloads, discussion and documentation. So OTN is an incredibly valuable and rich resource for people to get information on best practices for example, or who have a practical problem when installing a product, or need information about a new release, or need upgrade information."</p> <p>C: "So it's another resource for me to be able to see how other people have dealt with certain aspects of the database and potentially avoiding any of the pitfalls everyone goes through. It does make me more efficient in what I do."</p>
MICROSOFT	<p>ORM: "Being able to keep up to date with all of the current issues with these products was critical to my job. Helping out on the Newsgroups and Forums, I was able to recognise emerging issues on my network that had been discussed and solved on the online support forums. This allowed me to look much smarter than I really was."</p> <p>CR: "I like to keep up to date on current technology and trends, and I like to fully understand technologies. These tools help me find information that isn't available in the documentation or other common sources. I get paid to be on the cutting edge and to know answers that others do not. Often this comes down to keeping up on this type of information and being proactive about finding it."</p> <p>P: "The access to information when working on something is pretty valuable. I think it is great that organisations create these spaces where you can get access to information and people because without it most wouldn't be able to move forward in their day-to-day jobs."</p>

4.2.3 Knowledge, Expertise, Experience, Ideas

The resources necessary for individuals also include knowledge, expertise, experience and ideas. Content moves beyond technical information, documentation and manuals to include personal knowledge and experience of using a particular product, skill and expertise obtained over time, and ideas and opinions concerning

product direction (See Table 4.7). Participants stated that the ability to share that form of content can be inherently valuable. That value lies in the opportunity to obtain feedback, to demonstrate expertise and to develop thought leadership. It came across from the data that participants want to share some of their experiences, ideas and views with an appropriate audience. Organisational social media platforms provide that audience, while users provide their applied knowledge. This arguably enriches the quality of content and helps identify skilled professionals in the field.

Table 4.7: *Data quotes on sharing knowledge, expertise, experience and ideas*

SAP	<p>PR: “Definitely, when I get comments and feedback on my work, that’s invaluable because you don’t want to create work in a vacuum and you really need to have that perpetual feedback loop with your constituents.”</p> <p>CR: “So I also use these spaces as a creative outlet. So it’s not for the reward or the recognition I will get but it’s about communicating what I’m thinking.”</p> <p>OR: “Apart from getting information, I also write. I use SDN to evangelise about things I am interested in, about certain topics that are close to my heart. And SDN is a great platform/channel for sharing. SAP is such a huge machine so we use SDN to find others in the same niche.”</p> <p>PR: “Also, sometimes you might be against the wall and all of a sudden you might get an epiphany; you want to share that, people can follow these easy steps to get this done and not struggle with it like I did.”</p>
ORACLE	<p>E: “We made a strategic decision as a team when we started to have a blog. Since we are not a product team there is really no record other than the blog of what we’ve been doing or what we think. So it gives us a reference point. As an innovation team we don’t really have any other outlet to prove that we are innovative.”</p> <p>PR: “Why are people there? It is to find the audience to share their ideas, to come up with certain discussions and to have basically a forum to discuss the technical topics or the problems or what they found or to bounce some ideas, etc.”</p> <p>PR: “Sometimes I am researching something and I will talk about it or ask a question about it, like is this a good idea or should I do it in another way? Many times I share the experience that I had at a customer and that has two goals; one is to show people that we have knowledge, that we are a company that you can approach to get help, and two is to get feedback from other people who might have other ideas or other experiences or they can validate what we did. So it is basically trying something new and sharing what we’ve done. As a company we also think that knowledge sharing is an important thing so we dedicate some time to enable people to spend time in reading/writing blogs, etc. We noticed it gives us more entrances to customers and people recognise our skills.”</p>
MICROSOFT	<p>ORM: “One word, knowledge! Initially, I simply looked for the answer to a question on other forum threads and copied and pasted the information. Flash forward to today and what I enjoy the most is looking for the most complicated problems. Once I identify one, I go off and start researching to find the answer. The research is what I enjoy the most. I know the solution is out there and it’s just a matter of finding it, recreating the problem on one of my test computers and applying the fix to make sure it works. Each time I do this, my knowledge increases, and I help someone out in the process.”</p>

4.2.4 Community Building

The interaction identified on a professional level also transcends into the social. Networking and communication develops relationships between professionals that go beyond exchange of information. Participants evoked a feeling of community that can be empowering in terms of collective action (See Table 4.8). Similar interests develop that build stronger links among people leading to more content, community-driven projects and other opportunities beyond the platform. This indicates that organisational social media platforms move beyond information exchange systems to enable community building.

Table 4.8: *Data quotes on community building*

SAP	<p>ES: “Really, once people start sharing and participating they are also able to make friends and form relationships with people.”</p> <p>PR: “The community right now is my family. Some of my best friends are in this community right now. They became my best friends because of the relationships we developed in the community. It is always more fun to work with your friends. For me, it just turned out to be my little SAP family.”</p> <p>OR: “The community brings individuals together; you meet so many people, you share interests, and you share things that transcend into other areas other than SAP.”</p> <p>CR: “You end up having this feeling of community that is inherently satisfying.”</p>
ORACLE	<p>PR: “I don’t think it translates directly into actual commercial benefit but it is part of being part of a community. I am sort of connected with the top tier experts, world wide. There is a community feeling definitely there.”</p> <p>OR: “I understand that what we have here is a community of Oracle enthusiasts so everything that I do is to reinforce this community. There is no financial personal gain. There is nothing other than enforcing the community spirit.”</p> <p>OR: “I’ve built a pretty good support network. I’ve received a lot of “keep your head up” type support that’s helped me personally to weather the storm(s). I’ve met a lot of great, nice people who share my interests in technology.”</p> <p>C: “There is definitely a sense of community among the regulars. It definitely creates more relationships with people. The networking benefits are just phenomenal.”</p>
MICROSOFT	<p>EM: “People who participate in community believe in community.”</p> <p>PR: “If Microsoft would take away the MVP that community spirit would still be there. I would still keep doing it.”</p> <p>E: “If you want to help a community you need to be part of that and I think blogging enabled me to be part of the technical community.”</p>

4.2.5 Learning

These platforms also foster a learning environment whereby users develop professionally in terms of troubleshooting, implementation and application skills. Learning in this context, therefore, concerns the development of competences and capabilities necessary to respond to the technical needs of the products (See Table 4.9). Participants claimed that the content available enables learning in terms of solving problems, getting exposed to a variety of scenarios and becoming aware of the capabilities of the products. Learning maybe more significant for the development of junior level professionals, but also forces more mature users to view the products from the perspective of an inexperienced user. A learning environment is therefore, beneficial as junior level professionals develop skills from a community of users.

Table 4.9: *Data quotes on learning*

SAP	<p><i>P: "One is that I get to learn a lot myself; I stay sharp because I can see what other people say and what they are doing. It can spark things in my mind, which is part of the exchange."</i></p> <p><i>E: "The good thing about social media is that you keep learning all the time and it is exciting."</i></p>
ORACLE	<p><i>CR: "So there are a lot technical stuff that I learned by reading blogs, which seems to be a valued source of technical information these days."</i></p> <p><i>PR: "It is a way of also helping to strengthen the technical knowledge that someone has, so I think I have learnt a lot of things by trying to answer questions that people have."</i></p> <p><i>C/P: "The greatest value I gain from this is that as a person if you want to learn everything yourself from books or first hand is impossible because there is so much information out there. So what I see from the blogs, the wikis and any of these social media is that they are helping me to distil that information and they are providing that information in a very concise, precise and comprehensive manner."</i></p>
MICROSOFT	<p><i>P: "It is generally about professional development. It is about learning and expanding into new areas."</i></p> <p><i>CR: "I see two benefits: learning from other really smart people in my field, and adding my own contributions as well. It's an important way to stay involved with the greater technology community. The more I explain important programming topics, the better I understand them myself. Everything I do at work is part of trying to contribute to the global software community. Online communities are just one way to do that. It is part of learning and teaching."</i></p>

4.2.6 Recognition

The benefit of recognition has been the most frequently cited outcome of voluntary participation. It reflects competence in terms of technical expertise, and accessibility in terms of community engagement. According to participant claims, recognition emerges from the perception that an individual's contributions are valuable (See Table 4.10). Participants claimed to appreciate and enjoy being well-known in a community of professionals. They also stated that such recognition can lead to further opportunities such as speaking at global organisational events, obtaining a formal recognition title (SAP Mentor, Oracle ACE and Microsoft MVP), and getting contracted for further (paid) work. These recognition-related opportunities can therefore offer both monetary and non-monetary rewards as the professional status of an individual increases the more their contributions are perceived to be valuable.

Table 4.10: *Data quotes on recognition*

SAP	<p>ES: <i>"Many of the people involved have realised what the collective can do for you and predominantly this is recognition. Recognition becomes the common denominator across the border. Acknowledgement and recognition is something that every culture can understand and associate with, a virtue that everyone can enjoy. The participation on our platform, even at the beginning where the SAP community network was developing its online presence, showed that people were 'hungry' for the recognition among their peers."</i></p> <p>PR: <i>"You don't want your skills to become commodities. I would argue that one of the biggest ways you can avoid that is through achieving recognition because by achieving recognition in your field, you are suddenly a sought after person, you are not someone in a data centre that can be easily outsourced somewhere else."</i></p>
ORACLE	<p>OR: <i>"Being known, that's the benefit of being a contributor to the online community. When you keep sharing on a constant basis you create a name for yourself, you are recognised, you enhance your career because then you have proof online that you have been doing what you are doing and it is valuable to people. It is a win-win situation. You win because you create a name for yourself and other people win who seek for the same answer. For me it has worked great because I did it more than others so I stood out and I gained an Oracle ACE Director title."</i></p> <p>CR: <i>"In terms of my profile and how people see me, it has been really successful. I have been an Oracle DBA from 1990 until 2003, and a fairly good one, and I taught lots of DBAs, so I am very senior technically. Within five years of blogging everybody thinks I am some sort of a genius. I have been recognised within the Oracle community big time. I really appreciate it but I never really cared about it."</i></p> <p>E: <i>"Recognition is a by-product though. If you provide the right information you will get the right respect and recognition, but if you start out attempting to do that you will possibly fail. Sometimes it takes longer to get recognition if you are being careful and diligent in what you are writing, quality lasts longer."</i></p>

MICROSOFT	<p>PR: “Also I get a bit of kudos in the community as well. I think the biggest thing it’s done is to get me noticed. On the forums I was heavily active to be able to get my MVP and on the newsgroups beforehand.”</p> <p>PR: “As a result of what I do I am being recognised as one of the Most Valuable Professionals. This is one level of recognition. The other one is when I speak to different events people already know me from my posts and come up to me.”</p> <p>PRM: “It has in a way an egotistical impact, not in negative way. It is personal satisfaction, the feeling of being recognised and known by name and quality of content. Being recognised by other professionals in the field, who are also well-known, is a great accomplishment and feels really good.”</p>
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4.2.7 Indirect marketing and Career gains

At the egocentric end of the spectrum lays the personal monetary-related gain. This is where individuals realise that voluntary participation in organisational social media platforms can create marketing and career-related opportunities (See Table 4.11). According to participants, these emerge predominantly from recognition as individuals are able to market themselves as experts through their content contributions. This in turn leads to creating a business network that enables meeting prospective clients and getting paid work. Traditional marketing ideas are challenged, however, as individuals need to prove themselves as experts and let the community of users shine the spotlight on them. It was reported that trying to reap the benefits before proving yourself can be extremely transparent and consequently of no value.

Table 4.11: *Data quotes on indirect marketing and career gains*

SAP	<p>CR: “You are constantly building a career trajectory...putting myself out there and building a career, these are some things that worth my time.”</p> <p>PR: “In particular, for the clients that I picked up in the last year, the fact that I am an SAP mentor is picking them up. In this model you are focused more on building something that has value to others and then seeing what develops from that. All those different things I did for free made a real impression on the people in the market in a way that led to a lot of paid work.”</p> <p>ES: “For the business side you have the extra measure of recognition and acknowledgement equalling a kind of professional power; you are not only more marketable, you have more job security, you are more valuable and worth more in the market. This gives rise to a new stream of marketing called ‘neo-marketing, through which your peers tell your customers and partners how good you are.”</p>
ORACLE	<p>P: “As a consultant there is obviously an indirect benefit that may be professionally useful. You are getting so much money but are you giving good advice? If you have samples of what your advice is like before they ‘buy’ then that is obviously useful.”</p> <p>CR: “And to give an example, someone was reading the articles on OTN and I got a</p>

	<p><i>phone call that resulted to an assignment for our company. At one point when you realise that it has personal benefits and benefits for the company you work for, it is really another driver to share more information. So it is kind of a snowball effect. For companies outside Oracle the value is in terms of recognition. For consultancies it is also about self-promotion; the customers know your name.”</i></p> <p><i>PR: “As a company we have actually gained some customers that actually approached us because they read an article on OTN on a topic that was exactly the same thing that they were trying to achieve and they had some trouble.”</i></p>
MICROSOFT	<p><i>PR: “No extra rewards or recognition related to my day job, although I wouldn’t hold my current position if I wasn’t already active in social media. It is not so much rewards and recognition but it has given me new skills that I’ve applied in my work.”</i></p> <p><i>PRM: “When they consume from you and you are doing a good job delivering good content then they will think of you as the person to go to when they have questions or when they want to pursuit anything in that product market. They are going to have a positive association that they know someone in that area. That is a piece of value I get from a client perspective.”</i></p>

4.2.8 Organisational benefit

Participation in organisational social media platforms benefits the internal and external users involved, but ultimately benefits the host organisation (See Table 4.12). Employees that use and support the corresponding platforms claimed that such an environment can have both strategic and marketing benefits. Platform engagement can develop and maintain customer loyalty, the cost of service and support can be reduced, feedback mechanisms can create open innovation opportunities, and endorsement of products and services can increase sales. These represent the topmost return on investment for organisations establishing such platforms justifying their decision to be part of the social media movement. By hosting their own platform, organisations gather their ecosystem into a single space and thus get to utilise the outcomes from their contributing activities.

Table 4.12: *Data quotes on organisational benefit*

SAP	<p><i>E: “From a marketing point of view we love it when a customer wants to give feedback and share his experience. It is the best thing; it is an endorsement.”</i></p> <p><i>E: “From the SAP perspective, the community creates customer loyalty because if you built your network there you will want to come back.”</i></p> <p><i>E: “The ability of the customer to consume SAP software also depends on skilled people in the market that help you do it, so the community helps us generate more expertise and percolate that expertise through the community.”</i></p> <p><i>E: “SAP on the other hand, saves a lot of cost through SDN in terms of support. Instead of calling the support services, they search the forums maybe somebody already</i></p>
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	<i>answered that question or otherwise they post a new thread and get an answer from the perspective that they can relate to.”</i>
ORACLE	<p>ES: <i>“OTN and the ACE Program are the router between Oracle and the community. They are a very effective channel of communication. They help us convey information to our customers and the other way around.”</i></p> <p>ER: <i>“Obviously the nature of instant feedback has been extremely important. We make significant decisions nowadays based upon the nature of feedback that we get. Sometimes we haven’t done the certifications they are asking us so it only takes a few customers in order to alert us that we need to do these because they probably represent hundred customers who would want that feature as well. That’s a direct example of how feedback on the blog immediately and profoundly impacts our product strategy.”</i></p> <p>CR: <i>“Oracle wouldn’t do it if they didn’t get anything out of it and I think it is the publicity; having people with strong opinions on their site.”</i></p> <p>C: <i>“As for Oracle they have basically free support. We definitely are part of the support team at Oracle. It is not the official line of support. It is basically other people’s views. You know it is other people with real world experience. They have been through the same hassle as you. I think it makes Oracle a stronger company because of that, because there is such a communal aspect to it.”</i></p>
MICROSOFT	<p>EM: <i>“When you are answering a question or writing a blog you are putting a face to the corporation. It is not Microsoft that says this but this Microsoft engineer who has an opinion. It provides a friendlier type of interaction, becoming thus more personable.”</i></p> <p>PR: <i>“I don’t think Microsoft’s intentions are all altruistic. The bigger the ecosystem around their products the more products they sell, and that is completely their focus I think. Most people who are involved from the products point of view, the Microsoft bloggers for example, are there because they are passionate about the products or the service they represent and sometimes the marketing shrine is obvious but that’s because it’s natural when you are paid to promote a product. By and large most people are less sales-focused and more to highlight new features that are good for such and such reasons. So it is more about education than it is about sales.”</i></p>

4.3 Drivers and Motivation

Exploring drivers and motivation enables understanding of the reasons that encourage continuous participation and ongoing contribution of content. In a largely benefit-driven environment where participants claimed to gain some form of value from organisational social media platforms, the reasons that drive them to maintain these behaviours indicate that a certain level of motivation is also involved. Identifying these motivational factors provides an insight into the participation process and indicates what aspects of usage behaviour need to be emphasised so as to encourage desirable activities.

4.3.1 Reciprocity and Paying it Forward

After experiencing the benefit of having others solve your problems or provide you with the necessary information, participants responded to a need of giving back or paying it forward (See Table 4.13). They expressed an outlook of fairness and balance, where you cannot only take but have to give as well; even though you are probably not giving back to the same people, but paying it forward. There is essentially a feeling of appreciation for what the people and the platform have offered towards the professional development of certain individuals that makes them respond to this motivation. Participants frequently stated that useful benefits are attainable only when people give back to the community. For example, in order to be recognised as an expert or a leader in the platform, individuals need to provide content that enables community health and growth.

Table 4.13: *Data quotes on reciprocity and “paying it forward”*

SAP	<p>C: <i>“In terms of motivation, you have certain experiences and it is kind of a trust thing. If I put my experiences out there, then other people will do the same and we will all be better for it. If I do this, others will reciprocate and we will all be better down the road, knowing that someday there will be information to help me as well.”</i></p> <p>PR: <i>“My main motivation would be that I got a lot out of this community, I can give something back.”</i></p> <p>CR: <i>“‘Quid pro quo’ (one thing in return for another). If I post answers to questions then my expectation is that other people will do the same.”</i></p>
ORACLE	<p>PR: <i>“What you get from such a thing is proportional to what you put in, which is true for many things in life. With social media it is especially true. The more effort you put in the more followers you get. Yes, there are benefits but you will get nothing if you put nothing in.”</i></p> <p>C: <i>“So there is this generous feeling of wanting to contribute there, yourself. I use it as a two-way street. I feel like I benefited immensely professionally and personally from the Oracle community. Virtually I met some interesting people and I definitely derived some technical benefit. I intend to keep using the platform at my disposal to try and give back to the community.”</i></p> <p>C: <i>“Because I have learnt so much it is only fair, it is only right that I give back to people to help them so they can come up and start to help other people. So it is sort of a pay it forward situation; keeping the cycle going really.”</i></p>
MICROSOFT	<p>PR: <i>“So I always think of those people who are starting out or who don’t know the answers. I always try to help them because that is what other people did for me. I was the person asking the questions initially but now I’m doing the answering so I just think is paying it back.”</i></p> <p>EM: <i>“You are giving back to a community that has helped you or if you want to be a leader in the community then you need to make sure that your experiences help others as well.”</i></p>

P: *"I am at the point in my career where I don't learn a whole lot from the community. It is about giving back. I have been in this product for a lot longer than most people and I was able to get in on early programs with Microsoft. So it is about giving back and helping other people through their pain points."*

4.3.2 Visibility and Online presence

Visibility and online presence refer to the image individuals are able to project in a space used by professionals. From this image individuals can gain recognition, develop reputation and possibly get paid work or other opportunities (See Table 4.14). This can be particularly motivating for individuals as they stressed out the importance of being active in organisational social media platforms. Visibility and online presence are thus perceived to be the stepping stone for realising value and benefit, through which individuals demonstrate knowledge, expertise, independent thinking and community leadership.

Table 4.14: *Data quotes on visibility and online presence*

SAP	<p>PR: <i>"There is a promotional motivation, getting visibility for my work does matter to me, and it has impact on what I do. The recognition I've received from that has definitely had an impact in terms of obtaining clients and getting the best client relationships. So there is a self interest that is part of it."</i></p> <p>CR: <i>"For me it's great to have that sort of visibility in such a global platform because I know people from all over the world. That is really a great thing for me."</i></p>
ORACLE	<p>PR: <i>"It [the blog] definitely gives me visibility; it is read by thousands of people, not everyone obviously comments but you can see from the web statistics which posts on your blog are the most popular. So you can definitely see the popularity; which topics are hot and what people want to know about."</i></p> <p>C: <i>"There seems to be a move amongst people to try to establish their online presence. It feels like a way as to pre-network; get yourself out there before people meet you in real life. The number of people who choose to do that is growing possibly assuming that there is value to it."</i></p> <p>OR: <i>"I felt the need for a web presence so for me that was the blog."</i></p>
MICROSOFT	<p>P: <i>"I picked up a lot of engagements over the years just by being public-facing. It has helped towards creating a name for myself. Everything transfers to the dollar at the end of the day. The more well-known you are, the more stuff you have out there, the more people have seen them the more they believe you are worth when you are negotiating for jobs."</i></p> <p>E: <i>"Even though it hasn't been my goal it has helped my career personally. It is just the whole point of community and social aspects; the more you are out there the more you are seen as a leader the more likely it is to be given the opportunity to lead and that is accomplished through these tools like the blogs, the wiki and the forums and other tools out there."</i></p>

4.3.3 Reputation management

Reputation also builds when recognition and visibility of an individual can have a professional impact. Participants claimed that the development of professional reputation enables differentiation in the market, builds a strong business network and showcases expertise (See Table 4.15). This source of motivation concerns more specifically individuals who are in charge of their career trajectory including consultants, freelancers and self-employed professionals. These individuals are effectively building a brand around their name by managing their online presence and thus challenging the way competitive edge is traditionally gained.

Table 4.15: *Data quotes on reputation management*

SAP	<p>CR: “For me it was a reputation thing; trying to build my reputation persona outside my own company. With the web 2.0 generation of tools it gives you an opportunity to build your reputation and career outside your job. What I always say as my motto lately is: “take your career into your own hands, separate from your job”. And that’s what active participation in the community can do for you.”</p> <p>ES: “For virtual participation the most distinct motivation is the reputation motivation. People want to be seen as a leading expert and strive to participate.”</p> <p>PR: “Part of how you differentiate yourself in the field currently is by both making a contribution and becoming a thought leader in a particular area. It is more about figuring out what you are good at and what you want to be known for, and then essentially turning up the volume in that area by blogging, podcasting, etc. I was very intentional in what I did, in that I wanted to be remembered for focusing on SAP skills and careers.”</p>
ORACLE	<p>ER: “In the old school model, the way to build reputation is to be the sole source of information. In this Google-enabled society of today your reputation is enhanced when you share as much expertise as possible as wide as possible. If you wish to differentiate yourself you need to somehow share the fact that you are an expert and the only way to do that today is to show your expertise.”</p> <p>C/P: “There are possibly a million practising professionals in this Oracle area so how do you differentiate yourself. It is only top of the mind recall; people only remember the first 5 or 10 names, if you are number 12 no one remembers you. People work hard to establish themselves. It is work in progress.”</p>
MICROSOFT	<p>PR: “I don’t think it was so altruistic. Sometimes I think it is a new way of seeing things and I like to share, but I would say my motivation is more selfish. It is in a sense that my name will be known and I should keep the ball rolling, keep the kite up in the air.”</p> <p>PRM: “What I have been able to do is to integrate it with my clients and my company culture because this needs to be part of our job because it differentiates us from our competitors and it makes a huge impact on our notoriety and reputation. So now it is not just personal reputation but corporate reputation as well.”</p>

4.3.4 Satisfaction and Enjoyment

Satisfaction and enjoyment refer to the intrinsic motivational factors that emerge from self-determination. Participants claimed to enjoy and feel satisfied when they contribute content that helps others (See Table 4.16). Enjoyment arguably surfaces when individuals perceive their participation to be a form of hobby or past time activity that centres on an interest in the technology, the people or the community. Satisfaction, even though pertains to a warm feeling of giving back, it also serves as an inherent ego-boost whereby individuals feed on the positive feedback that makes them keep contributing.

Table 4.16: *Data quotes on satisfaction and enjoyments*

SAP	<p>C: "It is not tiring for me because I feel satisfied when I can help people. I found I could not stop posting because it is so rewarding when you find you could help many people around the globe to solve their problems. I feel satisfied when I get feedback because I can see that my value is recognised. I don't need to get credit for it or to know that my name is associated with it, but to know that I helped bring something to fruition, it just feels good knowing that you playing a part in that."</p> <p>PR: "For me it was never about recognition, it is something I do because it's fun for me."</p> <p>PR: "So I do enjoy posting on SCN. I actually really enjoy the community on SCN, there is usually a good comment thread that develops when you post a blog and so I like that interactive feeling that you can get in the community site."</p>
ORACLE	<p>C: "It just gives you a warm feeling when somebody says that they learnt something from you. It does motivate me to keep doing what I'm doing."</p> <p>CR: "You feel appreciated for the content you bring in there."</p> <p>C: "I am quite happy to help out even if it means that I give Oracle free support."</p> <p>C/P: "Answering questions and seeing that someone has gained something useful out of my given answer and/or solution is a great feeling of satisfaction."</p>
MICROSOFT	<p>ES: "Sometimes people just love technology and they love to share. Mostly it is the enjoyment. Nobody goes into community and helps unless they love doing it. People who do this solely to get recognised I don't think will succeed because they will end up contributing, being present and making comments that don't have very much value to other people. So they will not get recognised as MVPs I think because they need the passion to help people and provide good content."</p> <p>OR: "It is also satisfying to help people, particularly when I am able to help people help themselves. That is, they learn something from the exchange. On the other hand, it's less pleasing with people who ask to be spoon-fed."</p> <p>ORM: "I think that I just enjoyed helping others who were experiencing the same problems that I had faced as a new user. My initial experience was excellent and I wanted others to have that same experience. There is a feeling of satisfaction when you can help someone and make their lives better. I was appointed a Moderator in late January 2008 and have been enjoying my online experience since then."</p>

4.3.5 Interest and Passion

Interest and passion signify that altruistically-driven behaviours also exist. The content in these platforms centres on the software products and the technologies these organisations are concerned with, which can translate into interest and passion for some users (See Table 4.17). It was stated that individuals create content, respond to questions and explore ideas and views regarding software products and technologies because they have developed certain interests and passion about their wide use and application. Such passion and interest apart from translating into product support and service, it can also lead to outlets for creativity and innovation in an open platform.

Table 4.17: *Data quotes on interest and passion*

SAP	<p>PR: "...there is a desire to help people and there is a dynamic culture that has centred on shared interests that people are passionate about. So definitely part of what motivates me is that connection to an international community of people because all them share those interests."</p> <p>OR: "It is definitely close to my heart, talk to any mentor here and they will tell you that they contribute on what they are passionate. And this is what makes a mentor. The stuff I write on SCN has nothing to do with what I do at work. It really is about passion."</p> <p>CR: "One thing that it has to do with is the adrenaline of being creative. For me it is a little bit addictive; the personal feeling of doing something useful and the feedback of others that it is actually useful. I enjoy being creative. I have an idea and I don't want that idea to die, because if it stays up there it dies, so I get it out into the community. It is interesting to see how your ideas interact with others."</p>
ORACLE	<p>OR: "Passion is what drives me to write and share and connect. I'm lucky I get to do something which I love to do."</p> <p>PR: "[The motivation comes] mainly from the technical passion for the product; getting to the solution, finding out how things work and sharing that."</p> <p>C: "If you ask some people, it is actually a hobby. It is something that is a genuine interest they don't mind spending their time on. It is something they are passionate about, it is not a chore, it is an extension of what they do, what they are good at and what they enjoy doing."</p>
MICROSOFT	<p>CR: "Like most people, I started my participation by reading and learning. I was fortunate enough to have some influential people help me get started writing and teaching others. Once I started writing more and explaining different techniques, I was hooked."</p> <p>PR: "I find my area of competence really interesting and it is not something I switch off when I go home."</p>

4.3.6 Personality trait and Pro-sharing attitude

The decision to participate and create content in organisational social media platforms comes down to the individual with some proclaiming a personality characteristic for their inclination to contribute (See Table 4.18). A pro-sharing attitude reportedly develops with participants stating that it is an integral part of being in a community. Activities like hoarding information or avoiding requests have arguably no place in such contexts where a sharing culture is largely cultivated.

Table 4.18: *Data quotes on personality and pro-sharing attitude*

SAP	<p>CR: <i>“Why I share; it is in my nature I guess, the way I was brought up, simply to me it is the human thing to do; educate people in what I know, it’s not in my style to hoard information, or to be proprietary in the tips and tricks that I know.”</i></p> <p>P: <i>“The second thing is that I am a people’s person. I like to meet people and interact with them in the community.”</i></p> <p>CR: <i>“Some people have that type of personality; they want to be active, to be heard and to voice their opinion.”</i></p>
ORACLE	<p>OR: <i>“By nature I am nose-y and I like to try new things. I always keep tap of what is going on and when I was introduced to RSS that’s how I started to monitor what’s going on online through my news reader. I am always connected. Now I am more connected than before. Everything I do is because I want to experiment; to try and see how it goes.”</i></p> <p>OR: <i>“Although, I have been described by many people as a natural teacher, I do like to help other people, get involved, get to do things and get to learn things in what I perceive as the correct method.”</i></p>
MICROSOFT	<p>PR: <i>“I wouldn’t say that it is anything in particular that makes me participate; perhaps my personality.”</i></p> <p>CR: <i>“First it is some kind of a personal characteristic. If you think it’s nice to share information then it is more likely to be a personal characteristic.”</i></p>

4.4 Impact of Participation and Contribution

A degree of impact is illustrated in terms of career and work opportunities as an outcome of recognition, visibility and reputation. Recognition Contribution Programs come to enhance these outcomes by introducing an organisational initiative that formalises recognition by awarding an annual title to the highly active external (and in some cases internal) platforms users. The opportunities discussed in terms of benefit and motivation can arguably materialise to a larger extent through these initiatives. A

more substantial degree of impact is essentially introduced with the SAP Mentor, Oracle ACE and Microsoft MVP programs respectively. The titles of Mentor, ACE and MVP have a certain level of authority and power in their corresponding platforms. They are identifiable in the internal and external environment and act as a means of prominence and expertise in these technology-driven online spaces. There is arguably a degree of value to obtaining these titles and that has an impact on the individual, the community and the organisational level.

4.4.1 Recognition Contribution Programs

Recognition Contribution Programs are organisational initiatives established to acknowledge contribution in social media platforms and encourage ongoing participation. Under these programs, prominent individuals in the external organisational environment are identified as subject matter experts engaging actively with the wider organisational community. Three broad types of participants are recognised, namely content creators, people who answer questions, write articles, post blogs or create any other forms of content; critics, people who provide feedback, ideas, comments or provide their views and opinions in any other way; and advocates, people who evangelise the products by indicating their capabilities, support other users by solving their issues or create any form of content about their application and strategic use. This award indicates that the recognised individuals are highly involved, and that they contribute content and information that is perceived to be valuable by the community and the organisation.

All three programs function on an annual nomination basis; both internal and external users can nominate individuals to be part of the program. An internal team assesses their participation and contribution over the past twelve months and decides which people are eligible for the title. The exact conditions are to a large extent subjective, but the main criteria required to recognise people under these programs include:

- Technical expertise; individuals need to be experts in specific areas or technologies the organisation is concerned with.

- Community leadership; individuals need to be leaders in the wider community and this is evident from the content they create, the number of people that follow them, and the frequency of accurate answers they give to people.
- Visibility and Accessibility; individuals need to be visible in the community and accessible to others in terms of interaction and exchange.

4.4.1.1 SAP Mentors

The SAP Mentor program was launched in 2006 and has currently 110 Mentors (20 employees, 38 customers, 33 partners and 19 other independent users). The recognised mentors are invited to SAP events, have privileged access to SAP information, have a private mentor only forum and wiki space on SCN, and can attend mentor only web seminars with SAP subject matter experts, where they can provide feedback and suggestions on SAP technologies (See Table 4.19). Mentors are also invited to attend two out of the four global TechEd events, where they do presentations and sessions for the attendees, and take part in meetings and briefings with product teams and other SAP experts.

Table 4.19: *Data quotes on the SAP Mentor program*

SAP	<p>PR: "So it feels like by being a mentor you are given a reward in terms of you guys know your stuff and you going to represent SAP well. It feels like an honour to be part of this group."</p> <p>CR: "I have been chosen to become an SAP mentor because of all the contributions I made to SCN. I think that I have made a lot of contacts and a lot of friends, and a lot of nice people have come to me because of my contributions."</p> <p>OR: "Being a mentor is an official endorsement. There are three skills that are required for you to be a mentor; you need to have subject matter expertise, to have visibility in the community (being involved), and to have some communication skills. So part of these communication skills is to be able to expose yourself, being recognised and acknowledged by the community is one positive aspect. I will never despise it, it is fun."</p>
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4.4.1.2 Oracle ACEs

The Oracle ACE program was launched in 2003 and consists of two levels of recognition; the Oracle ACE and Oracle ACE Director. There are currently 240 Oracle ACEs and 110 Oracle ACE Directors. The distinction between the two levels is that

Oracle ACEs have a track record of advocacy and it is the organisation's way of appreciating their contributions, while Oracle ACE Directors go beyond that by committing to future participation in an ongoing dialogue between Oracle and the people who use Oracle technology or applications in the real world (See Table 4.20). Essentially, Oracle ACE Directors have a number of requirements they should meet for the duration of twelve months including regular communication and interaction with the local community and user groups, providing feedback to Oracle including community input, maintaining an active Oracle-related blog, presenting at conferences, meetings and seminars, and posting answers and comments regularly in Oracle discussion forums. In return, Oracle ACE Directors obtain more privileges than Oracle ACEs, who have their ACE profile posted on OTN and are invited to participate in Oracle ACE events. Oracle ACE Directors, on the other hand, attend an annual briefing at Oracle HQ, get free software, have access to the product development and strategy teams, and have a private discussion forum for ACE Directors only.

Table 4.20: *Data quotes on the Oracle ACE program*

ORACLE	<p>PR: "Being an ACE Director adds that stamp of validity. So it is really helpful but also it helps legitimize your message when you are posting on the forums because they give you an ACE logo that appears next to your name. You know that this post comes from an ACE."</p> <p>PR: "For being active on the OTN forum and on my own blog and thereby demonstrating my technical skills I was nominated for the Oracle ACE award. This doesn't have a direct impact on the work I do, but it is a nice thing to have the opportunity to discuss Oracle related issues with some of the most knowledgeable Oracle experts in the world - it is always quite enlightening."</p> <p>ES: "The [Oracle ACE] program has been really successful for us and an interesting thing we found was that when you recognise people for their activities they become more and more active. It has a snowball effect. The more you engage with people the more active they become."</p>
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4.4.1.3 Microsoft MVPs

The MVP program is a more mature program running for more than 15 years recognising community contributions over the years from a number of contexts, from CompuServe to Newsgroups to Bulletin Boards and now to Social Media. There are currently 4,091 MVPs as Microsoft recognises both online and offline community contributions. With the MVP award individuals receive a number of benefits that last

for one year (See Table 4.21). These include access to a variety of technical resources, free use of all Microsoft products, and additional access to pre-release products before they hit the market. They also have an MVP only newsgroup and technical support to enhance their technical skills, and are appointed an MVP Lead; a Microsoft employee who is the MVP's appointed person of contact inside Microsoft. They are also invited to company global and regional events to network and build relationships with Microsoft employees and other MVPs. The idea behind this is to connect MVPs with the people responsible for the development of the particular products. This is done through live chat, conference calls or distribution lists, while they are also invited to the Microsoft headquarters for their annual summit to take part in a series of sessions, presentations, and discussions with the product groups. They are also encouraged to provide feedback via Connect; Microsoft's official feedback site.

Table 4.21: *Data quotes on the Microsoft MVP program*

MICROSOFT	<p>PR: <i>"It instilled confidence in me having the MVP title because Microsoft has given me the award rather than something I have to earn. I feel more confident in what I'm saying and in my ability and I think a lot of people feel the same when Microsoft has given them the title. Things like, 'He must know what he is talking about, he is well respected, he can inform based on some insider knowledge; he can direct companies in the right way', is what others think of me."</i></p> <p>ORM: <i>"It means a lot to have the MVP title. It shows that I have a history of being helpful, providing accurate answers, and being a source of accurate information. I mentioned before about how helping people online kept me up to speed with all of the current technological issues. Being an MVP enhanced this because it provided me with early release information, beta testing opportunities, and other perks that I could use to enhance my capabilities."</i></p> <p>ES: <i>"Featured MVP blogs on MSDN is the benefit of joining the program. One of the benefits is that MVPs are so highly recognized as experts and the technical content that they usually provide is fantastic. That is why their content is featured on MSDN, it's because it provides so much value."</i></p>
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4.4.2 Individual Level Impact

The recognition contribution programs first and foremost have a reported impact on the individuals themselves. Participants claimed to have become more popular and to have raised their status in the community (See Table 4.22). For some the Mentor, ACE or MVP badge represents some form of credential that essentially raises their reputation profile developing arguably a professional credibility whereby

they are perceived to be experts in a community of peers. It was also indicated that through these programs individuals obtain a number of organisational privileges including access to internal experts and product teams, free software and premium technical support, which they can utilise to expand their skills and network of experts. The data also showed that these titles can create career and work opportunities as these individuals appear to carry a stamp of approval from the organisation as leading experts.

Table 4.22: *Data quotes on the impact realised at the individual level*

SAP	<p>PR: <i>"In the community, the mentor status is like a flag; it gives you extra attention when you say something. When you are answering questions you immediately have better reputation, people trust you more but they also expect more from you. Being a mentor does give me a bigger base to stand on and voice my concerns on how the community should be, and it attracts more attention to what I say, if for example I write a blog about it more people read it because I have that mentor status."</i></p> <p>CR: <i>"I have always been very active, proactive, and collaborative, and I think by becoming an SAP mentor I have gained more responsibility and credibility."</i></p> <p>PR: <i>"So by becoming a mentor it helped me professionally because it gave me access to SAP executives and insiders in a way that I have not had before, and that also put me in a peer community with other mentors who have taught me a lot."</i></p>
ORACLE	<p>CR: <i>"I am an IT contractor and I suppose what it did is that I put it on my CV that I was an Oracle ACE, to make my CV stand out a bit more."</i></p> <p>PR: <i>"So it is a useful medium to reach out to a larger audience and give you better visibility on what you do."</i></p> <p>PR: <i>"Indirectly it is often for us easier to get introduced or get into contact with a prospect because we refer to our Oracle ACE status and it is something that distinguishes us from other companies."</i></p>
MICROSOFT	<p>PR: <i>"I also get access to the product teams' directors, I can phone any member of the product team, I can ask questions, I also get invited to pre-release events and get asked my opinion on what I think about the product. So I get very early viewing so I can understand the products before others even see them."</i></p> <p>CR: <i>"Also it drives me to "raise my game" to keep up with my peer MVPs. I get several job offers a week. I believe it is because of the MVP. It also provides status and my opinion is respected."</i></p> <p>PR: <i>"Also because I am well known in the community as well, I help people, I talk to people, I do presentations, and people come to me afterwards and say 'I've got this business case at work, can you come in for a few days?' So it does lead to opportunities, it does put you in places where you can get work. What it does is that the MVP status allows me to open doors. Having been an MVP for a while now and knowing the product teams I can open these doors a little bit easier."</i></p>

4.4.3 Community Level Impact

The impact of recognition is also evident on the community level. Visible recognition and status in these platforms creates the perception among the rest of the community that these individuals are subject matter experts and community leaders. Arguably then, the rest of the community looks up to them for content and resources, to get answers and relevant information to solve issues and problems, and as such learn and be able to carry on with their work. This indicates that they play a significant role in supporting, moderating and creating content for the community; where they can also influence others to get involved, be active and reach that status by encouraging desirable behaviours in others. Evidently, the community empowers highly contributing and recognised individuals in that they begin to assume support, leadership and influencer roles (See Table 4.23). Their history of contributions has led to this title, and the impact of that title feeds back into the platform. This community impact also demonstrates the development of a self-regulated environment, where this peer support system sustains much of the platform activity.

Table 4.23: *Data quotes on the impact realised at the community level*

SAP	<p>ER: <i>“Being a mentor isn’t just about the content you create, it is literally about helping others to get involved in creating content. It is about being an evangelist and helping the community to grow. It is about encouragement that what they are doing is good and valuable or getting them back on track when they get off.”</i></p> <p>CR: <i>“Once you are at the mentor status the things that you do are different. You have a certain feeling of responsibility; responsibility of trying to mentor others for example, to help them try to contribute more. As a mentor, this is expected, but being a mentor means that you personally are interested that the community flourishes, because we achieved through the community a certain level of reputation. It is not easy taking the first steps; until the content is there, there is no reason for people to come. If there is no reason for people to come then they won’t create content and then it dies. That’s the reason the mentors are so critical.”</i></p> <p>OR: <i>“The question is not how you get honoured by being a mentor, but how you honour the title as a mentor, what can you do for the community. It involves a certain level of leadership and moderation; how can you make the community stronger by adding your views and your subject expert mark.”</i></p>
ORACLE	<p>PR: <i>“I do believe I have an impact in the Oracle community for helping people to choose the right tool, to make informed decisions. I believe that the benefit that I bring to other users is to help them make the best decision so that they can build their systems with the right tools and with minimum effort. I try to provide as much information so people can make an informed decision.”</i></p> <p>C: <i>“Oracle says these are our customer ambassadors, these are ACEs and this is what they’ve done, look at their bios and their skill sets. That is something to aspire to.”</i></p>

	<p>ES: “The one common denominator is that they [ACEs and ACE directors] give back to the community, they share their knowledge, they interact, and they are active in the community. These people contribute as an act of faith. As far as the community is concerned the ACE program has been very effective in terms of helping us create a cohesive community because the people of this program are sort of the novel part of the system, they relay information.”</p>
MICROSOFT	<p>PR: “Being an MVP I think gives you a little bit of extra stealth. So the MVP is a bit of a rubber stamp from the product team, ‘we are happy that this guy knows what he is talking about, and he is out there, providing support, and helping people he doesn’t know’. When you go up to answer questions in the forums, when you go to conferences people see you as an MVP and they tend to listen, which is nice.”</p> <p>CR: “It means that I’m contributing to the community of peers by providing helpful information, presentations, and sharing of knowledge. I think it helps to have the title as a recognition of knowledge and efforts. I think I am seen as someone who attempts to build community, to share my knowledge and to help other developers.”</p> <p>ES: “By answering questions in the forums they not only get to keep their MVP status, they get seen as a community expert, which is of value to them personally and it keeps other people from making the same mistakes or the things they learnt from experience or by reading other forums they can share and again create a community of experts where people can go to get help and feel welcome to do so.”</p>

4.4.4 Organisational Level Impact

Even though organisational stakeholders stated to have deployed these programs to essentially show gratitude to highly active users for their contributions, it became apparent that a high level of impact emerges for the organisations well (See Table 4.24). Organisations award these titles to form a close relationship with individuals that are technical experts and community leaders. They create specific events, meetings and sessions whereby they develop internal-external communication prospects. This involves accumulation of feedback in terms of beta testing, product team sessions and other ways of expressing views and opinions on particular products. Information flows in the other direction as well when individuals convey messages back to the community. This essentially establishes an ongoing dialogue on the use and application of products from the perspective of the real users. Meanwhile, the perception that these individuals are subject matter experts means that the content they create can be also perceived as external advocacy when recognised individuals evangelise organisational products in the public domain. Arguably, there is more value to their input as an apparently independent voice with no vested interest. For organisations, these programs indicate the potential that can develop from activity in

social media platforms, while it is also used as a form of reinforcement to encourage desirable behaviours in inactive or lurking platform users.

Table 4.24: *Data quotes on the impact realised at the organisational level*

SAP	<p>PR: “I always make sure that I bring the feedback I get from every event/session back to the community. For instance, the blogs that I write are usually about a question related to an event. We are also the way of passing the message from the community back to SAP. We can bring our thoughts as people outside SAP and a lot of people can relate to that, and we can convey that message on behalf of SAP.”</p> <p>PR: “The value for SAP is that this core group of people have regular Webinars and conference calls with different products groups within SAP, so that they can say ‘let’s take this to the mentors to see what they think’ and in turn they get valuable feedback on the early stage of products from people who know the reality of it.”</p> <p>CR: “As an SAP Mentor, I get free access to meetings and to things that SAP wants to do. At times it is more that we are being used to advance something, things that might be more to SAP’s advantage and to the customers. SAP has given us access to product management but in a sense it is at their discretion or in their priority when that happens.”</p>
ORACLE	<p>ES: “We see them as advocates and experts in there. We have other benefits for them participating in the program to basically bridge the gap between Oracle and the ACE community. The Oracle ACE Directors are also a very important focus group. So when we have our technical briefings there is a lot of give and take, suggestions and feedback that comes from the ACE Directors to Oracle. They are a very valuable source of feedback.”</p> <p>OR: “We are more recognised as evangelists if you like because of our online interaction and community contribution and therefore Oracle as an organisation wants to harness this. They want to have people talk about their products and who best to do that than the people who are already talking about their products. They encourage us and give us more incentive to do that which is also a win-win situation.”</p> <p>ES: “Oracle can go on the marketing campaign so much, but when you have people who provide this incredible message why not encourage that. We want them to remain an independent voice even though they are recognised by us. We have a good relationship with them. Even if they have something not so positive they bring it to our attention, let’s talk about it, tell us what you are saying so we can figure it out.”</p>
MICROSOFT	<p>PR: “As an MVP I get to talk to the product teams directly. For a couple of new products I was invited early on to have a look, write my opinion, and things like that. I know for certain that the feedback the MVPs give to the product team, and they work very closely, does go back into the product because there are some features that have been tailored based on the feedback given by MVPs. I think the MVPs as a group together with the product teams tend to work very well together.”</p> <p>PRM: “What Microsoft gets out of it is having people like me who charge quite a lot per hour working for free as their pseudo tech support. I am a regular guy who is an expert trying to earn a living spending my free time to help them. So it is not that big of stretch for them to reward me non-monetarily with inclusion in certain events and in beta software. I think it is a great strategy for them because if they didn’t recognize that or provide any rewards it would be a leeching scenario. Instead they have chosen to reward and still not have to spend a fraction they would have of our time spent anyway.”</p> <p>ORM: “As an MVP I get to participate in meetings with many of the product teams to</p>

provide feedback and report the top issues we are seeing on the forums. We also get automatic invitations to any beta testing opportunities for the specific products we each support. We also have sources where we can get answers to just about any information that we need to help support users. It really has been a great experience for me. I don't think that I have ever met a Microsoft employee who was not interested in my feedback, whether it was positive or negative."

4.5 Construct Correlations

For each of the four themes a number of constructs have emerged from the data based on the categories formed from participant responses. The analysis of these constructs indicates that there are evident correlations, which provide deeper understanding into the participation process. This link between constructs indicates that usage behaviour is not a list of antecedents and factors that affect or result in contribution, but a complex structure of interrelated processes that enable a spectrum of behaviours. By illustrating the prominent correlations from the data, patterns of usage behaviour emerge. Table 4.25 shows these patterns by identifying a starting construct and analysing how it relates to others. As a result, particular links are made visible from a largely unstructured data demonstrating a number of behaviour processes.

Table 4.25: *Behaviour processes shown in terms of construct correlations*

Construct Correlations and Behaviour Processes	
Starting Construct	Related Constructs
Communication, Reach, Interaction, Connectivity	<ul style="list-style-type: none"> → Resources, Problem Solving and Keeping Informed → Knowledge, Expertise, Experience, Ideas → Community building → Learning → Organisational benefit of internal-external communication and interaction
Resources, Problem Solving, and Keeping Informed	<ul style="list-style-type: none"> → Learning → Reciprocity and Paying it Forward → Organisational benefit in terms of free online support by community of users
Knowledge, Experience, Expertise, Ideas	<ul style="list-style-type: none"> → Satisfaction and Enjoyment → Reciprocity and Paying it Forward → Learning

	<ul style="list-style-type: none"> → Resources, Problem Solving and Keeping Informed → Feedback on organisational products and on other users' contributions → Visibility and Online presence → Recognition → Organisational benefit in terms of external advocacy and product evangelism
Visibility and Online presence	<ul style="list-style-type: none"> → Recognition → Reputation → Indirect marketing and Career gains
Recognition	<ul style="list-style-type: none"> → Professional Credibility → Reputation → Indirect marketing and Career gains → Organisational recognition contribution programs
Learning	<ul style="list-style-type: none"> → Reciprocity and Paying it Forward
Reciprocity and Paying it Forward	<ul style="list-style-type: none"> → Community building
Community building	<ul style="list-style-type: none"> → Recognition → Satisfaction and Enjoyment
Satisfaction and Enjoyment	<ul style="list-style-type: none"> → Interest and Passion
Interest and Passion	<ul style="list-style-type: none"> → Resources, Problem Solving and Keeping Informed → Learning → Community building → Knowledge, Experience, Expertise, Ideas

One such process begins when individuals reach out to communicate and interact with others developing thus a sense of community. On one hand, it was claimed to be an inherently satisfying and enjoyable venture, while on the other, it was stated to establish a learning environment. Essentially, through the connections people make they are able to share knowledge and resources, solving each others' problems, widening their network and accessing applied information. These links are reportedly also formed with employees and other internal experts building thus an internal-external channel of communication that develops both individual and organisational impact.

Another sequence of related constructs involves the fundamental sharing of user knowledge, experience, expertise and ideas. When individuals share this form of

content, they are arguably providing useful resources to others in terms of problem solving and product information, offering thus free online support. When this content involves product capabilities, positive experiences, and suggestions for applications, individuals are providing a form of feedback engaging thus in external advocacy and product evangelism. By continuously sharing content, individuals are therefore in a position to create a visible online presence, through which they can be recognised as technology experts. Recognition can reportedly evolve into professional credibility and reputation creating therefore personal marketing opportunities and potential career gains. It can also reach the level of eligible membership in recognition contribution programs, incorporating individuals into more formal support and leadership roles. Recognition therefore is showed to be both an outcome and a driver for participation, as individuals claimed to both enjoy being known as well as strive to reach a higher professional status.

With learning being an ongoing process, this accessibility of different types of user-generated content reportedly motivates recipients to give back or pay it forward. While this enriches the knowledgebase of the corresponding platforms, it also develops community relationships, which some individuals are finding satisfying and enjoyable to maintain. In this respect, individuals are bound to find their niche audience and form relationships with users of similar interests. Passion, global expertise and community-oriented attitudes can therefore create opportunities for collaboration and innovation outside working practices as technology enthusiasts gather in a single space.

4.6 Summary

This chapter outlines the basic data outcomes identifying factors and constructs that answer the main research questions. The data is analysed following a qualitative paradigm through which categories of responses emerged. The richness of quotes and thick descriptions provided indicate data closeness and grounded interpretation. The complex structure of user behaviours in organisational social media platforms is evident as benefits, motivations and impacts interplay in a multi-level process to signify the composite activities that occur in non-monetary firm-hosted communities.

From these findings a spectrum of behaviours is evident that ranges from altruistic to self-interest attitudes. Participants appear to gain personally as well as to be interested in contributing towards the wellbeing of a community of professionals. They assume different roles accordingly, creating a trajectory of user participation that evolves over time. By reaching the top levels of recognition they can undertake leadership and influencer positions that have the highest degree of impact. The implications that emerge from these behaviours are discussed in the next chapter forming theoretical as well as practical contributions, firmly placing this research within existing literature and practice.

CHAPTER 5

Discussion of Findings

This chapter discusses the resulting findings by linking data to existing literature and building understanding in the area of organisational social media. In this interpretive cycle of analysis theoretical contributions are constructed and stakeholder implications are critically analysed with respect to the user participation behaviours explored. The themes identified have specific implications for the individuals as platform users, the organisation as a platform host, and the platform as a structure of collective action. Both in terms of theory and practice, organisational social media platforms introduce new dimensions of contribution and support that come to challenge the boundaries of the organisation, the engagement with the external environment and the generation of value for all stakeholders involved.

5.1 Theoretical Contributions

A series of models and frameworks have been developed across the four themes of the data. These conceptualisations depict some of the interesting processes in the data and challenge existing preconceptions about economic benefit, organisational marketing and community support. Organisational social media platforms have been presumably established as a dedicated space for stakeholders to access information, exchange resources and interact with one another. The implications that emerged in terms of recognition, professional status, community leadership, product evangelism, and career opportunities push for a more critical analysis as to who are leading the observed collective action, and what is the strategic importance of these platforms. One thing is certain that the firm-community relationships have changed; the organisational ecosystem has become far more

interconnected and the role of the consumer has evolved. This shift causes a power readjustment that is evident in the behaviours explored. The give and take between organisations and their stakeholders results in changed benefits and impact for all involved as they negotiate the terms of their interaction. The following models, frameworks and processes give a deeper understanding of the issues at hand by evaluating the user characteristics, the underlined reasons and the organisational purpose.

5.1.1 Spectrum of Behaviours

The categories of responses illustrated in sections 4.2, 4.3 and 4.4 (in chapter 4) indicate a spectrum of behaviours with certain emerging patterns between benefit, motivation and impact. In particular, benefits are seen as the outcomes individuals gain whilst participating in these platforms, while at the same time the value realised acts as an underlined motivation that encourages and drives contribution. This then develops individual, community and organisational impact as users become more involved undertaking community leadership positions and forming a closer relationship with the organisation; essentially becoming more invested with more responsibilities as well as more things to gain.

A traditional view divides these responses into intrinsic and extrinsic factors (Hars and Ou, 2002, Lui et al., 2002, Roberts et al., 2006). Their converging nature in this context however, forms a continuum of behaviours mapped between the two utmost positions of altruism and self-interest (See Figure 5.1). Along this scale, behaviours can be grouped into three main categories, namely *altruistic attitudes* (interest and passion, personality trait and pro-sharing attitude, community building and impact, satisfaction and enjoyment), *reciprocal behaviours* (reciprocity and paying it forward, communication, reach, interaction, connectivity, learning, resources, problem solving and keeping up to date, knowledge, expertise, experience and ideas), and *personal gain* (visibility and online presence, recognition, reputation, organisational benefit and impact, individual impact, indirect marketing and career gains).

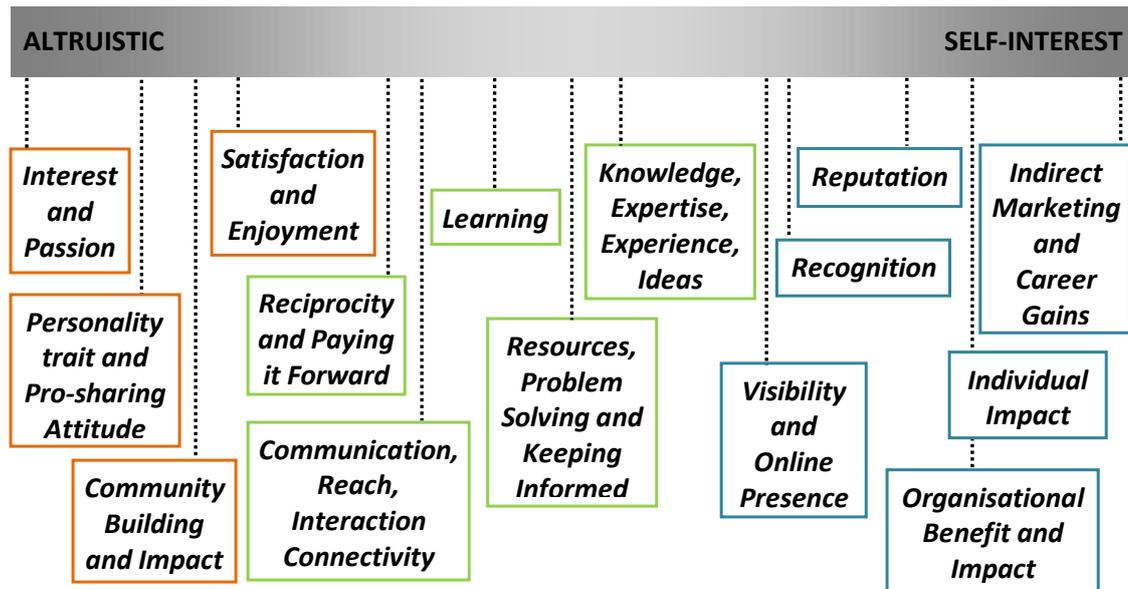


Figure 5.1: *The spectrum of behaviours indicates a continuum from altruistic to self-interest attitudes grouping constructs into three main categories; altruistic attitude, reciprocal behaviour, and personal gain.*

These three broad categories are supported in the literature. Altruism and the desire to help others emphasises direct satisfaction and an the internal sense of community obligation that drives content creation (Bryant et al., 2005, Hars and Ou, 2002, Lakhani and von Hippel, 2003, Oreg and Nov, 2008). The perception that information is a public good creates an information sharing culture characterised by pro-social norms that enables collective action (Ardichvili et al., 2003, Jarvenpaa and Staples, 2000, Kankanhalli et al., 2005, Wasko et al., 2004, Yu et al., 2010). These cultural factors are also rooted in a gift-giving culture that favours reciprocity (Bitzer et al., 2007, Ekeh, 1974, Hyde, 1983, Kollock, 1998, Mauss, 1990), under which individuals pay forward the help they received themselves (Benbya and Belbaly, 2010, Lin et al., 2009, Shah, 2006, Wasko and Faraj, 2000, Wiertz and de Ruyter, 2007). Reciprocal helping behaviour is an underlined drive that encourages interaction and contribution of resources, through which individuals are able to learn about particular technologies, solve problems and share their own experiences. Learning is essential when it comes to software development and use (Benbya and Belbaly, 2010, Fang and Neufeld, 2009, Lakhani and von Hippel, 2003, Ye and Kishida, 2003); while the opportunity to gain visibility when sharing content introduces a series of other benefits and motivations. One is online presence, which is based on the ability to develop

identification in a community of technology professionals that establishes recognition in the long run (Bagozzi and Dholakia, 2006, Hars and Ou, 2002, Hertel et al., 2003). Status, reputation, self-marketing and career gains have been shown to result from voluntary contribution in a variety of other settings as well, indicating self-interest and personal gain attitudes (Benbya and Belbaly, 2010, Hars and Ou, 2002, Lerner and Tirole, 2002, Lui et al., 2002, Stewart and Gosain, 2006, Wu et al., 2007, Zeitlyn, 2003). Consequently, the potential for self-marketing and career gains can reportedly motivate individuals to contribute more and to ever enhance their platform presence. As a result, these constructs show collectively that individuals participate in organisational social media platforms with a mixture of altruistic attitudes, reciprocal behaviours and personal gain expectations; a finding that is well-grounded in social and psychological literature.

This spectrum of behaviours is strongly reinforced through feedback obtained as part of social interaction. Feedback can be defined as advice, criticism or information about the usefulness of something or somebody's work. It is therefore a crucial aspect of social media as it is reportedly invaluable for ranking, filtering and retrieving content. It basically reflects value and quality, enabling also contributors to assess their standing in a community. In this respect, feedback is usually given in terms of comments, ratings, reviews or counter posts to indicate opinions and views. Through feedback individuals are able to evaluate their social influence (Brzozowski et al., 2009), and identify quality in the mass of information (Agichtein et al., 2008). Theories of reciprocity (Gouldner, 1960), reinforcement (Ferster and Skinner, 1957, Komaki et al., 1996), and the need to belong (Baumeister and Leary, 1995) suggest that feedback from other users can establish long term participation and contribution.

Participants of this study indicated that the feedback they get from other members is significant in encouraging their continued contributions. The perceived value of content that emerges from community feedback creates satisfaction and recognition, which in turn translates into encouragement and motivation to engage in an ongoing process of contribution (See Figure 5.2). Every iteration of this feedback loop increases benefit and motivation, which then encourages further contribution and content creation. Through this feedback mechanism individuals claimed to accumulate

valued outcomes; the more individuals contribute valuable content, the more benefits they gain and the more motivated they become to maintain a contributing and sharing attitude.

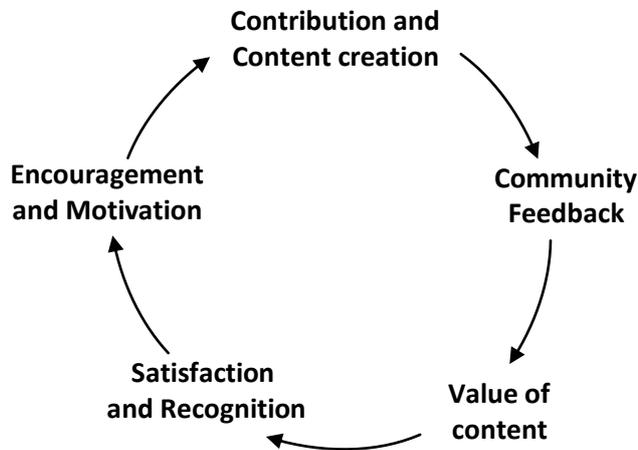


Figure 5.2: *A positive feedback loop of contribution that accumulates personal benefit and motivation*

The significance of feedback is well documented in organisational, social and psychological literature. According to Ryan and Deci (2000), feedback as a social-contextual event conduces towards feelings of competence during an action that can enhance intrinsic motivation for that action. Feedback is known to not only lead to the achievement of performance goals, but also to a higher sense of competence (Barr and Conlon, 1994). As noted in self-efficacy related literature (Bandura, 1977, Bandura, 1986, Compeau and Higgins, 1995, Igaris and Iivari, 1995), individuals partly rely on the opinion of others as well as the encouragement and support they receive to judge their own ability. Barr and Conlon (1994) argue that feedback also affects the intention to persist with a new behaviour, while Lu and Hsiao (2007) state that feedback has a strong effect on personal outcome expectations.

The emphasis here is that feedback is part of the mechanism by which prominent individuals get recognised. It is essentially not only about personal satisfaction, but also about the impact of valuable contributions in terms of recognition. Individuals claimed to be recognised for supporting as well as leading a community of peer professionals based on the feedback they get from others that their content is valuable. This comprises the community aspect entailed in recognition

contribution programs. Recognised individuals must be involved in content creation and support, as well as be accessible to other platform members in order to be eligible awardees. One way the internal team assesses their community involvement and accessibility is by examining the feedback they get from their followers. This helps determine their standing in the platform when the annual title dissemination takes place. For individuals who are working towards a title, the feedback they receive from fellow platform users can be crucial.

On the whole, the spectrum of behaviours identified here enriches the content and activity, arguably building social capital in organisational social media platforms; a collective outcome through which community assets are developed from the interactions of individuals (Chu, 2009, Wasko et al., 2004, Wiertz and de Ruyter, 2007). These assets are relevant to the field and involve code, trials, previews, experience, practical tips, strategic views and creative thinking. There are therefore some similarities with open source and open innovation contexts (Benbya and Belbaly, 2010, Chesbrough and Appleyard, 2007, West and Gallagher, 2006), but the strong presence of the host organisation creates other implications. The content is to a large extent focused on organisational products, practices, and other general topics that affect or interest the organisation; community projects that facilitate open collaboration are by and large rare; and the outcome of contribution, i.e. the development of a knowledgebase, is bound to the organisation. Organisational social media platforms therefore, hint towards a new business model for organisations that utilise the connectivity of their ecosystem communities.

The findings regarding the underlying reasons to participate are vastly supported in the literature. The participation behaviours, sharing attitudes and motivation theories explored in the literature review (sections 2.3.1, 2.3.2 and 2.3.3 respectively) form a foundation regarding volunteer-based activities and non-monetary exchanges. The spectrum of behaviours outlined here in terms of altruistic attitudes, reciprocal behaviours, and personal gain expectations develops insights into this particular context of user contribution. Each specific factor is not of particular surprise and is well-grounded in existing literature; e.g. (Benbya and Belbaly, 2010, Chu, 2009, Hars and Ou, 2002, Kollock, 1998, Pink, 2010, Wasko and Faraj, 2000, Wasko et al.,

2004). However, the main contribution here is the overall spectrum that provides an overarching view of the scale of behaviours that exist in organisational social media platforms; the fact that users contribute in order to help others as well as help themselves.

5.1.2 Typology of users and user trajectory

Access to information and resources entails the fundamental function of organisational social media platforms. The underlined reasons for creating, sharing and distributing these resources are crucial for the health and growth of any community (Cothrel, 2000, Jarvenpaa and Staples, 2000, Preece, 2001). The skill and career level of an individual reportedly acts as a parameter to the content users contribute as it affects their information needs, outcome expectation and underlined drivers (Butler et al., 2008, Constant et al., 1994). The reason for identifying typologies in online behaviours is to enable characteristic patterns or types of users to be determined, contributing thus to improved understanding of individual users (Johnson and Kulpa, 2007). The data of this research revealed three broad typologies of users supported largely by the quotes in Table 4.4, where participants at the top tier of contribution elaborate on the different stages of participation namely:

- I. **The ‘newbie’:** These are usually individuals in the early stages of their career. The main reasons for engaging with social media is to ask questions, solve problems and get information on the immediate issues and challenges they are facing in their day-to-day work. These can be young professionals new to their position trying to figure things out. Learning and networking are the main benefits obtained as they value the expertise and experience of other more knowledgeable users.
- II. **The knowledgeable:** These are usually individuals in the middle stages of their career. They recognise the value of such environments because they have been helped in the past and are still participating to learn more, extend their professional development, as well as give back and pay forward the help they received themselves. Career enhancement and ongoing learning are the main

benefits obtained as they are on the path to establishing themselves as experts in their field.

III. The expert: These are usually individuals who are established in their field and are widely recognised as experts. They are in a stage in their professional life that they want to give back and help others learn. These can be high level consultants and other executives, or retired professionals. They are highly skilled and have a deep understanding of how the industry works. They are driven by the recognition they get from both the community and the host organisation, and they benefit from that recognition in terms of gaining reputation and generating client prospects.

The typology presented here identifies a pattern of online behaviour that is determined by the professional expertise of users. Wasko and Faraj (2005) indicated that individuals share information when they have the expertise and experience to do so; while Ryan and Deci (2000) showed that competence can yield self-motivation. Existing typologies of online user behaviour include social technographics segmented as inactives, spectators, joiners, collectors, critics, conversationalists and creators (Bernoff, 2010); social networking site users as sporadic, lurkers, socialisers, debaters and actives (Brandtzaeg and Heim, 2011); information exchange users with non-interactive, interactive collaborative and interactive hostile behaviours (Burnett, 2000); and formal and informal community roles with subject matter experts, knowledge managers, moderators, advocates, instigators, opinion leaders, isolates, boundary spanners and gatekeepers (Cothrel and Williams, 1999, Loughman et al., 2000, Wellman, 2001).

The three levels of knowledge and skill identified here, however, affect the type of content that individuals contribute, the benefits they gain and the motivations that drive them. This directional pattern, where more experienced members provide information to novices, shows that ‘newbies’ enjoy learning and accessing resources, while knowledgeable and expert users obtain more ample benefits including recognition, reputation and career prospects. The interaction between the three types of users is depicted in Figure 5.3 through the direction of knowledge exchange, where ‘newbies’ learn from knowledgeable and expert users, knowledgeable users mentor

‘newbies’ while they learn from experts, and expert users mentor both ‘newbies’ and knowledgeable users. In this respect, knowledge and information exchange is shaped by the expertise of the respective platform members, which progressively evolves over time. Newbies become knowledgeable users as learning ensues, information accumulates and professional development builds up; while knowledgeable users establish themselves as experts and community leaders due to their ongoing reciprocal and pro-sharing attitude.

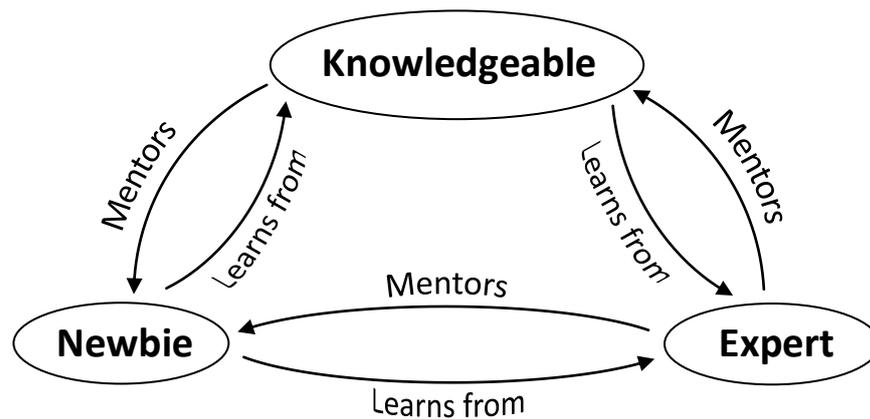


Figure 5.3: *The direction of knowledge exchange between the three types of users*

This creates a pathway of user behaviours that comes in line with Lave and Wenger’s (1991) legitimate peripheral participation. A life cycle is identified showing that when lurkers decide to participate they enter a community as novices, develop into regulars and leaders, and then leave as outbound users when their interests have changed (Lave and Wenger, 1991). In this context, this pathway is defined slightly differently. Once users start to actively contribute, their history of participation can reach an influencer status and from there to be recognised as technology experts in particular areas. This creates a trajectory of user behaviours based on the level of contribution involved ranging from lurking to recognition (See Figure 5.4):

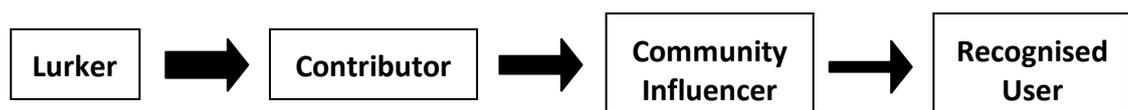


Figure 5.4: *The different levels of participation with increasing degrees of contribution transforming lurking into recognition*

- I. **Lurker:** Passive use of content with no intention to create or share content.

- II. Contributor:** Somewhat active participation and engagement with some intention to create and share content. Contribution can range from answering questions in forums and commenting on blogs, videos and podcasts to editing wiki pages and writing blog posts, articles and sample code.
- III. Community Influencer:** Highly active participation and contribution in terms of creating and responding to existing content, and generally engaging with the community. Highly motivated to participate for both personal and community benefit. At this level, users develop a closer relationship with the community, and therefore undertake an influencer role, which involves moderating and organising content, responding to and supporting other users, and creating new areas of content to explore individual and community interests.
- IV. Recognised User:** Recognition Contributor Programs exist that identify particular users as community leaders in specific areas of expertise. Being officially recognised under organisational recognition initiatives, like the SAP Mentor, Oracle ACE and Microsoft MVP programs, has a number of privileges as well as requirements. While recognised users get to develop a more insightful relationship with the organisation and its product managers, they also have greater community responsibility in terms of being visible and accessible as a technology expert.

This pathway is strongly based on Preece and Shneiderman's (2009) reader-to-leader framework, which indicates a series of participant roles, ranging from reader to contributor to collaborator and then to leader. In this trajectory, some lurkers become contributors, some contributors become community influencers and some influencers become recognised users. According to Nielsen's (2006) 1-9-90% rule, this transformative process usually applies to a small percentage of the overall participants. Not every user follows this trajectory, indicated with the decreasing size of the block arrows; the number of people who proceed from one level to the next decreases. Some users are happy to lurk without feeling the need to contribute; some contributors are not aspiring to gain a community influencer role; and some community influencers are not looking for personal recognition. Possible reasons for lurking or reaching a certain level and not going further include time and work-related constraints, feeling

inexperienced and intimidated, and lacking expertise, competence and status aspirations. Lurking, however, is a starting position (Marett and Joshi, 2009, Nonnecke and Preece, 2001, Preece et al., 2004). It is an important group of users from which desirable behaviours emerge given the appropriate encouragements and motivations.

On the whole, the typology of users and the user trajectory depict the information exchange tendencies that exist. Individuals share content because they have the expertise to do so and because they are able to build their professional development as they move along a pathway of contribution by increasing their community involvement. While expertise involves the levels of newbie, knowledgeable and expert, involvement is about the decision of a particular user to move beyond lurking and as such advance participation from contribution to influence and then to recognition. By combining the two we can better understand the participant roles that emerge across both expertise and involvement. Figure 5.5 shows the most prominent participant roles depicted across the two dimensions.

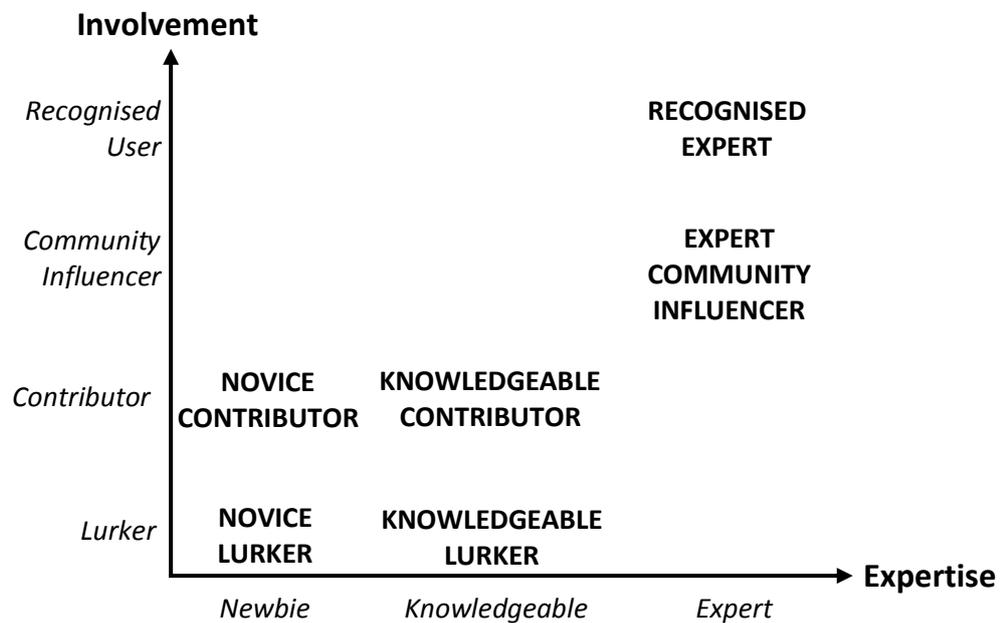


Figure 5.5: *Most prominent participant roles in terms of expertise and involvement*

What these scales show is that the level of expertise affects the level of involvement. Newbies or novices are usually involved in peripheral activities leaving leadership roles to expert users as high levels of technical expertise are required for individuals to assume community influencer roles and gain recognition titles.

Knowledgeable users are defined as a middle ground for individuals who have things to share but have not reached their peak. Emergent roles are, hence, formed that support community health and growth by helping young professionals learn, enriching thus the knowledgebase of the platform. The participation intentions are in this way identified developing understanding of the exchange relationships between users. The value in knowing these characteristics means that organisations are aware of their audience, their needs and most importantly their motivations. Tapping into the motivations of individuals means that organisations can develop strong relationships with their ecosystem by satisfying their needs in return for platform loyalty, brand affiliation and ecosystem support.

The main contribution here is the identification of user characteristics; the indication that users of organisational social media platforms lie across the newbie-knowledgeable-expert scale with varying intentions to contribute creating lurkers, contributors, influencers and recognised users. Authors like Lave and Wenger (1991), Nielsen (2006) and Preece and Shneiderman (2009) identified comparable user types, but the typology presented includes the effect of organisational recognition that creates further implications (discussed in section 5.1.3). What impacts the most is the fact that the recognised users gain more tangible benefits while the rest reportedly aspire to get there. This is further supported by the trajectory of user behaviour whereby individuals gradually increase their degree of contribution based on increasing levels of expertise and willingness. This helps them gain community-oriented prestige and consequently recognition-related benefits.

5.1.3 The Impact of Recognition Contribution Programs

Organisational recognition contribution programs acknowledge the time and effort active contributors put in by recognising them as technical experts and community leaders. The fact that this recognition is visible in a given organisational community used by customers, partners and other interested individuals, introduces some complexity in trying to understand the impact of such organisational initiatives that disseminate recognition to highly active participants. As well as having intrinsic value, recognised individuals also encourage desirable behaviours in others. It was

claimed that recognised users assume mostly the roles of content creators, critics and advocates resulting to multi-dimensional impact analysed on the individual, community and organisational levels (Demetriou and Kawalek, 2011); findings that are extensively supported in the data (section 4.4 in chapter 4):

- **The individual level**, where the recognition results to a number of organisational privileges such as access to premium resources, attendance and presentation at global organisational events, and private feedback sessions with internal experts and product managers. As a title, it also enhances the individuals' professional credibility as experts, and generates benefits from possible career and work-related opportunities.
- **The community level**, where the recognition enhances the professional expertise and community standing of individuals as they undertake support, leadership and influencer roles in organisational social media platforms. The Mentor, ACE and MVP badge that appears next to individuals' contributions and in their platform profiles constitutes a distinguishing flag that is recognisable among platform users and reflects superior technical expertise and top community involvement. Support, leadership and influence emerge because the title is visible creating followers in this respect.
- **The organisational level**, where the recognition bridges a perceived gap between the internal and external organisational environment through which internal-external communication occurs, direct feedback from recognised individuals to organisational employees identifying issues and offering suggestions on products, services and practices is offered, and external advocacy for the organisation and its products takes place.

Figure 5.6 depicts this process through which active participation and contribution in organisational communities powered by social media have the potential to develop significant sources of impact. Organisations recognise the top contributors in their online communities as leading experts in a technology or an area that the organisation is concerned with, and in turn the recognition gained by an individual can have valuable outcomes (Demetriou and Kawalek, 2011). From the data collected, it

was shown that individuals obtain organisational privileges, develop professional credibility and get further career and work opportunities. The rest of the community has peer expert leaders as a result, who offer support but also get to influence; while, the organisation obtains external feedback, establishes internal-external communication and nurtures the external environment in anticipation of external advocacy.

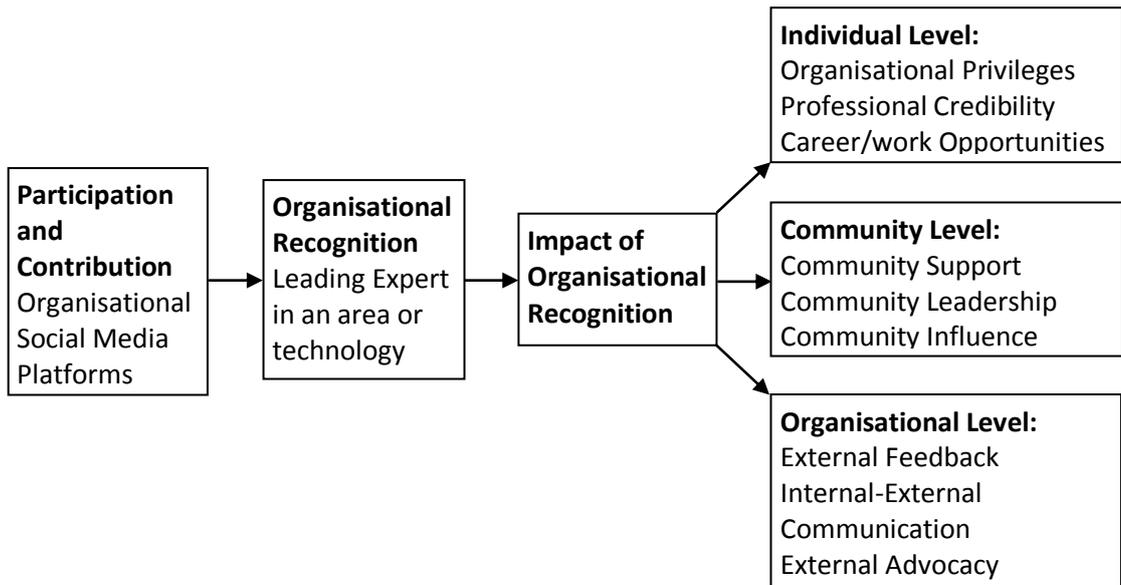


Figure 5.6: *Process diagram of the impact of Recognition Contribution Programs (Demetriou and Kawalek, 2011)*

More specifically, at the individual level, the recipients of this title of recognition obtain some tangible privileges that the organisation offers as a ‘thank you’ for your contribution. The most significant impact however, is the ability to create professional credibility by making a name for yourself as an expert, building your reputation in a community of peers and other professionals with the potential of further work and career opportunities. It also means that as a recognised individual you are seen as a leader in the community with the responsibility of supporting others and the privilege of influencing them as well. When that influence is about the organisation’s products, services and practices, external advocacy also takes place. These individuals are perceived to be leading experts, to have some insider knowledge of the organisation and its products, and to be relatable as customers or partners. Therefore, what they say about the organisation and its products can be seemingly

more valuable rather than coming from an internal source. Organisations seek to nurture this free external advocacy because it is reportedly more effective than any marketing campaign. In addition, the formal relationship developed between these people and the organisation leads to direct feedback from external sources to organisational product and strategy teams, creating thus channels for internal-external communication and awareness of the market, the end users and their needs.

On the whole, these recognition contribution programs appear to expand on existing peer rating and forum point systems (Lui et al., 2002, Yang et al., 2005, Zacharia et al., 1999). Beyond the necessary participation incentives, these programs also create a reputation profile for each awarded individual. Next to the total points earned, a badge of recognition appears with implications that transcend both the online and offline space. For programs that have become well-known in the field, awarded individuals are able to market that title as an accomplishment, showcasing in this way expertise and leadership, enhancing thus their resume. Organisations have expert leaders on their platforms and at their events supporting and advocating products, while other individuals are following their content and in some cases their path to reach that status and enjoy the same privileges and opportunities that may arise.

The importance of recognition was also stated by Jeppesen and Frederiksen (2006), whereby communities of users view the recognition they get from host organisations as a motivational factor to continuously participate and share their innovations. The model presented here, explores this recognition further by illustrating how that recognition create implications on the individual, community and organisational level. Chan et al. (2004) defined recognition in terms of identity, expertise and tangible recognition, whose effects include a sense of community, obligation, self-efficacy and self-esteem (See Figure 2.17). The impact of recognition contribution programs revealed in this research however, includes organisational privileges, professional credibility, career/work opportunities, community support, leadership and influence, external feedback, internal-external communication, and external advocacy (See Figure 5.6). Besides identifying these constructs, the significance of this model lies in the implications developed for further research in areas including marketing and user power (discussed extensively in section 5.3). In

particular, the impact of recognition on the organisational level opens the doors for further implications as the host-user relationship is renegotiated when external feedback and advocacy are provided. A certain level of power is given to recognised users, who obtain a degree of control over the host organisation. This suggests the existence of a new business model expanding user participation behaviours into other research areas.

5.2 Practical Considerations

In terms of practice, it becomes evident that organisational social media platforms emerge from firm-hosted online communities that offer service and support facilities. These platforms enhanced their functionality with social media in response to the market hype around this generation of tools. In this respect, organisational communities move beyond technical forums and knowledge repositories to include blogs, wikis, podcasts and content-sharing tools. This research has facilitated a deeper look at the particular platform functionalities and enabled understanding of how participation is structured, what tools and permissions exist and how that implicates participation. In addition, organisational positions have been identified that support and manage the activities that take place, indicating that this emerging community structure is well-established. Collectively, organisational social media platforms indicate how large corporations can re-evaluate the relationship with their external environment and create online spaces that can yield strategic outcomes in terms of brand affiliation and participation marketing.

5.2.1 Platform Comparison

The three organisational cases studied here revealed similarities as well differences in the way social media tools are organised and used (See Table 3.7 in chapter 3). SAP integrated social media tools onto a single platform, Oracle established a community site that launches to distinct spaces, and Microsoft developed two distinct platforms for developers and IT professionals. In particular, the SAP Community Network (SCN) has a series of tools including forums, blogs and a wiki organised across the SAP Developer Network, the Business Process Experts and

Business Analytics; all of which are integrated onto a single platform. The Oracle community site has different spaces for each tool with technical forums on the Oracle Technology Network, employee blogging on Oracle Blogs, social networking and idea voting on Oracle Mix, and a public wiki space on Oracle Wiki. Microsoft established entirely separated platforms dedicated to two major groups of organisational stakeholders, i.e. developers and IT professionals. MSDN and TechNet operate as two distinct spaces using more or less the same tools including technical forums, employee and MVP blogs, video podcasts and learning libraries. Integrating tools on a single space was claimed to increase understanding across the different areas by enabling ‘techies’ and business-oriented people to communicate and exchange information directly leading thus to further interaction and collaboration opportunities. Separating use into distinct areas, on the other hand, was claimed to create more targeted spaces that cater more closely to the needs of the particular members stating that different groups of users focus on different areas and as such have different needs.

Out of the three organisations, only SAP allows external users to blog on their platform, with Oracle limiting blogging to employees and Microsoft to employees and MVPs only. On SCN, users ask for blogging privileges and submit content to be given a blogging status that allows them to start. Once they have contributed a sufficient amount of content they can become expert bloggers and freely post entries. To make up for the limiting permissions, the Oracle Wiki has a user-maintained page that lists external blogs, while employees’ blogs often feature external bloggers and link to content beyond the platform in terms of RSS and news aggregators. As far as Microsoft is concerned, by giving blogging privileges to MVPs as well, it reportedly shows that recognised experts and community leaders have a voice on the platform creating content from an external point of view. Across all three cases a sense of control sneaks up by managing the blogging permissions, either partly by giving blogging status to certain external users or completely by allowing only employees to blog.

This sense of controlling part of the content creation process was linked with a concern for security and trust, mentioned from both internal and external users. Internally, users stated to be concerned about the freedom with which employees can

blog, the material they are allowed to share, and whether that bridges any security or competitive aspects. Externally, for platforms that allow only employees and/or recognised users to blog, users claimed to view that content as an official source of release dates and updates, and to look in external blogs for user experiences and views on products. It seems that in this way employee blogs are used as a mass broadcasting medium, which limits their potential for two-way communication and interaction. The struggle between autonomy and control is undoubtedly persistent with organisations being used to protecting their assets as well as their image, and with individuals getting more opinionated and autonomous about sharing.

By broadening the range of bloggers on organisational social media platforms, a more representative sample of the external environment can be heard. This enriches the source of content, on one hand, but opens the floodgates to noise, clutter, abuse and spam, on the other. It can be overwhelming for organisations trying to manage increasing volumes of content, but social media communities are evidently evolving into self-regulated spaces with particular members assuming community support and influencer roles. Active members gradually become content moderators, gain blogging permissions and build topics of interest. This makes them part of the support team as they help structure and manage the content and activity in these platforms. Through their involvement organisations get to know their external environment better, target platform content more precisely, and learn to deal with their environment's needs in order for customer loyalty to be built on strong interpersonal relationships.

5.2.2 Emerging organisational positions

A number of organisational positions have been identified in response to organisational social media platforms. The community support employees that were interviewed in this research hold the titles and/or are part of the teams outlined in Table 5.1. These include a variety of positions that range from support and online service to public relations and marketing. These employees are involved in some respect with the functionalities of the corresponding platforms and the initiatives ran to engage active contributors.

Table 5.1: *Organisational positions, teams and departments in relation to organisational social media platforms*

Organisational Positions, Teams and Departments	
SAP	<ul style="list-style-type: none"> • Community Evangelist • Chief Evangelist • Community Coordinator • Director of Community and Collaboration Services • Manager of the SAP Mentor program • Community Advocate • Senior VP of SAP Community Network • Chief Operating Officer for SAP Community Network • Social Media Audience Marketing team
Oracle	<ul style="list-style-type: none"> • Senior Director of Oracle Technology Network (OTN) and Development programs • Manager of the Architect Community on OTN • Manager of the ACE program • Marketing Director of Innovation and Social Media • Social Media and developing strategy for Marketing and Communications for Partners
Microsoft	<ul style="list-style-type: none"> • Customer Service and Support in the department of Community and Online Support • Manager of the MVP program • Program Manager for Community and Online Support • Technology Evangelist team • Managing PR for the Technology Audience • Technical Audience Marketing Manager • Field Readiness and Community team • Developer and Platform Evangelist • Senior Community Manager for Springboard Technical Experts Program • Program Manager for Microsoft Community Contributor award

These positions indicate an emerging group of practitioners, firmly establishing social media within organisational practice. Evidently, this generation of tools has moved beyond the initial hype and buzz (Best, 2006, Skiba et al., 2006), with organisational positions being formed to cover the social media outreach needs of a firm. The infrastructure of these positions shows the internal support required in establishing social media platforms in terms of development, maintenance and continuous support. In addition, the involvement of departments in the likes of

marketing and public relations shows that these platforms are utilised beyond technical service and support; evidently expanding into technology evangelism, audience marketing and social media innovation.

Social media practice therefore, appears to be emerging as an essential branch of communication and support, spanning the service, marketing and strategy areas. The skills necessary seem to be formed in a bottom-up ad-hoc mode as organisations improve the engagement with their internal and external environment in anticipation for user-driven opportunities. Such practice is still in its infancy as many organisations still experiment with the tools and ideas of social media. The platforms explored here give indications on how well these initiatives can work and portray lessons to other firms on organising and managing social media initiatives for large scale sectors that focus on service support and knowledge-driven exchange.

5.3 Reflections and Implications

Organisational social media platforms are volunteer-based structures for professional content-creation and information distribution. Participants are involved based on the level of expertise they possess and the level of engagement they wish to undertake ranging from novices to experts and from lurkers to recognised individuals. The content created and the activity observed appears to be motivated by a continuum of behaviours ranging from altruism to self-interest. Individuals realise personal value outcomes that motivate them in undertaking continuous sharing behaviours, while the host organisations run programs and initiatives to acknowledge highly active users, spanning the purpose of these platforms from service support to strategic community involvement.

It might appear that organisations are ceding control to employees, customers and partners in these value-laden social structures, but the clear winner is yet to be determined in this give and take relationship. Reflecting on the data collected a number of issues and implications are identified that come to question the presence of the organisation in this community structure, the power distribution between individual users and the host organisation, the level of independence maintained for highly

involved users, the potential marketing relationship developed from customer advocacy, and the widening of organisational boundaries that have come to include these external-facing structures in an emerging business model. Some of the issues that emerged during analysis were beyond the scope of the research that is why they are not covered in the literature review.

5.3.1 Organisational Presence

By hosting these community structures, organisations have a central role in social media platforms; they establish the features, create part of the content, and support and manage use of the tools. Community support employees work for these platforms (See Table 5.1), and internal experts participate through content-creation and question answering. Looking at it from a sceptical point of view, one can question whether the organisational presence ends with the participation and support of these internal groups of users, or whether there is a corporate identity on the platform as well that drives a business-focused agenda.

The reason for these questions is that business opportunities are expected to arise from user-generated content (Culnan et al., 2010, Qualman, 2009, Safko and Brake, 2009). According to Hagel III and Armstrong (1997), online communities can be seen as having purchasing power due to the establishment of a group with a critical mass that allows members to exchange information on things including product prices and quality. In these contexts it was shown that favourable content can result from product feedback suggestions, community-driven projects and other collaborative activities, which are strongly based on creative thinking and idea generation. What happens then when business value and innovation potential are detected in social media platforms? Who gets to manage, influence and utilise these outcomes, when both internal and external organisational members are actively participating?

These concerns point towards issues of development, governance and intellectual property rights indicating the extent of implications involved in firm-hosted online environments, bringing about matters of strategy and business model implementation. Based on the level of impact explored in terms of product feedback and product team affiliations, organisational social media platforms have the potential

to develop a community model for organisational open source and open innovation activities. This strongly depends, however, upon whether the host organisation is willing to open up its development process by increasing transparency and accessibility to external users in anticipation of outside-in innovation (Gassmann and Enkel, 2004).

5.3.2 Power Distribution

According to French and Raven (1959) there are five main bases of power; coercive, reward, legitimate, referent and expert power. Benfari et al. (1986) augmented this list with power in terms of authority, information, affiliation and group power. Viewing power as the capacity to influence the behaviour of others, means that power can reside in rewards or coercion, in authority or reciprocal behaviours, in having the information or being the expert, and in the synergies of the group process by knowing or referring to the right people (Benfari et al., 1986). Social media platforms portray social organisational structures where different sources of power co-exist pulling in different directions and favouring the internal and external sides accordingly.

By providing free technical support, participating in product feedback and building the firm's knowledge base, it may appear that organisations are exploiting their customers' and partners' willingness to contribute. These people can be seen to be taken advantage of by large corporations, seemingly exploiting their technical passion in return for peer support and expert content. These individuals, however, claim to gain significantly as well, by utilising the platform for professional credibility, expert reputation, potential career advancement and further paid work. It may seem therefore that organisations have the upper hand in terms of power by being able to utilise external content and place themselves in a favourable position (Jeppesen and Frederiksen, 2006); but collective bargaining power may also develop as individuals gather to solve each other's problems, share product experiences and essentially establish a user-driven space (Parameswaran and Whinston, 2007).

Furthermore, community leadership and influence accumulate as organisations award individuals titles of recognition. In particular, the recognition and visibility of

certain ‘powerful’ contributors can potentially mobilise users when they are dissatisfied with product performance, or when their feedback, suggestions and generally expert voice is ignored. Individuals are empowered in this way to criticise the company and its products when they are unhappy. The leadership position of recognised users can assimilate collective peer support and carry out strong criticism in an open domain that the organisation cannot remove or ignore, but might be forced to respond to and be accountable for. It can be argued therefore, that through these recognition contribution programs, organisations evidently grant a level of authority to external users that can potentially equalise the power imbalance between the organisation and its external environment. The users’ ‘cognitive surplus’ might be readily available for organisations to utilise (Shirky, 2010), but these individuals are gaining a great deal of personal benefit that arguably underlines their willingness to participate. By establishing social media platforms, external voices can be heard creating channels for ideas, opinions and feedback that can potentially trigger transformation or change in this way.

5.3.3 Brand Affiliation and Independent Voice

The percentage of community participants that reach the level of recognised user is small, but portrays an elite group of professionals at the top tier of participation. These individuals have a privileged relationship with the company and an influential status within the community. Their newfound professional reputation distinguishes them as experts and leaders in the community, while their relationship with the organisation constitutes a two-way channel of communication that can be evidently beneficial as some of these recognised individuals are even diffused into internal positions arguably based on their platform prominence.

Equally, this affiliation with the brand comes to scrutinise the extent of their independent voice in the community. The longer a person holds a recognition title, the more conferences and events he/she attends in support of the organisation, and the more briefings and meetings he/she takes part to discuss issues with product and strategy teams, the more embedded he/she becomes in the organisational culture and that can arguably affect their impartiality. The involvement of external stakeholders in

particular events and sessions presumably develops strong bonds with internal organisational members, which can affect their views and opinions regarding the products and the firm itself.

Even though recognised individuals do not account for the majority of platform users, with only a handful of cases where community members have been recruited; this still places the organisation in a favourable position. The recognition awarded to certain individuals feeds back into the organisation as brand affiliation, with recognised users comprising a special group of participants in this context. They appear to have strong independent voices used to make their opinions heard by organisations, indicating an ability to rally user communities in cases when they are dissatisfied with the performance of a product or when product changes should be implemented. On the other hand, their affiliation with product teams and managers creates close links with internal organisational members, which challenges their impartial standpoint in the external domain, especially when they are talking about the applications of particular products, their positive aspects and why other people should use them. In this respect, their autonomy can be scrutinised by the community when they appear to be in the organisation's pocket.

5.3.4 Marketing Relationship and External Advocacy

Advocacy in the marketing domain refers to mutual dialogue and partnership, which assumes that if the company advocates for its customers, those customers will reciprocate with trust, purchases and enduring loyalty (Urban, 2004, 2005). In particular, a company advocates for its customers' interests and its customers advocate for the company by buying its products, helping it design better ones, and most importantly by telling others about them (Urban, 2004, 2005). Advocacy is therefore perceived to be the next marketing imperative due to the accelerating growth of the power of consumers through which organisations are able to build deeper customer relationships by earning trust and commitment, and by developing mutual transparency, dialogue and partnership with customers (Lawer and Knox, 2006).

In this context, external advocacy emerges from an assumed objective stance of recognised individuals endorsing particular products without any vested interest in the

organisation's profit. Their community influence and visibility means that these individuals have a certain following and that the things they talk about can have an impact on others' choice of products. The title they are awarded can be therefore seen as an endorsement from organisations, arguably approving them as 'informal spokespeople' and enabling them to talk openly about their expertise and experience with the products. Given the marketing impact this can have, further questions are raised about the underlining reasons why recognition contribution programs are established to begin with, implying issues of anticipated marketing potentials on behalf of organisations.

Having customers and partners talk about how good the organisational products are in a domain used by other professionals can influence purchase and use. These recognised individuals are perceived to be independent expert voices with an insider's knowledge and an outsider's relatedness. The information and knowledge they share can have an impact in a community of professionals creating thus more effective marketing channels for the organisation; rhetorically prompting whether there is anyone better to promote organisational products than the expert leaders among users.

5.3.5 Extended Boundaries for an Emerging Business Model

Organisations are interacting with their external environment in a variety of ways changing the way in which customer service and support can be delivered, product and sales advocacy can be established, and innovation and product development can be achieved. Technical answers, user experience, product feedback and practical tips can boost support, marketing and beta testing complementing internal activities with external content. As a result, organisational social media platforms can constitute a new interface with the external environment, leveraging flexible forms of communication and interaction for customer support, partner cooperation and product innovation. By allowing non-corporate voices to be heard, organisations are projecting a corporate image that reflects community-oriented values and transparency of process ultimately portraying them as relatable non-faceless institutions.

The question raised therefore is whether this is a marketing move or an emerging business model. The organisations explored in this research appear to extend their firm boundaries to include to a certain respect their external stakeholders. This can lead to many opportunities for an organisation with the most significant being the ability to create and preserve organisational flexibility (Harrison and John, 1996). Through these platforms organisations are able to engage with specific groups of external stakeholders, creating opportunities for instrumental outcomes. According to existing literature, these can comprise improved predictability of changes in the external environment resulting from better communication with external stakeholders, and higher percentages of successful innovations resulting from the involvement of stakeholders in product/service design teams (Harrison and John, 1996). What is being questioned here is whether these platforms constitute the new boundaries of the organisation where capital can be created and then utilised by the organisation.

These platform structures support predictions made about new business models where volunteer-based projects and networked markets are claimed to become the next stage of human organisation and economic production (Benkler, 2006, Levine et al., 2001). The ability to exploit user-generated content can arguably add value to commercial activities (Tredinnick, 2006), and management capabilities can be unlocked through stakeholder participation (Chui et al., 2009). The locus of value creation shifts towards the relationship the product has with the consumer, and the relationships that people around the product forge with each other (Briggs, 2009). As a result, firm-hosted social media platforms can be seen as brand-building tools (Wiertz and de Ruyter, 2007), market-sensing mediums (McWilliam, 2000) and eventually as strategic assets (Jeppesen and Frederiksen, 2006). Organisations, however, still have a lot to consider regarding the potential of an extended-boundary firm where decentralised and transparent processes can support internal activities, essentially establishing these platforms as a new social media business model.

5.4 Summary

In this chapter, theoretical contributions and practical considerations are outlined leading to data reflections and implications. By answering the research

questions, a spectrum of behaviours has been identified indicating that participation and contribution in organisational social media platforms involves altruistic attitudes, reciprocal behaviours and personal gain expectations. Furthermore, the level of competence and expertise underlines a scale of participation ranging from novice to knowledgeable to expert, while the level of involvement an individual wishes to undertake develops an ascending pathway of engagement building from lurker to contributor to community influencer to recognised user. The recognition contribution programs explored showed to have significant impact on the individuals, the community and the organisation, creating further implications in terms of power, brand affiliation and marketing potential. In conclusion, these emerging organisational communities appear to be well-established structures in terms of internal infrastructure and business implications potentially establishing into long-term business models.

The next and final chapter concludes this thesis by briefly summarising the research undertaken, illustrating the major findings and contributions. Finally, possible trajectories for further research are also outlined.

CHAPTER 6

Conclusions and Future Directions

The final chapter summarises the research undertaken in this thesis outlining the main findings and outcomes of the study. The contributions and implications are reiterated building a strategic view for organisational social media platforms. The constraints of this study together with the issues raised during discussion develop directions for future research expanding this work further.

6.1 Research Summary

The aim of this research was to explore the user participation behaviours in the emerging structure of organisational social media platforms; a term coined and defined in this thesis. It became evident that this community structure, originating from technical discussion forums and knowledge repository systems, has evolved into a social media platform incorporating social media tools for customer and partner engagement. In particular, the participation and contribution involved in these large-scale organisational communities is concerned with solving user problems, generating professional and technical content, and facilitating conversation in the external organisational domain.

The voluntary contributions and non-compulsory engagement involved justify an in depth analysis of the individual rationalisations for participating in organisational social media platforms. The data for this research was collected from three large-scale organisational platforms in the software and technology sector, namely the SAP Community Network, the Oracle Community site, and Microsoft's platforms of MSDN and TechNet. By exploring how social media tools were used in these contexts, what benefits and value outcomes were generated, what drivers and motivations

underlined user contributions, and what impact active participation has on the stakeholders involved, a breadth of responses was collected. Table 6.1 outlines the basic data findings from this largely qualitative semi-structured research, indicating a personal decision to participate driven by an underlined motivation for value-gain outcomes, be they personal, social or organisational.

Table 6.1: *The basic data findings from data collection*

Basic Data Findings	
<i>Use of social media tools and content</i>	<ul style="list-style-type: none"> • Professional and technical content • Practical information, solutions and tips • Bottom up adoption • Embedded use in working routine • Different levels of participation based on the degree of contribution
<i>Benefits and Value</i>	<ul style="list-style-type: none"> • Communication, Reach, Interaction, Connectivity • Resources, Problem solving and Keeping informed • Knowledge, Expertise, Experience, Ideas • Community building • Learning • Recognition • Indirect marketing and Career gains • Organisational benefit
<i>Drivers and Motivation</i>	<ul style="list-style-type: none"> • Reciprocity and Paying it Forward • Visibility and Online presence • Reputation management • Satisfaction and Enjoyment • Interest and Passion • Personality trait and Pro-sharing attitude
<i>Impact of Active Use</i>	<ul style="list-style-type: none"> • At the Individual level: <ul style="list-style-type: none"> • Organisational Privileges • Professional Credibility • Career and Work Opportunities • At the Community level: <ul style="list-style-type: none"> • Community Support • Community Leadership • Community Influence • At the Organisational level: <ul style="list-style-type: none"> • External Feedback • Internal-External Communication • External Advocacy

More specifically, the social spheres of engagement create interpersonal relationships that built altruistic, reciprocal as well as personal gain attitudes. The evidence shows that participation can be about passion, interest and enjoyment for individuals who feel a sense of satisfaction when sharing ideas, co-creating content and helping others. Experienced users can empathise with novices and through these platforms establish channels of learning, mentoring and generally giving back to each other. At the other end, personal outcomes and gain expectations surface from the development of recognition, status and credibility, which can be utilised in the pursuit for career advancement, introduction to client prospects and possible paid work. Most of the behaviours identified are arguably situated along this spectrum with users reportedly claiming a combination of such attitudes.

The bottom-up process of adoption makes motivation a central theme in this research. The activity and behaviours identified seem to be based on an intrinsic decision to participate. Individual users appear to value the benefits and outcomes gained from participation, to have incorporated usage in their working routine and to be driven in keeping up with their platform presence. A general pro-sharing attitude appears to emerge. It centres on reciprocity, satisfaction, enjoyment and similar interests, on one hand; while on the other, the effects of visibility and professional reputation seem to motivate individuals in contributing to a community of professionals as well as taking leadership positions and creating a name for themselves.

The organisational recognition contribution programs fit with this trend as heavy contributors get acknowledged and non-recognised users can be incentivised. These initiatives are well-known in the platforms explored, with recognised users developing a sense of differentiation and expert superiority while gaining tangible and intangible benefits from the organisation as well as the community. Even though recognition initiatives were claimed to serve as a ‘thank you’, their main aim appears to be about increasing engagement. Through these programs people interested in the organisation and its products get to form close relationships with internal members and as such develop opportunities for direct feedback, external advocacy, brand affiliation and marketing potential.

Understanding how organisational social media platforms work can be a considerable contribution in its own right as actual social media business value is reportedly scarce. As a case study research these findings provide practical data on social media applications, engagement and value from the point of view of the individual users. In terms of practical lessons learnt, these organisational social media platforms indicate how firms can interact with a range of stakeholder audiences, be they customers, partners, developers or business process analysts by catering to their different needs, providing necessary resources and engaging on a personal level. What other firms can take from this is that social media communities should be built on existing capabilities, in this case service support, and should aim to fulfil particular customer and partner needs in order for them to grow into rich media environments.

6.2 Reflection on Outcomes and Contributions

The results of this study are not intended for generalisation as this exploratory work primarily aims to contribute towards theory development, or the process of theorising as defined by Weick (1995). For this reason, the resulting findings are interpreted in terms of implications; the effect these explored behaviours can have primarily for the individuals who invest a sufficient amount of time in participating and the organisation which dedicates resources for the support and management of these platforms. It was shown therefore that user participation behaviours in organisational social media platforms affect the support infrastructure in software and technology firms with the potential to expand into the innovation and marketing channels.

As far as individual users are concerned, their contribution can be understood on a scale of participation roles that essentially inform the level of expertise they hold and the degree of dedication they are willing to dispense. This has created a typology of users with ‘newbies’, knowledgeable users and experts; and a trajectory of user involvement ranging from lurker and contributor to community influencer and recognised user. What has been found is that low levels of expertise affect the level of involvement shown. Newbies usually lurk and knowledgeable users contribute fairly, whilst expert contributors are perceived to influence the community and result in

recognition. Knowledge, expertise, resources and information are prominent in these platforms and strongly affect the content and the level of participation. With these platforms rooted in service and support, it is no surprise that technical ability affects the participation patterns. The knowledge base created there as well, enables professional development, which allows individual members to enhance their technical expertise and move along the scale from 'newbie' to expert given their willingness to get involved remains high. The interplay of expertise and involvement on a personal level therefore affects the participation patterns identified, the value gained and the motivations claimed.

With individual interest in participation, organisational social media platforms can flourish. Rich technical content, personalised experience and thought leadership create an environment for problem-solving, professional development and expert recognition. To promote these positive behaviours recognition contribution programs come to boost technical expertise by acknowledging individual contributions and establishing a higher level of participation in this way. The elite group of recognised individuals create interesting behavioural patterns that affect platform participation, impact the organisation and build opportunities for the awarded individuals themselves.

The user-generated content allocates power to both the organisation as a source of free technical support, and to the highly active community users as reputation, leadership and status. Both sides appear to gain significantly, creating further implications. Affiliation with the brand develops challenging the degree of impartial opinions and views. An outlet of external advocacy also forms that creates an indirect marketing relationship. The organisation appears in this way to extend its reach beyond traditional firm boundaries in search for external input to certain internal processes introducing the possibility of externally-driven development, innovation or even organisational change. These issues raised during discussion constitute different elements of a renegotiated community/firm relationship that can form the basis of an emerging business model as the channels for product feedback, brand loyalty, marketing and innovation evolve based on an evolving relationship with the consumer in an interconnected internal-external environment.

In essence, from basic community involvement strong organisational implications can emerge as participation appears to be value-laden, with the benefits gained creating further individual, community and organisational impacts. A number of issues are at play in the contexts explored that go beyond participation and contribution. With social media being the latest web movement, organisations are forced to think strategically and explore possible implications in terms of branding, marketing and innovation. This research has shown that there is potential for the development of a new business model that incorporates these elements in a structure of extended organisational boundaries to generate different forms of tangible and intangible return, creating a more strategic aspect on stakeholder social media involvement. Organisational social media platforms therefore, portray a community structure in a professional domain that can create a magnitude of opportunities for both the individual users and the host organisation. When utilised effectively, such a context can strengthen the professional path of an individual, and place the host firm at an advantage regarding its stakeholder relationships.

6.3 Directions for Further Research

The area of organisational social media is a relatively new area of both theory and practice in need for more research and deeper understanding. As an immediate next step to this research, quantitative data is needed to support the patterns and frameworks developed in this thesis. Organisational social media platforms need to be explored in other business sectors as well in order to demonstrate similarities and differences in behavioural patterns as the subject of participation changes changing in this way the stakeholder needs. Furthermore, some of the implication issues already discussed lend themselves to various streams of further research.

For one, the recognition contribution programs should be explored further. As organisational initiatives, their purpose has been questioned. Opportunities for product evangelism and external advocacy have challenged the altruistic organisational standpoint whereby relationships with industry experts can be arguably established in anticipation for purchase influence and product direction through “independent” voices. This leads to further questions of actual impact of external feedback on product

development and organisational strategy. If the only reason organisations create these initiatives is to promote the activities of these people in anticipation of advocacy for products and services, then the feedback that they provide can be limited in terms of affecting any real change. It will be interesting therefore, to explore whether these initiatives are rooted in marketing campaigns and as such driven by marketing departments. Also, it will be important to look at particular threads of feedback in order to estimate whether a community of customers, partners and other interested individuals can affect any real change with respect to product development and strategic decisions.

In addition, the strategic utilisation of organisational social media platforms has also come up during discussion. It will be interesting to identify the extent of branding, marketing and innovation from these platforms, and form links between social media and the corresponding theoretical areas. Finally, the discussion on the possibility of a new business model lends itself to further research such as the extent of governance in platform-driven projects, the distribution of power as free support and external advocacy accumulate, and the safeguarding of objective stance versus endorsed behaviours.

6.4 Summary

This research study has provided answers to the research questions set out for qualitative exploration. Anticipated patterns and emerging issues have been identified that enrich the understanding of organisational social media platforms. This context is situated at the firm boundaries, creating in this way internal-external implications as the relationship between organisations and their external environment is renegotiated. By exploring user participation behaviours in such environments, the impact of user communities is illustrated in the service and support sector. Future research is required, however, to explore these issues beyond the individual perspective of participation and contribution, in order to demonstrate their strategic importance further.

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Appendix A – Interview Schema and Questions

Interview Questions	
Introductory Questions	<ul style="list-style-type: none"> a. What do you do? b. How is that related to <company name> and its products/services? c. Which <company name> platforms do you use? d. How is participation in any of these platforms related to what you do in your day job?
Social Media Use Questions	<p>For internal/external users:</p> <ul style="list-style-type: none"> a. On the <platform name> that you use, which tools (forums, blogs, wikis, videos, articles, etc.) do you mostly use and how (reading, commenting, contributing, moderating, etc)? b. Can you describe your participation behaviour? How frequent do you participate and engage with these tools? What do you usually do when you are on the <platform name>? <hr/> <p>For community support team members:</p> <ul style="list-style-type: none"> a. On the <company name> platforms that you work for, which tools (forums, blogs, wikis, videos, articles, etc.) do you use and how (reading, commenting, contributing, moderating, etc)? b. What does your job description involve? How frequent do you perform the activities described?
Benefit and Value Questions	<p>For internal/external users:</p> <ul style="list-style-type: none"> a. What benefits can be identified from using these tools in the <platform name>? b. How do such benefits relate to your work or work-related practices? c. How does the use of these tools integrate to other parts of work and/or career development aspects? <hr/> <p>For community support team members:</p> <ul style="list-style-type: none"> a. What benefits can be identified from using these tools in the <platform name>? b. How do such benefits relate to work or work-related practices? c. What are specifically the organisational benefits of establishing such platforms?
Drivers and Motivations Questions	<p>For internal/external users:</p> <ul style="list-style-type: none"> a. How did you find out about the < platform name>? b. Why did you choose to join? Why do you keep participating? What does it mean for you to participate, whether reading or contributing, on the site? c. How has your participation behaviour evolved since the day you joined? What did you do on the platform at the beginning? Has that changed in any way, and if yes, how and why?

	<p>For community support team members:</p> <ol style="list-style-type: none"> From your perspective, why did users choose to join? Why do they keep participating? What does it mean for them to participate, whether reading or contributing, on the site? From your perspective, how does participation behaviour evolve for users from the initial stages to a more involved active presence?
<p>Impact Questions</p>	<p>For recognised users:</p> <ol style="list-style-type: none"> When and how did you get awarded the <recognition title name>? What does the recognition mean to you? What is the impact of having that <recognition title name> in terms of your day job? Does it lead to any opportunities/new clients? What is the impact of having the <recognition title name> towards the community? How are you being perceived in the community? What is the impact of having the <recognition title name> towards <company name>? Do you get the chance to influence any decisions in terms of giving feedback?
	<p>For community support team members:</p> <ol style="list-style-type: none"> How does the <recognition program name> function? What are the criteria for people to be recognised? What are the requirements for an individual once he has been awarded? What is the impact of having the <recognition title name> for an individual? What benefits do they get for being recognised in this program? What is the impact of having the <recognition title name> towards the community? How are these individuals perceived in the community? What is the impact of having the <recognition title name> towards <company name>? What does the relationship between these individuals and <company name> involve?
	<p>For other external users:</p> <ol style="list-style-type: none"> Are you aware of the <recognition program name>? Do you know how it works and what it involves? Would you like to be awarded the <recognition title name>? What is your opinion of the people who have been awarded the <recognition title name> so far?
	<p>For other internal users:</p> <ol style="list-style-type: none"> Are you aware of the <recognition program name>? Do you know how it works and what it involves? What is your opinion of the people who have been awarded the <recognition title name> so far? Does the <recognition program name> and the people awarded the <recognition title name> have any impact on your work?

Appendix B – Transcription Tags and Coding

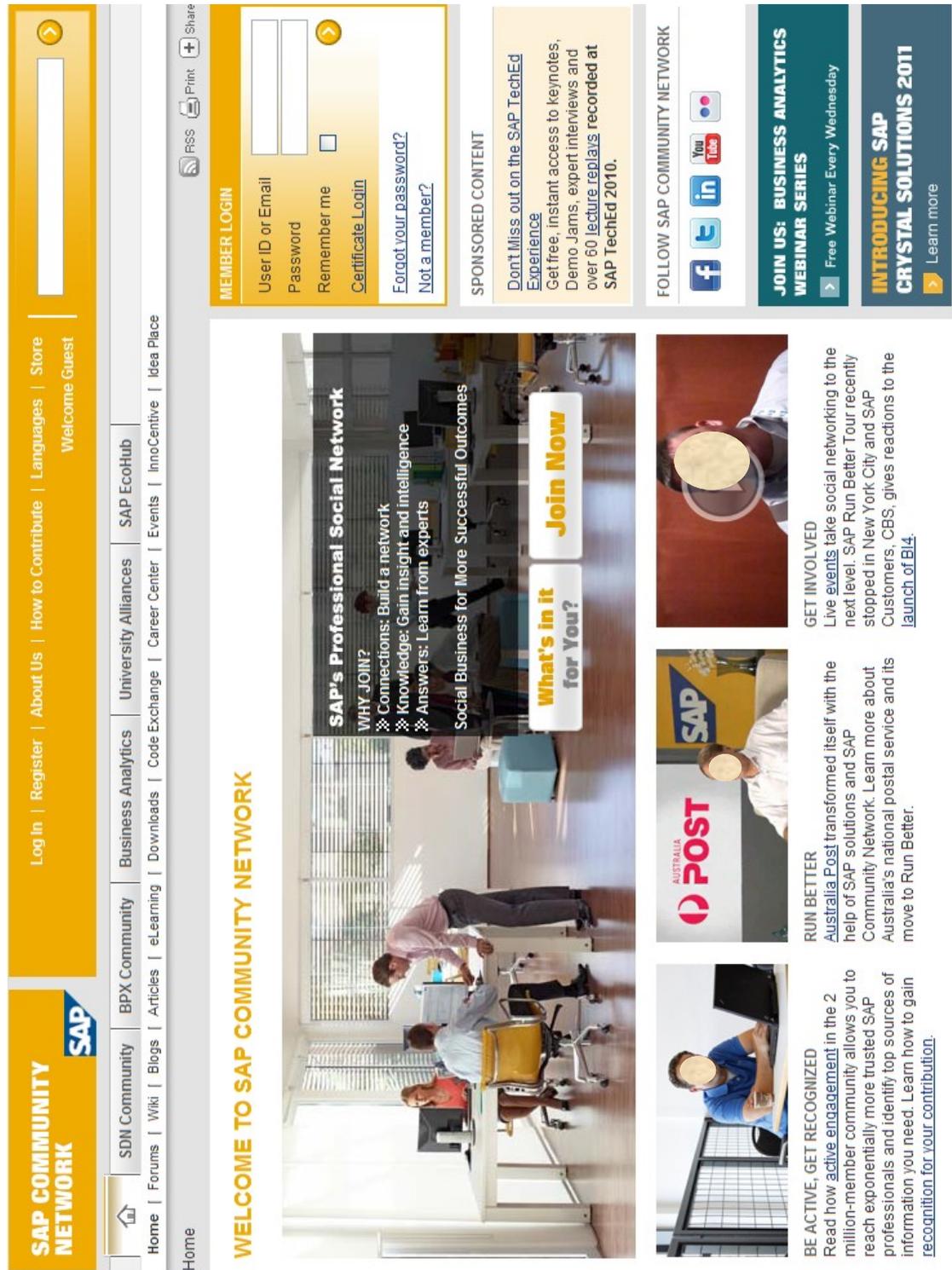
Question Tags

<organisational social media initiative>	data about the tools and programs an organisation runs as part of their social media initiative
<usage behaviour-activities>	data about the use of the platform and its corresponding tools
<benefits-value-outcomes>	data about the perceived benefits, value and any other outcomes obtained by a participant when using a corresponding platform
<usage behaviour-motivation>	data about the perceived underlined drivers and motivations that encourage participants to use a corresponding platform
<usage behaviour-impact>	data about the perceived effects of on-going participation in a corresponding platform

Participant tags

Relationship with organisation	E = company employee
	C = company customer
	P = company partner
	O = other (e.g. freelancers, retired IT professionals, industry analysts/bloggers, software training providers)
Specific role in the platform	M = moderator user
	R = formally recognised user
	S = community support user

Appendix C – Research Contexts



Screenshot of the SAP Community Network

ORACLE

(Sign In/Register for Account | Help) United States ▾ Communities ▾ I am a... ▾ I want to... ▾ Secure Search 🔍

Products and Services Downloads Store Support Education Partners About Oracle Technology Network ▾

Communities

Oracle Technology Network
Oracle PartnerNetwork
Oracle CFO Central
Oracle Discussion Forums
Oracle Blogs
Oracle Ace Program
Oracle Wiki
Oracle Mix
Oracle User Groups

Oracle Community

Whether you're a customer, a developer, a partner, or just someone who's interested in Oracle products and technology, Oracle offers you a range of ways to get involved and be heard. Explore Oracle's well-known global communities, including OTN, OPN, and Oracle User Groups—as well as newer fast-growing communities based on social media including the new Oracle Wiki and Oracle Mix. See below to get started.

Oracle 1-800-633-0738
 Have Oracle call you
 Global contacts
 Sales Chat Live

Expand All | Close All

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TECHNET FEATURE ARCHIVE

On the TechNet Blog

The Week that Was 31st Jan - 5th Feb
Last week was a busy one with everything from cloud services to competitions and event announcements. There were also a couple of interesting case studies on Virtualisation and in... more
Monday, Feb 6

7 Minutes with Steve Plank: Business Agility and the Cloud
We put Steve Plank in a room full of video equipment, computers and a whiteboard. Here's what happened... He got really into explaining cloud computing and how to keep y... more
Thursday, Feb 2

Competition: Share the Love for SQLBits with TechNet UK
The weather has chilled somewhat in the UK this last week and the SQLBits Conference is coming up fast... with snow forecast next week we thought that it would be a great idea... more
Wednesday, Feb 1

News

02/06 Determine Readiness for Windows 7 and IE9 Migration

02/06 Get Trained on Lync Server 2010 Solutions

02/06 Performance Monitoring with System Center 2012

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Cloud

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Stay abreast of Microsoft cloud technology, take advantage of published scenarios, and update your cloud skills.

Hot Topics for IT Pros

Microsoft Ends Support of Windows XP, Office 2003 in 2014
Find out what this means for your company and how Microsoft can help.

Windows 7 migration: get the right advice, right here

Please help us understand where you are on your journey to Windows 7. Thirty seconds is all it takes and it'll enable us to give you the right advice, tailored to you and your needs.

GET STARTED

Windows 7

SECURITY NEWS

- Microsoft security bulletin summary for January 2012
- Webcast: January 2012 Security Bulletins

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Screenshot of Microsoft TechNet

Appendix D – Point System

SAP COMMUNITY NETWORK (SCN) CONTRIBUTOR RECOGNITION PROGRAM

SAP Community Network (SCN) is a dynamic and diverse community with over 2 million members. Being part of this vibrant, passionate community is like being part of a family. As you get active on SCN, you will make friends, grow your knowledge and build a reputation. Regular participation is important for getting the most out of your chosen community - whether it's SDN, BPX, BOC, or UAC. Not only do you get ongoing feedback and have an active area to exchange your ideas, there are rewards for getting active and staying active on SCN. To that end, we have established a point system with tiered recognition levels to measure your activity, thank you for your contributions and reward you with deserved visibility within the community.

Points are assigned differently throughout collaboration areas - forums, blogs, wiki and articles - on SCN:

- In the forums, the original poster gives points to fellow SCN members for the best answers provided
- SCN Moderators (SAP and external moderators) assign points for blog posts
- SCN Moderators (SAP and external moderators) assign points for wiki contributions manually or on a quarterly basis
- SCN Moderators (SAP and external moderators) assign points to articles, white papers, rich media content, etc.

The number of points you get for your contributions grows over the years (lifetime points) but the SCN recognition program is based on the points that you have accumulated in the last 12 months, on a rolling period. This way, the SCN recognition you get is tied to your most recent contributions over the last 12 months. This also means that you need to contribute on a regular basis to maintain your contribution status over the rolling 12 months.

ACTIVE CONTRIBUTORS

Active Contributors are SCN members that have reached at least 250 points in the last 12 months at any date. As an Active Contributor you can showcase your level of contribution with badges assigned to your name on SCN:

	Active Contributor	Bronze:	250-499	points
	Active Contributor	Silver:	500-1,499	points
	Active Contributor	Gold:	1,500-2,499	points
	Active Contributor Platinum: 2,500 points and above			

In addition, Active Contributors are highlighted in various places on SCN and in some of our communications. At the end of the year, the names of all Active Contributors are listed on SCN. Active Contributors with Gold and Platinum status may be featured in SCN Spotlights - based on SAP and SCN Moderator discretion.

TOPIC LEADERS

Topic Leaders (formerly referred to as Top Contributors) are recognized at the end of each calendar year as being the three leading contributors in a specific category on SCN. They get to enjoy additional recognition on SCN and are involved in exclusive activities at events such as SAP TechEd. Throughout the year, on the "Find the Expert" page, you can see who are the five leading contributors per category that "compete" for the title of "Topic Leader" at the end of the year. To achieve Topic Leader status, points across all areas of contribution (blogs, forums, wikis, articles and rich media content) are considered at the end of year.

SAP MENTORS

SAP mentors are experts nominated by the Community and SAP. They are chosen for their quality of contribution and influence in the community, on SCN and outside SCN.

Oracle Technology Network – How to contribute

Legend ?	
	Guru : 2500 - 1000000 pts
	Expert : 1000 - 2499 pts
	Pro : 500 - 999 pts
	Journeyman : 200 - 499 pts
	Newbie : 0 - 199 pts
	Oracle ACE Director
	Oracle ACE Member
	Oracle Employee ACE
	Java Champion
	Helpful Answer (5 pts)
	Correct Answer (10 pts)

-  Answered question
-  Unanswered question with answer points still available
-  Unanswered question

Top Users in Category	
	hsawwan (43,720)
	JohnGoodwin (29,115)
	Frank Kulash (25,595)
	ATD (13,000)
	Helios- Gunes E... (11,200)
	BluShadow (11,115)
	hoek (11,045)
	jarola (10,820)
	Justin Cave (10,785)
	sb92075 (10,705)

MSDN and TechNet Recognition System

What are these little medals under my Display Name?

The Forums now include a basic recognition system to gauge your participation in the community. Based on your actions, you are awarded points. Based on the number of points you earn, you get the medals.

How are my points calculated?

You earn points based on the action you perform on the site. The following table lists the points that you earn for various actions.

Action	Points
You reply to a question started by another user	2
Your reply is marked as the answer	10
Your reply is voted as being helpful	5 x (# of votes)

Can I lose points?

Yes, you lose points that you gained if the post for which you gained the points is deleted or the post that you created contains an answer that is removed.

How many points do I need to get a particular star rating?

The following table lists the points for each star rating.

Medals	Points
0	0
1	1 ~ 750
2	751 ~ 2000
3	2001 ~ 7500
4	7501 ~ 15000
5	15001 +

How long will it take my points to be awarded?

It may take up to 24 hours for points to be reflected by the system.

What should I do if I do not get the points I should receive?

There may be cases where you feel that the system has not properly awarded you points for a particular action. While we have taken precautions to cover all scenarios, errors may still occur. If you feel that your points are showing a significant error, please report it to the Bug Reporting Forum.

Why are my points at forums.microsoft.com different than this system?

A user's recognition points in the current forums will be different than the forums.microsoft.com site. There were known issues in the way the old system awarded points. These issues have been addressed in the current system by processing a user's points based on their total record of participation.

Appendix E – Publications

Title: Championing the Community: The Impact of Recognition Contribution Programs through Social Media Use

Authors: Demetriou, G. and Kawalek, P.

Journal: *European Journal of Information Systems*, 2011 (submitted pending acceptance)

Abstract

Recognition Contribution Programs are organisational initiatives established to acknowledge contribution in organisational social media platforms and encourage ongoing participation. Three such programs have been explored and it was shown that this form of visible recognition bestowed by an organisation to individuals in the public domain generates different sources of impact. On the individual level, recognised users are offered some organisational privileges and develop professional credibility that can lead to further work opportunities; on the community level, they assume support, leadership and influencer roles with regards to the rest of the community members; and on the organisational level, internal-external communication is established through such initiatives that results to external feedback on and advocacy of organisational products. These findings are discussed and analysed in this paper to develop a situated view of these sources of impact in the context they occur and the implications that emerge.

Title: Benefit-driven participation in Open Organizational Social Media Platforms: The case of the SAP Community Network

Authors: Demetriou, G. and Kawalek, P.

Journal: Issues in Information Systems, 2010, XI, 1, 601-611. Presented at the International Association for Computer Information Systems 2010 Conference, Las Vegas, Nevada, USA, 6-9th October 2010.

Abstract

Organizations are creating social media platforms at the boundary of their company, bringing together interested individuals from internal and external sources for communication, collaboration, information exchange and content creation. This paper explores the participation behaviors that take place in such open organizational environments in order to identify the sources of benefit that exist in terms of business and work related activities. The focus on the emerging benefits arises from the fact that use of such tools and participation in such platforms is broadly based on a voluntary decision to join, and thus adoption of Web 2.0 practices involves acknowledgement of subsequent benefits by potential users. The case of the SAP Community Network provided a rich context of behaviors and led to the finding that participation and active contribution is bound by the benefits people gain. Such benefits can be broadly understood in the extent of usefulness and the level of interest individuals hold for the content and the organizational ecosystem. The significance people place on these benefits indicates that the working environment is no longer confined within a single organizational environment and that subsequently affects individuals, organizations and communities.