THE INTERNAL DIFFUSION OF NEW DIGITAL INNOVATIONS:
A CASE OF ENTERPRISE SOCIAL NETWORKING ADOPTION

by

MARIO RAMOTAR

Submitted in partial fulfillment of the requirements
For the degree of Doctor of Philosophy in Management

Department of Information Systems and Management
UNIVERSITY OF WARWICK, WARWICK BUSINESS SCHOOL

January, 2016

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Acknowledgements

It has been my tremendous fortune to have the opportunity to get to know and work with my advisors, John Baptista, Panos Constantinades, and the amazing Information Systems and Management (ISM) Group. A lot of guidance that framed my thinking and this dissertation initially came from John and ISM professors Harry Scarbrough. John and Harry were especially helpful in connecting me with a network of practitioners that provided a great source of empirical opportunities and practitioner knowledge on my topic of interest. When Harry eventually moved on from WBS, John was even more dedicated and focused on ensuring that I found an ideal empirical setting for my research. John's dedication and loyalty to students and colleagues have been a great source of inspiration for me. I am very grateful to John for continuously challenging and helping to shift my views in important ways and pushing me to write more clear and concise so that my views would be clearly understood. Thank you for this John.

Although my time working with Panos has been short, in this short time he has been a great source of inspiration and challenge, pushing and guiding me more towards greater academic heights with every passing day, with the stoic composure of a special forces sniper. It was this guidance pushed me to re-evaluate and refine my thinking to produce this work. Thank you also for this Panos.

While there are many other ISMI colleagues and friends that have helped me in some way along my journey to this point, it is without question that I would not be in this position today without the support and teachings of my Mom and Dad. Mom, you have always pushed me to go after my dreams regardless of the cost, personal sacrifice, or trials, and Dad, although we are separated by an ocean, you knock on my door every morning at 6AM to remind me to get up and work until I reach my dreams. This work is dedicated to you both.

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Abstract

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Despite a growing interest in processes of diffusion within organisations and some understanding of the social processes of creating and enacting external and internal IT innovations, little empirical research has studied potentially relevant intra-organisational diffusion dynamics underlying the movement of innovations adopted at an organisational level, into the front-line practices of organisational subunits. Furthermore, we know even less about the diffusion processes of non-transactional digital innovations, such as enterprise social networking (ESN). ESNs embedded "ideology of openness" and its non-transactional nature particularly create social tensions that largely run against the grain of organisational rationality and efficiency, pervade key organisational processes and lead to wide variations in how organisational actors interpret and appropriate ESN features within organisations. The goal of this research is to theorize about the institutional mechanisms and processes by which these highly flexible digital innovations become misaligned, aligned and diffused at the micro-level of everyday work, as well as the enabling and precipitating dynamics that condition and trigger these mechanisms. This theorization involved a longitudinal exploration of how different communities of actors in a globally distributed technology services firm appropriated an ESN platform over a four year period, and how managerial intervention shaped appropriation outcomes. These dynamics can be understood through a rhetorical legitimation lens as a process where organisational actors with competing interests use strategic communications, to legitimate and enable the generation of collective meanings around distinctly different IT features and practices.

Findings indicate that the core internal diffusion process was intra-organisational theorizing around ESN. Intra-organisational theorizing was an on-going process of elaborating and refining the organisational level theorization for ESN to suit front- line employees in their immediate contexts. In this way, it gradually helped to standardize and scale the ESNs features and functions as it was appropriated by different communities of actors (infusion). In each infusion, intra-organisational theorizing unfolded in three cumulative and relatively sequential phases of legitimation: *(1) rationale framing (2) value advertising, and (3) motivating engagement*, which were instrumental for respectively managing political, technical and cultural institutional misalignments, and promoting intra-group meaning making. On the other hand, negotiation and inter-group meaning-making was enabled by *strategically grafting* on other intra-organisational theorizations, and *co-opting* people, ESN functions, and practices from other infusions. Further, these legitimation processes unfolded as a sequence of primarily pragmatic pathos and logos appeals. In particular, early and on-going logos appeals helped to de-legitimate established, competing technologies, and directly enabled legitimation and collective meaning-making around ESN.

The Internal Diffusion of New Digital Innovations: A Case of Enterprise Social Networking Adoption

Chapter 1 Introduction

Recently organisations have started to devote a lot of time and resources to appropriating consumer-based digital innovations such as enterprise social networking (ESN) (Harris, Ives and Junglas, 2012; Treem et al., 2015). These systems are adopted with the intention to facilitate widespread connections between information, people and processes within and across organisational departments, principally through the application of discontinuous, mechanistic and uniform notions about relevant technology appropriation processes (Ciborra, 2000; Leonardi, 2009). Information systems enquiry cautions us, however, that the internal standardization and scaling of technologies across increasingly complex organisations is not wholly consistent with mechanistic, uniform and discontinuous principles (Scott, 1987; van Gestel and Hillebrand, 2011). As these new digital innovations become more strategic and continue to extend to more bureaucratic organisations, and across increasingly diverse activities, it is vital for practitioners and researchers to understand more about how these systems coevolve with the constantly changing and complex organisational contexts into which they are imported.

If organisations were purely viewed as tightly integrated, mechanistic and purely uniform social structures, then perhaps traditional technological appropriation perspectives could well address our need to understand how new digital innovations can be standardized and scaled to better connect information, people and processes within organisations. However, since the introduction of a new digital innovation often capriciously rearranges the local problems that the technology was expected to address in the first place (Arnold, 2003; Tilson, Lyytinen and Sørensen, 2010), contemporary information systems theory has established that ongoing and concurrent technological and

organisational change activities both have substantive effects on how technologies are appropriated in contemporary organisations (Karasti, Baker and Millerand, 2010; Leonardi, 2009). Therefore, looking at digital innovation development, implementation or use appropriation activities in isolation from each other, simply does not enable researchers to capture the uncertainty, and locally emergent, socio-technical change that is involved in the appropriation of new innovations with the daily activities of organisational actors. This view is consistent with the digital innovation literature's calls for an "extended design" approach to the study of technologies like ESN (Pollock and Williams, 2010).

Studies which have not adopted this "extended- design" perspective have had to make necessarily reified compromises. These studies show that digital innovation appropriation tends to be more straightforward for distinct business processes and domains, which are more uniform and tightly integrated (Yoo, Lyytinen and Yang, 2005; Henfridsson, Mathiassen and Svahn, 2014). In these domains, digital innovations may be easily adapted across development, implementation and use activities to fit activities that can, and implicitly should be streamlined and rationalized. These domains are largely efficiency- driven and financially focused. Even in these cases, organisational actors often respond to digital innovations with a wide variety of idiosyncratic appropriations and local misalignments at the front- line of activity (Sia and Soh, 2002; Berente and Yoo, 2012; Herzhoff, Elaluf-Calderwood and Sørensen, 2010). These misalignments are becoming increasingly significant, as ESNs spread within organisations over time.

Researchers have only recently turned their attention to making sense of the local appropriation of ESN within organisations. While the larger share of ESN research has indicated that specific ESN features exert fairly deterministic pressures *across* organisations (Parameswaran and Whinston, 2007; DiMicco and Millen, 2007), recent research around its effects of performance show that ESN adoption often reinforces, alters, or dramatically transforms how organisational actors accomplish important processes *within* organisations (Treem and Leonardi, 2012; Majchrzak et al., 2013; Vaast and Kaganer, 2013).

ESNs embedded "ideology of openness" and its non-transactional nature particularly create social tensions that largely run against the grain of organisational rationality and efficiency, pervade key organisational processes and lead to wide variations in how organisational actors interpret and appropriate ESN features within organisations (Pike, Bateman and Butler, 2013; Treem et al., 2015). In these cases, the materiality of ESN cannot be overlooked, but can be idiosyncratically appropriated, in very different ways.

In the majority of treatments of digital innovation and ESN appropriation in organisations, there is a pervasive presupposition that in order to be successful, the ESN must, more or less, be gradually aligned with key organisational values and activities over development, implementation and use appropriation activities (Vaast and Kaganer, 2013; Ghazawneh and Henfridsson, 2013). This implies a process of simultaneous and mutually reinforcing organisational and technological change, where the system essentially structures parts of organisational fabric in each of these appropriation activities, and is in turn structured or adapted by actors in some way during the enactment of these appropriation activities. In cases like this, where there are deep organisational-level misalignments related to conflicting institutional structures, a growing number of digital innovation studies have highlighted that processes of institutional diffusion during technological appropriation help to drive mutual organisational and technological alignment (Azad and Faraj, 2011; Compagni, Mele and Ravasi, 2015; Henfridsson and Yoo, 2013). Similar studies have demonstrated that this approach is also consistent with an "extended design" perspective since it illustrates how linguistic, material and social processes co-evolve during alignment (Scarbrough, Robertson and Swan, 2015; Nielsen, Mathiassen and Newell, 2014; Hansen, 1999; Hsu, Huang and Galliers, 2014). Despite this, little empirical research has studied potentially relevant internal organisational diffusion processes and mechanisms underlying how digital innovation adopted at the organisational level are aligned with often pluralistic front- line organisational processes.

In this research I explore these dynamics, based on three observations from the literature on digital innovations: (1) that the introduction of digital innovations often generates different types of structural misalignments across the front- line activities of various communities of organisational actors, and (2) that different structural misalignments emerge from legitimation gaps between technological and organisational institutions, and can be aligned through entrepreneurial linguistic framing processes.

Granted these observations, I draw primarily on macro-institutional (field and organisational level) studies of IT diffusion and related framework of rhetorical legitimation to theorize about the mechanisms and processes by which digital innovations adopted at an organisational level, become justified, diffuse, and transform front-line activities and behaviours, as well as the enabling and precipitating dynamics and entrepreneurial intervention that generate and condition these mechanisms and processes. Throughout this research I refer to this process as the internal diffusion of digital innovations.

1.1 Institutional Views on IT Diffusion

The dominant understanding of technology diffusion dynamics is rooted in the economic rational research traditions that focus on how managers rationally assess the factors affecting IT diffusion according to their expected economic returns (Fichman, 2004). However, the "IT assimilation" branch of this dominant perspective has long established that IT diffusion decisions in locally situated contexts are often more irrational and influenced by social and political dynamics (J. Wei, Lowry and Seedorf, 2015; Cooper and Zmud, 1990). The institutional perspective provides a way of identifying social and political regularities and consistencies that shape technology appropriation decisions (Scott, 2001). With this, the institutional lens offers an especially useful lens for studying the appropriation of new digital innovations (Orlikowski and Barley, 2001). Not only can this perspective illuminate structural

and systematic understandings related to irrational political and social factors beyond the systems immediate context, but it also integrates techno- rational considerations (Orlikowski and Barley, 2001).

Institutions are essentially pre-constructed patterns of action that actors draw on to guide their daily activities and behaviours. In doing so, institutions may be perceived by actors as objective reality, even though they are socially constructed by actors themselves (Berger and Luckmann, 1967). Giddens (1984) describes institutions as the *'more enduring features of social life'* (p. 24) since they persist and are reproduced over significant periods of time. The institutional lens can therefore be used to examine prescriptions, values and objectives that legitimate and underlie the behaviors of communities of actors or individual actors (Ocasio and Thornton, 1999).

Friedland and Alford (1991) advanced the concept of the *"institutional logic"* as way to study institutional dynamics between societal, organisational and individual levels of analysis (Friedland and Alford, 1991, p.242). Institutional logics provide the *'formal and informal rules of action, interaction, and interpretation'*(Ocasio and Thornton, 1999, p.804), that, outline the means to be employed, ends to be pursued, and standards to be used to define success, in a specific context (Greenwood et al., 2011; Pache and Santos, 2010).

Since information technologies are "carriers" of institutional structure (Scott, 2001), they can embed distinct institutional logics (Berente and Yoo, 2012). Institutional perspectives on IT diffusion therefore advance that variations in the speed, form, and appropriation of a newly- introduced innovation depends on the degree to which the logic embedded in the innovation is aligned with the organisation's prevailing institutional prescriptions. Traditional institutional studies explain that organisations in similar institutional fields tend to appropriate technologies in similar ways in order to gain or maintain legitimacy within that field. While isomorphic effects are possible, institutional process studies highlight that since organisations are constituted of multiple, conflicting institutional logics- a concept popularly referred to as institutional pluralism (van Gestel and Hillebrand, 2011) –

newly-introduced digital innovations may simultaneously be in conflict and congruent with the logics that underlie different communities of actors' front- line activities (L. K. Lewis and Seibold, 1993; S. Standing et al., 2013). I refer to this situation of multiple simultaneous institutional misalignments as infusion variance.

Process studies also demonstrate that IT alignment should be precipitated by (1) the early unlearning, dis-embedding, or de-legitimation of established technologies with similar form and function to the newly-incoming digital innovation (Garud and Karnøe, 2001; C. Oliver, 1992), and (2) the early and on-going mobilization of linguistic micro-processes to drive internal meaning making, legitimation and the eventual mobilization of resources around the new digital innovation (Kambil et al., 2000; Swanson and Ramiller, 1997). These linguistic micro-processes trigger a process of alignment that involves mutually constitutive organisational and technological change, where the process of organising generates technology appropriation and alignment processes that in turn, change the process of organising (Leonardi, 2007; Mekonnen and Sahay, 2008).

Studies in the institutional translation perspective add that institutional misalignments may be technical, cultural and political in nature (Ansari, Fiss and Zajac, 2010). Technical misalignments emerge from a lack of knowledge or experience of the new innovation and are relatively easily managed through the transfer of vicarious knowledge about the innovation. However, there is relatively scarce research into how this knowledge is filtered and framed and how actors make sense of this knowledge (Scarbrough, Robertson and Swan, 2015). Related research suggests that meaning-making and filtering processes around vicarious knowledge about the innovation is influenced by the degree to which that knowledge is aligned to the institutional logic of the target audience – this is an instance of cultural misalignment. These studies highlight that institutional entrepreneurs play a crucial part in managing cultural misalignments since they are sensitive to the organisation's cultural complexity and have access to key sources of vicarious knowledge (Wang and Swanson, 2007; Henfridsson and Yoo, 2013). While the

majority of research in this area has only investigated bottom up, organic instances of micro-level cultural alignment between innovation and audiences, they importantly highlight that institutional entrepreneurs may use framing practices to strategically manage cultural, and related knowledge misalignments. In highly pluralistic contexts, rhetorical framing practices importantly drives a process of contestation and negotiation around different IT configurations, in order to ensure that the working system accommodates key interests and embeds useful compromises (political misalignment) (Orlikowski and Gash, 1994; Azad and Faraj, 2011).

It is therefore my argument that in cases where the logic inscribed in the newly- introduced digital innovation is in conflict with the logics that shape prevailing front-line activities, the result will be the emergence of multiple, simultaneous institutional technical, cultural and political misalignments across various departments, job roles and hierarchical groups. These misalignments affect organisational actors' ability to make sense of the system and thus, hinders standardization and scaling during internal diffusion. Institutional entrepreneurs in different organisational groups will manage these misalignments from the top by mobilizing competing rhetorical framing practices (justifications) to legitimate the system configuration that they believe is more appropriate.

In line with this insight, I advance the notion of *"rhetorical legitimation"* to narrow or widen the gap between the local activities and behaviours related to the digital innovation in pluralistic contexts with the prevailing institutional order in which these practices are situated. These dynamics constitute the process of internal diffusion, which illustrates how digital innovations adopted at the organisational level are eventually translated and transform front- line organisational practices. In locating rhetorical legitimation processes within a web of prevailing organisational institutional logics, including the logic inscribed in the technology, I suggest that clear-cut regularities can be pinpointed. In particular, I advance that institutional logics constitute the interests, values and objectives that are salient to a specific community of actors at a particular period of time, and will therefore shape rhetorical

legitimation actions, be reflected in some way in the form and function of the aligned, working system. In many ways, the institutionally embedded nature of rhetorical legitimation is implicit, and thus makes for a tightly integrated conceptual lens.

1.2 Intra-Organisational Rhetorical Legitimation

The rhetorical legitimation lens (Harmon, Green and Goodnight, 2014) asserts the importance of rhetorical structure and type for understanding the role of rhetoric in processes of legitimation and institutional change. In particular, different forms and types of rhetorical arguments in actors' technology configuration justifications will influence the target audience's assumptions of the innovation's legitimacy in different ways. In turn, as actors develop different assumptions of the digital innovation's legitimacy, they will appropriate the innovation in ways that either maintains or changes their immediate institutional logic (Suddaby and Greenwood, 2005; Harmon, Green and Goodnight, 2014). Actors would maintain or change their immediate institutional logic by either adapting the innovations form and function, or adapting their activities and behaviour.

In embedding rhetorical legitimation actions within a web of institutional logics, I extended the lens to provide a tightly integrated and uniform way of conceptualizing the deep interests that underlie rhetorical framing practices, and the web of dynamic institutional objectives and interests that constitute organisational and technological change. Moreover, the extended lens is also adjustable to multiple levels of analysis (supra- organisational, organisational, intra-organisational, conceptual, technical etc.), and can therefore be used to support multi-level theorizing, and generalize conclusions across institutional orders. While the concept of institutional logics is widely established across a number of disciplines, including information systems, rhetorical legitimation is relatively less established. However, the idea of rhetorical legitimation is implied in a host of classic organisational (Selznick, 1949; Toulmin, Rieke and Janik, 1984; Klein and Hirschheim, 1989; Ashforth and Gibbs, 1990;

Elsbach and Sutton, 1992; Zucker, 1977; Rogers, 1995). However, the term itself was only recently explicitly labelled by Harmon, Green and Goodnight (2014), after being adopted by a host of management researchers (Suddaby and Greenwood, 2005; Greenwood et al., 2011; Green and Li, 2011; Suchman, 1995; Pfeffer, 1981; Weick, 1969; Green, 2004). Earlier explicit references to the concept were also quite fittingly referred to as a *"Rhetorical Theory of Diffusion"* (Green, 2004, p. 656) and a *"Rhetorical Model of Institutionalization"* (Green, 2009, p. 16). Therefore, it is entirely congruent with classic management enquiry to view the institutional diffusion as a process of rhetorical legitimation (Barrett, Heracleous and Walsham, 2013; Nielsen, Mathiassen and Newell, 2014; Hsu, Huang and Galliers, 2014).

However, with the exception of a few recent studies (Barrett, Heracleous and Walsham, 2013; Hsu, Huang and Galliers, 2014), the concept of rhetorical legitimation has not received explicit attention in the information systems diffusion literature. Even those studies that have alluded to rhetorical legitimation in some way to explain IT diffusion (Cho and Mathiassen, 2007; Swanson and Ramiller, 1997) have either not delved deeper than the organisational level of analysis. Instead, the institutional diffusion literature acknowledges only two broad outcomes of new technology introduction: resistance (Swanson and Ramiller, 1997; Aldrich and Fiol, 1994) or acceptance (Gallivan, 2001; Venkatesh, M. Morris and G. Davis, 2003). However, discontinuous studies of IT development, implementation and use recognize that technology often triggers organisational and technological changes that result in a form of simultaneous acceptance and resistance, or loose- coupling (Marakas and Hornik, 1996; Berente and Yoo, 2012). In this research, I integrate an institutional perspective of IT diffusion with the notion of rhetorical legitimation to engage in an in-depth case study of internal diffusion of an enterprise social networking platform.

1.3 Research Summary

To explore the internal diffusion of new digital innovations across the front- line activities of organisational actors, this study focuses on a novel form of enterprise information systems, an enterprise social networking platform (ESN).

1.3.1 Enterprise Social Networking

Over the last decade the use of Enterprise Social Networks within organisations has grown and is now considered to be a viable medium for realizing business objectives and enabling new work behaviours. Typically, organisations adopt ESN with the intention of dissolving traditional horizontal and virtual lines of communication, and enhancing the connections between people, information and processes. (McAfee, 2009; Huang, Baptista and Galliers, 2013). More often than not, organisations also justify ESN adoption as a way to enhance employee satisfaction and engagement. This is unlike the majority of diffusion research that examines business applications which by nature are linked to improvements in efficiency and are therefore more likely to follow known patterns of diffusion (Culnan and Markus, 1987). In contrast, the organisational appropriation of ESN features and services is significantly shaped by non-transactional prescriptions of use that are set outside organisational contexts, and often driven by consumer use cases (Treem et al., 2015). As such they don't necessarily fit in traditional business models and established processes of diffusion that are based on technical and economic benefits.

In deploying ESN in this context, organisations usually mimic popular social networking sites such as Facebook by integrating multiple social technologies such as social networking, social tagging, micro-blogging, and document sharing into one Enterprise Social Networking platform (ESN). While traditional standalone technology such as email, forums and corporate directories, or more sophisticated groupware and knowledge management systems could be deployed to achieve similar objectives, ESN not only allows all these activities to occur in a single space, but also affords the

enterprise-wide visibility and persistence of communicative actions(Treem and Leonardi, 2012). ESNs visibility, persistence and interpretively flexible attributes constitute its unique and problematic *"ideology of openness"* (Gibbs, Rozaidi and Eisenberg, 2013). ESNs embedded "ideology of openness" and its non-transactional nature particularly create social tensions that largely run against the grain of organisational rationality and efficiency, pervade key organisational processes and lead to wide variations in how organisational actors interpret and appropriate ESN features within organisations (Pike, Bateman and Butler, 2013; Treem et al., 2015).

ESN makes all communicative actions and outputs of individual everyday work, which were traditionally just visible to others in their immediate network through asynchronous technologies like email and telephone, visible to all organisational actors. This visibility either significantly reduces the amount of time and effort that organisational actors have to expend to locate information, or significantly increases this effort by making it harder to interpret information quality (Pike, Bateman and Butler, 2013). ESN also makes communicative actions and outputs persistent or accessible for longer periods of time after their initially creation, than synchronous technologies like video conferencing and instant messaging. Organisational actors therefore do not have to witness or help to enact interactions or actions to have the ability to look at previous successes and learn from the experiences of others (Majchrzak et al., 2013). Access to visible and persistent information can lead organisational actors to either share more information in order to facilitate social learning, or limit knowledge sharing to pursue more instrumental interests (Gibbs, Rozaidi and Eisenberg, 2013).

These tensions arise because ESN's *"ideology of openness"* makes it both interpretively flexible and counter to the usual organisational ethos and status quo. As ESNs are appropriated internally, they are increasingly characterized by a multiplicity of different types of users, agendas, and purposes, and is often misaligned with the organisational activities and behavior that follow rationale and efficiency seeking institutional logics (Leonardi, Huysman and Steinfield, 2013; Huang, Baptista and Newell,

2015). Deep institutional misalignments are especially likely when ESN is adopted for non-transactional purposes like enhancing social learning (knowledge management, collaboration) and employee engagement. However, these ESN adoption decisions represent a significant shift away from the usual adoption of digital innovations that are (implicitly) linked to improvements in efficiency. Indeed, the appropriation of ESN for non- transactional purposes is a relative novelty and intriguing empirical oddity in a field of enquiry that for the most part, has based its technology diffusion and appropriation theories on the study of transactional, efficiency seeking systems (Treem et al., 2015). In this research, I explore the internal diffusion of ESN within organisations, and particularly examine how organisational actors navigate institutional misalignments between the front- line activities and behaviours related to ESN in pluralistic contexts, and the prevailing institutional order in which these activities and behaviours are situated. Next, I will provide a brief outline of my case site and highlight key findings.

1.3.2 Case Site

My case study involved a structured- pragmatic- situational (SPS) (Pan and Tan, 2011) and latent content analysis (Suddaby and Greenwood, 2005; Berg, 2009) of the 3 years following iSource consultancy's announcement that they would be replacing email with an ESN. This approach was refined from my earlier investigation of ESN adoption at another site (see Ramotar and Baptista, (2013)- *Legitimating User Participation in Mature Organisations*). The professional consulting environment is especially results and efficiency driven (Swanson, 2012), and is thus an ideal setting to observe the internal diffusion alignment processes. Further, their experiences with ESN resonated with a large variety of organisations (Treem and Leonardi, 2012). iSource was very pluralistic since it was formed of highly structured functional departments that developed conflicting objectives, interests and behaviours around ESN development, implementation and use. Despite this, iSource 3 year, top-down ESN adoption imitative and extreme stance on phasing out the use of email, was much discussed and

praised in academic and practitioner arenas as the "gold standard" for ESN adoption. Therefore, the case is highly suited for developing academic and managerial knowledge since it represented an extreme case of unusual success (Gerring, 2006, p. 101).

The research extended over 2 years and focused on understanding how a steering team justified ESN and with what consequences, through the analysis of 50 interviews transcripts and a proportionally larger number of documents. Using my rhetorical legitimation conceptual model as a guide, I found that the core internal diffusion process was intra-organisational theorizing. Unlike the organisational level theorizations proposed by Swanson and Ramiller (1997) and Greenwood, Suddaby and Hinings (2002), intra-organisational theorizing was an ongoing process of elaborating and refining the organisational level theorization for ESN to suit front- line employees in their immediate contexts. In this way it was vital to the standardization and scaling of the diffusing innovation's IT ontology (form (meaning) and function (material features)), as the innovation was appropriated by different communities of actors (infusion). In each infusion, intra-organisational theorizing unfolded in three cumulative and relatively sequential phases of legitimation: *(1) rationale framing (2) value advertising, and (3) motivating engagement*.

Managers *co-opted* people, ESN functions, and practices from other infusions*, and strategically grafted* on other intra-organisational theorizations, as they contested and negotiated among ESN infusions where actors followed different institutional logics. Equally as important, I found that processes of de-legitimation and legitimation both appealed to pragmatic legitimacy. Managers were able to successful legitimate particular ESN ontologies by employing primarily pathos appeals to the pragmatic institutional needs of target audiences. On the other hand, these legitimation processes were initiated and concurrently executed alongside managers' primarily logos appeals to pragmatic legitimacy, which were aimed at de-legitimating email.

1.4 Core Argument

The fundamental thread running through this thesis involves the examination of the connections among three distinct concepts: (1) institutional IT diffusion, (2) Intra-organisational rhetorical legitimation, and (3) enterprise social network adoption. My case study particularly involves an effort to theorize about the institutional mechanisms and processes driving internal diffusion of an enterprise social network adopted an organisational level, and through the conceptual lens of "rhetorical legitimation" point to the salience of intra-organisational theorizing. Based on my research, I propose that by employing specific rhetorical strategies across IT development, implementation and use, managers can direct the effective standardization and scaling of digital innovations like ESN across pluralistic front-line practice. Altogether, my overarching arguments and contributions are as follows:

1   Organisations are institutionally pluralist social systems, that is, they are constituted of multiple, often competing institutional logics that shape organisational front- line activities and behavior;

2   Institutional pluralism is maintained by simultaneous alignment and misalignment of various organisational activities and structures;

3   Since digital innovations can extend across hierarchical boundaries and practices, they are increasingly introduced into domains whose activities are shaped by institutional logics that are incongruent with that of the digital innovation;

4   Misalignments are especially likely and deep with ESN since its unique "ideology of openness" is also in conflict with the logic of organisational rationalism that epitomizes the mechanistic principles of hierarchical control and tight integration;

5   In cases where the institutional logics related to the digital innovation are in conflict or incongruent with logics guiding local activities, discontinuous approaches to examining

development, implementation and use activities will miss the real complexity of technology appropriation where organisational changes triggered by the technology during the conduct of one of these activities generates changes to the technology itself.

6   Processes of institutional diffusion help to drive mutual organisational and technological alignment and can therefore be used to conceptualize technology appropriation over development, implementation and use. However, research has only examined diffusion processes at a field and organisational level.

7   Research question 1: How can we conceptualize the development, implementation, and use of newly- introduced digital innovation as a process of internal diffusion?;

8   In cases where an existing technology supports the same activities that the new innovation is intended to enhance, the existing technology must be de-legitimated in order to effectively align the new innovation. However, studies have not examined these processes of de-legitimation in detail;

9   Research question 2: How are existing, competing technologies de-legitimated during internal diffusion;

10   Multiple, simultaneous internal institutional misalignments between the newly- introduced innovation and the organisation (infusion variance) may be technical, cultural and political in nature.

11   Institutional entrepreneurs can use rhetorical framing practices to narrow or widen infusion variance in order to respectively legitimate or de-legitimate a specific technology. However, research on how entrepreneurs manage diffusion through rhetorical actions is mostly confined to field and organisational level.

12   Research question 3: How can the process of internal diffusion be purposefully managed from the top?

13   Contribution 1: The core internal diffusion process is intra-organisational theorizing. intra-organisational theorizing is an ongoing process of modifying and refining the organisational level theorization for ESN to suit front- line employees in their immediate contexts. Intra-organisational theorizing unfolds in three cumulative and relatively sequential phases of legitimation across distinct groups: (1) rationale framing (2) value advertising, and (3) motivating engagement.

14   Contribution 2: Strategically grafting on other intra-organisational theorizations, and co-opting people, ESN functions, and practices from other infusions enabled meaning making between competing groups.

15   Contribution 3: Processes of de-legitimation and legitimation occurred in parallel (de-legitimation was initiated first), and both appealed to pragmatic legitimacy. Managers employed primarily pathos appeals to the pragmatic institutional needs of target audiences to legitimate ESN. Managers de-legitimated email using primarily logos appeals to pragmatic legitimacy.

1.5 Thesis Structure

The remainder of this dissertation is structured as follows. **Chapter Two** highlights the different perspectives and debates related to the IT diffusion in the IS literature, and particularly focuses on institutional views on IT diffusion. The research questions outlined in section 1.4 are also discussed during this examination. **Chapter Three** outlines the conceptual lens of intra-organisational rhetorical legitimation that will be used to conceptualize how actors can use rhetorical justifications to narrow (legitimation) and widen (de-legitimation) the institutional misalignments that emerge during technology diffusion. Here I conceptualize different types of legitimacy and how they are gained, how

to empirically identify institutional logics and alignment dynamics, and the relationship between legitimation and different elements of rhetorical. **Chapter Four** outlines the methodological considerations related to my study. I discuss how I chose the research site, my role in the research, my research orientation, design and data collection process. I then turn to discussing how I analyzed the data using the rhetorical legitimation analytical device. I end this chapter by considering the limitations of my methodological approach.

Chapter Five outlines the data collected at iSource in chronological order. I particularly focus on highlighting the key ESN features and events that were central to managers strategic communications. In **Chapter Six**, I describe the values, interests and practices that make up the institutional logics of the key stakeholder groups, paying attention to illustrating how these logics co-exist and compete; then I follow the chronology outlined in Chapter Five to illustrate the rhetorical legitimation practices around the ESN features and events described in this chronology. In **Chapter Seven,** a number of concepts developed in previous chapters are brought together in a conceptual model that illustrates how the internal diffusion of ESN at iSource was influenced by top-down rhetorical legitimation processes. **Chapter Eight** concludes the thesis, by drawing on the conceptual model developed in Chapter Seven to analyze its implications for practitioners faced with novel innovations like ESN, and it implications for IS research on technology evolution.

Chapter 2 Internal Organisational Diffusion

In this chapter I intend to position my study within the extant diffusion literature. In doing so I show that an internal diffusion lens is highly suited to conceptualizing the gradual process of institutional misaligning and aligning that shape the construction of meaning, and the form and function of newly-introduced digital innovations. I show that this lens resonates with the emerging view that technology is represented in intra-organisational discourse, and is thus replicated and transformed by organisational actors through legitimating discourse or rhetoric. Most importantly, I show that unlike traditional technology evolution approaches, an *internal diffusion lens* does not separate technological and organisational change by the act of implementation, but rather conceptualizes the evolution of digital innovations as a continuous process of technological and organisational co-evolution. This approach is especially relevant for the study of contemporary digital innovations that follow more open and uncertain appropriation trajectories.

As discussed in the chapter 1, traditional approaches that adhere to a temporal technology evolution sequence of development, implementation and use, run the risk of discounting the crucial role that material technological features play in the process of organising, and that organisations play in the evolution of technological innovations. The internal diffusion perspective mitigates this risk by conceptualizing technology development, implementation and use as parallel and interactive processes. This view resonates with recent empirical observations that novel digital innovations like ESN and other consumer-oriented organisational innovations do not adhere to the traditional temporal development, implementation and use sequence, because they can be easily adapted to multiple objectives as they evolve within organisations.

In order to understand how new digital innovations like ESN diffuse within complex organisational environments, it is vital to firstly clarify what is the nature of diffusion in general, and how and why diffusing innovations vary and change as they are appropriated into front- line practice. I explore these questions by firstly examining how the established economic rational and macro- institutional (namely the variance and process traditions) wings of the IS diffusion library have addressed variation in the speed, form and function of diffusing innovations. Economic rational accounts span multiple levels of analysis and show how diffusion is driven by actors' rational assessments of factors related to the innovation's comparative economic and efficiency benefits. This view locates the trigger for variation in technology form and function in the internal organisational processes and choices that are enacted to better align the technology to specific routines, objectives and strategies. Macro- institutional accounts on the other hand pay attention to how field and firm level social pressures for legitimacy cause organisations to somewhat irrationally adopt and use technologies in different ways. Here, variation results from misalignments between the institutional properties of the organisation and the technology.

I conclude this chapter by showing how the institutional translation perspective (Czarniawska-Joerges and Sevón, 1996; Sahlin and Wedlin, 2008) specifically attends to economic- rational and macro- institutional perspectives relative lack of attention to how intra-organisational change processes and mechanisms around a digital innovation can constrain and drive its appropriation and organisational impact. Translation research organically extends economic- rational and macro- institutional perspectives by highlighting that over time digital innovations are increasingly open to adaptation and multiple intra-organisational misalignments. Organisational actors grapple with these misalignments through social legitimation processes around mutually constitutive technological and organisational mechanisms.

2.1 Economic Rational Diffusion Perspectives

The concept of diffusion emerges from Rogers (1995) seminal work on the diffusion of innovations. He defines diffusion as *'the process in which an innovation is communicated through certain channels over time among the members of a social system'* (Rogers, 1995, p. 35). Actors may be "persuaded" to adopt or "decide" to accept an innovation *'as the best course of action available' based on knowledge communicated during the diffusion process* (Rogers, 1995, p. 171). Accordingly, the dominant economic-rational view of IT diffusion has traditionally analyzed the factors that influence the decision to adopt an innovation across firm, organisational unit and individual levels (Fichman, 2004; Katz and Shapiro, 1987; Sturdy, 2004; Bikhchandani, Hirshleifer and Welch, 1998). This form of analysis is focused on uncovering the "right characteristics" that firms need to develop in order to adopt particular innovations more often, earlier and thoroughly (Fichman, 2004).

Over the years economic rational studies have shifted between optimization views that focus on how innovation characteristics influence rational actors to adopt and use particular types of technological innovations (Venkatesh, M. Morris and G. Davis, 2003; Fichman, 2001; F. Davis and Bagozzi, 1989), to evolutionary perspectives. Evolutionary studies adopt a less technology deterministic view by arguing that there are general organisational characteristics such as size, structure and knowledge that predispose particular organisations to better adopt and exploit a particular range of technologies. Still, other studies increasingly argue that diffusion patterns are rarely uniform after organisations decide to adopt and use IT innovations. Rather, the gradual generation of visible behavioural change as innovations are put into practice (IT assimilation) (Rogers, 1995) does not mean that organisational actors have accepted the innovation as the best course of action (Cooper and Zmud, 1990; Armstrong and Sambamurthy, 1999; Swan, Newell and Robertson, 1999; Purvis, Sambamurthy and Zmud, 2001; Mu, Kirsch and Butler, 2015; J. Wei, Lowry and Seedorf, 2015).

'While rational diffusion models may be of use in explaining those behaviours that lead to IT adoption, such models may be of only minor use in explaining a firm's success or lack of success in infusing IT within its work systems. Political interests seem to be of basic importance, while rational actions serve as facades to mask political motives and to legitimize self-interest.'(Cooper and Zmud 1990, p. 136)

From this *"assimilation"* view, researchers focus on what factors cause different forms of diffusion or the marked diversity that exists in how well firms deploy and leverage business value from IT innovations (diffusion form) after the initial decision to accept and implement the innovation (Mansfield, 1993; Hu, C. Saunders and Gebelt, 1997; Venkatraman, Loh and Koh, 1994; Ravichandran, 2001; J. Wei, Lowry and Seedorf, 2015).

Internal IT diffusion is a key process of IT assimilation that focuses on the extent to which an innovation is used across organisational units, projects, tasks and people (Cool, Dierickx and Szulanski, 1997; Massetti and Zmud, 1996). Academic research in this area generally distinguishes between two sequential internal diffusion processes: (1) the infusion process immediately following initial adoption where an IT innovation's features are gradually used in more complete and sophisticated ways (Zmud and Apple, 1992; Massetti and Zmud, 1996), and (2) the routinization or stabilization of the innovation within organisational processes and behavior (Zmud and Apple, 1992; Somers and Nelson, 2003). However, empirical research has tended to conflate these processes into a general process of IT *"incorporation"* that has paid more attention of the dynamics of routinization at the expense of infusion (Massetti and Zmud, 1996; Fichman, 2000). Attending to this underserved area of infusion enquiry could potentially shed much needed light on how digital innovations evolve within organisations and the mechanisms initiating and driving internal IT diffusion. In particular, varying degrees of internal diffusion can be observed across two dimensions of infusion (1) the extent of IT innovation use across key functional business units (value chains), and (2) the extent of IT innovation use in supporting competitive strategies, such as enhancing customer relations and improving or creating new services and products (business strategy).

Accordingly, unlike former diffusion perspectives which emphasized relatively uniform diffusion patterns across particular types of firms and technologies (Nadler and Tushman, 1999), the "assimilation view" emphasizes variation in the form and speed of diffusion for similar types of organisations and technologies (Markus and Robey, 1988; Ragin, 1999). Indeed, post-adoption diffusion patterns inevitably fluctuate under pressure from a combination of institutional, political and social forces that shape individual actors' decisions to accept or reject innovations in particular ways (Sia and Soh, 2007; Cooper and Zmud, 1990). Specifically, assimilation researchers use empirical findings to show that neither distinct technological or organisational antecedents and mechanisms can fully explain what drives IT innovations to produce business value for specific firms.

For instance, Loh and Venkatraman (1992) empirically show that the adoption of systems integration and facilities management IT outsourcing in the US during the 90s *'was motivated more by internal influence (or imitative behavior) than by external influence amongst the user organisations' (*p. 2). This study and the majority of extant "assimilation" research continue to reinforce that internal organisational capabilities such as absorptive capacity, managerial capability and organisational complexity can significantly impact on IT innovation performance (efficiency and economic return) (J. Wei, Lowry and Seedorf, 2015; Mu, Kirsch and Butler, 2015). As a consequence, these internal capabilities also shape how individual organisational actors accept, reject and generally appropriate new innovations. Early post- adoption stages such as internal diffusion may therefore be the site where a lot of the dynamics relevant to improving our understanding of diffusion variance issues begin rather than end.

Chief among these diffusion variance issues has been the long-standing question of how to explain "assimilation gaps", where organisational actors' widespread use of IT innovation tends to lag behind their adoption. In this regard, Fichman (2004) proposes that the economic- rational philosophy is not well suited to explaining this gap since they generally tend to exhibit a pro-innovation bias where

merely possessing the *"right"* capabilities (e.g. absorptive capacity, leadership, less complex systems) to effectively adopt an innovation translates to business value. More recent assimilation studies have additionally suggested that this pro-innovation bias may also be a consequence of decades of empirical diffusion investigations of mandatory use innovations such as TQM and ERP, which are less open to post-adoption appropriation (J. Wei, Lowry and Seedorf, 2015; Mu, Kirsch and Butler, 2015). Indeed, Bharati, Zhang and Chaudhury (2013) empirically demonstrate that the impact of internal organisational capabilities (specifically absorptive capacity and other related capabilities) on ESN appropriation is magnified since organisational actors are not forced or do not need to use the technology to carry out their work duties. The authors additionally suggest that the relative economic uncertainty and flexibility associated with ESN usage hinders the ability of organisations to learn, exploit, and eventually infuse ESN, is influenced more by institutional mechanisms than by comparative economic benefits.

Along these lines, a number of economic-rational studies have suggested that more focused social and political views are better suited to improving our understanding of post-adoption diffusion dynamics. Specifically, economic rational studies do not fully explain how and why there are variations or adaptations to an innovation's material features (form) and organisational impact (function) after adoption. Institutional studies on the other hand attribute these variations to misalignments and accordingly investigate the processes through which diffusing innovations are appropriated in various ways to better align with different business objectives and value chains (J. Wei, Lowry and Seedorf, 2015; Fichman and Kemerer, 1999; Cooper and Zmud, 1990; Zhu, Kraemer and Xu, 2006). These alternative social perspectives are the focus of my research and are therefore afforded a more detailed discussion in the remaining sections.

2.2 Social Diffusion- Institutions and IT Innovations

Social diffusion studies (Strang and Meyer, 1993; Greenwood, Suddaby and Hinings, 2002) consider the ways in which institutional and social mechanisms influence the spread (diffusion form and speed, and institutionalization) of IT innovations. Institutional studies compliment economic rational perspectives of technology diffusion by considering the ways in which local "situatedness" in a particular context shapes the form and function of the diffusing innovation (Orlikowski, 1992; Barley, 1986). The concept of institutional "situatedness" draws attention to the established view that *'organisations are suspended in a web of values, norms, beliefs, and taken-for- granted assumptions'* (Barley and Tolbert, 1997), that progressively structures (constrain and guide) their organising norms, such as perceptions, work practices, interaction patterns. As such, while technologies may diffuse uniformly within organisations solely because of their comparative economic and productivity benefits, they may also diffuse irrationally when institutionally situated organisations try to resolve institutional misalignments between the organisation's prevailing institutions and the institutions inscribed in the technology (Gosain, 2004; Soh and Sia, 2004).

The institutional lens also offers a way to identify regularities and consistencies relating to the appropriation of diffusing innovations (Scott, 2001). These regularities emerge from the prevalence and pervasiveness of institutions as *'organised, established, procedures'* (Jepperson, 1991, p. 143). The label *"organised"* signifies structure, and *"established"* signifies a historical and enduring procedure. As this procedure is compulsively reflected on and replicated, it constitutes a distinct social pattern of rules that constrain and guide the everyday organising of groups and individuals within an institutional field (Scott, 2008). In this way, the institutional lens offers a way to analyze the prescriptions, values and goals that legitimate situated appropriation activities, and can thus, enhance our understanding of idiosyncratic technology appropriation activities across different social contexts.

Friedland and Alford (1991) propose that institutions may be analyzed from a societal, organisational and individual level of analysis, using the "institutional logic" conceptual device (Friedland and Alford, 1991, p.242). Institutional logics are taken-for-granted organising prescriptions that underpin actors practices- both legitimate goals and how they may be pursued- in a way that is consistent with a particular institution (Friedland and Alford, 1991).

Institutions are so pervasive that they gradually become inscribed in material objects like technology (Berente and Yoo, 2012; Gosain, 2004) as embedded institutional logics or normative assumptions and practices that are consistent with the means and ends of the embedded institution (Scott, 2001; Gosain, 2004). In embedding and therefore reflecting institutions, the form, function, and appropriation of diffusing technologies tends to vary with the degree to which the innovation's embedded institution is in conflict or congruent with the target organisation's prevailing institutions (Soh and Sia, 2004; Hong and Y.-G. Kim, 2002).

Soh and Sia (2004) usefully refer to this as the package (technology)- organisation dialectic. where 'one set of forces arise from structures around the implementing organisation' (p.83) and another 'set of forces arise from structures (reflecting developers' assumptions, norms, and values) embedded in the technology' (p. 83). The authors broadly suggest that technologies with institutional logics that are compatible with prevailing organisational institutional properties like non-negotiable industrial standards (i.e. "imposed-surface misalignments") require minimal customization during development in order to diffuse effectively. However, technologies that are misaligned with prevailing organisational institutions tend to diffuse slower and require significant development customizations (e.g. Christiaanse and Huigen, 1997; Wagner and Newell, 2004; Soh and Sia, 2004; Benders, Batenburg and van der Blonk, 2006).

The majority of the studies in this tradition primarily explain technology diffusion from a macro-institutional level. Field variance studies primarily attribute variations in the form and speed of IT

innovations to isomorphic institutional pressures towards conformity. Institutional process studies on the other hand attribute variations to a gradual process of co-evolution between the IT innovation and a complex web of prevailing organisational institutional logics.

2.2.1 Field Variance Studies

This tradition's enquiry into how and why diffusing innovations vary, is spread along a continuum where variance and alignment processes are rooted in irrevocable institutional conformity at one end, and inevitable resistance at the other end.

Conformity

Similar to classical economic-rational research, these studies broadly explain that while early adopting organisations are motivated by productivity benefits, subsequent adopters may adopt and infuse 'fashionable' innovations to gain legitimacy within a particular organisational network (e.g. industry) through isomorphic processes (e.g. Meyer and Rowan, 1977; Tolbert and Zucker, 1983; Teo, Wei and Benbasat, 2003; Avgerou, 2000; Orlikowski and Barley, 2001). Organisations that reflect and reproduce institutions are seen as legitimate and accepted, and are more likely to survive longer within an institutional field (Meyer and Scott, 1983). Thus, organisations may passively manage their legitimacy by employing conformation strategies (Deephouse and Suchman, 2008b; Suchman, 1995) to align with one or more normative (inter-organisational networks) (Chatterjee, Grewal and Sambamurthy, 2002; W. Lewis, Agarwal and Sambamurthy, 2003), or coercive (regulatory structures) (Miranda and Y. M. Kim, 2006; Liang et al., 2007) institutional pressures. They may also actively copy the actions of outstanding organisations (mimetic institutional pressure) (Soares-Aguiar and Palma-dos-Reis, 2008; Gosain, 2004). As such, studies in this tradition broadly assume that organisations in similar institutional fields will have a single, uniform and overarching set of institutional prescriptions that structure organisational actors' values, practices, and IT decisions.

As a result, organisations embedded in similar institutional fields will gradually draw on similar institutional prescriptions when making decisions on how to appropriate new digital innovations. Gosain (2004) for example illustrates that organisations in highly regulated institutional fields tend to mimic the enterprise information system configuration and usage patterns of more successful and larger organisations or formal professional networks, especially when the enterprise innovation is novel and its standards are uncertain. In a similar fashion, but with more attention to development processes, Nicolaou (1999) suggests that organisations tend to *'conform to social constraints to develop IS consistent with [institutional] expectations in order to demonstrate legitimacy in operational and managerial decision making'* (p. 133). In these cases, diffusing IT innovations tend to be appropriated and aligned in different ways across different societal and industrial institutional fields (Teo, Wei and Benbasat, 2003; Son and Benbasat, 2007; Gosain, 2004; Nicolaou, 1999). However, these studies have frequently received criticism for not being able to adequately explain why some institutionally misaligned innovations are still successful, or why some institutionally aligned innovations sometimes fail (e.g. Cho and Mathiassen, 2007; see Soh et al., 2003- package-organisation misalignments; Markus, 2004- techno-change misfits).

Resistance

In particular, a smaller proportion of research that focuses more on innovation use, suggests that rather than conforming to field level institutional norms, some organisational actors exercise agency to resist the prescribed and established ways of appropriating specific technologies (C. Standing, Sims and P. Love, 2009; Davidson and Chismar, 2007; Hu, Hart and Cooke, 2007). As a result, certain elements of an IT innovation may be rejected, adapted or ceremonially adopted when firms employ compromise or avoidance strategies to better fit the innovation with their own prevailing organising norms, past experiences, or recommendations of key external actors (Sia and Soh, 2007; Cho and Mathiassen, 2007; Mark, 2007a). For example, some studies show that local organising norms, objectives and past

technology experiences may be mobilized through symbolic actions to significantly enable or constrain how potential adopters appropriate and use technologies (Phang, Kankanhalli and Ang, 2008; Akkeren and Rowlands, 2007; Boxenbaum and Jonsson, 2008). Boxenbaum and Jonsson (2008) for example highlight that in many cases organisations within similar institutional contexts may appropriate an institutionally embedded and accepted technological innovation in different from other in their field in order to gain a competitive advantage. This suggests that the form and function of diffusing technologies may also vary within distinct institutional fields, and across technologies with similar institutional logics.

Process-oriented research has has usefully explored the dynamics of varying degrees of conformance and resistance. Process studies importantly highlight that "agentic" micro-processes, such as power politics, contestation, and negotiation mediate the interaction between technological structuring and institutional processes of organising (perceptions, work practices, interaction patterns). Building on these micro-processes, and the conformity behaviours exhibited in technology development versus resistance actions in technology use, contemporary diffusion research suggests that technological evolution should be examined over the entire development, implementation and use continuum. Such an analysis is necessary in order to fully understand how these socio-technical micro-processes affect technological misalignment and appropriation.

2.2.2 Institutional Process Studies: Consequences of Infusion misalignment

Process studies are sensitive to the important role that material technological features play in the organising process, and that organisational dynamics play in technological evolution. They also importantly focus on the role of discursive *micro-processes* in this mutually constitutive relationship (Leonardi, 2009; Carugati, Giangreco and Sebastiano, 2011).

Process studies add that under institutional pressures to adopt and implement IT innovations, processes of communicating and deploying changes in technology and organisational structures and practices are crucial for navigating misalignments and bringing innovations to life (Swanson and Ramiller, 2004; Gosain, 2004). A majority of these studies examine voluntary-surface and voluntary-deep misalignment dynamics during the IT institutionalization process. This process unfolds from the destabilization of prevailing institutional norms (de-institutionalization e.g. Lawrence and Suddaby, 2006 and unlearning e.g. Starbuck, 1996) through the materialization and diffusion of new IT ideas as new pre-institutionalized structures, to eventually becoming "taken for granted" (Baptista, Newell and Currie, 2010; Greenwood, Suddaby and Hinings, 2002; Currie and Guah, 2007; Lyytinen, Newman and Al-Muharfi, 2009).

Innovation Related Discourse

Empirical process studies generally indicate that one of the most important processes impeding and fueling IT innovation evolution is the elaboration of "innovation related discourse" (Kambil et al., 2000; Swanson and Ramiller, 1997; Ramiller and Swanson, 2003; Currie, 2004). Within this tradition, Swanson and Ramiller's (1997) theory of organising visions is arguably one of the most well researched contemporary examples of innovation related discourse. An organising vision for an IT innovation is a clearly labelled (e.g. 'enterprise 2.0' and 'green IT'), abstract symbolic theorization that facilitates interpretation (sense-making), legitimation and mobilization of resources necessary for the standardization and scaling of IT innovations within organisations. Organising visions are more effective at facilitating these processes when they are deployed early in the diffusion process, and when they are stable and collectively coherent. In this case, the mobilization of an organising vision will enable organisational actors to effectively communicate, manage and standardize institutionally aligned ideas for appropriating innovations, and uniform material features and practices (Swanson and Ramiller, 1997; Fichman, 2004; Wang, 2010).

However, early stability and collective coherence tends to be inhibited by contestation amongst the heterogeneous communities of field-level actors who rhetorically construct these visions from their own micro-level organisational experiences with the IT innovation. Although the process of reaching collective agreement is facilitated by the fact that the key stakeholders draw meanings from broadly similar IT, business and management institutional logics, it is often organic and slow (Swanson and Ramiller, 1997; Lucas and Spitler, 2000; Kambil et al., 2000). Accordingly, the organising vision for exceptionally new IT innovations like ESN will often be underdeveloped and unstable, and thus, more open to organisational interpretation and modification (Wang, 2010; Treem and Leonardi, 2012; Treem et al., 2015). In this case, even though novel innovations will be shaped in some way by under-developed field level organising visions, it will likely be influenced more by actors micro-level communications regarding their experiences with the IT innovation (Wang, 2010).

In this regard, linguistic process studies have demonstrated the utility of examining discursive micro-processes as a way to understand the dynamics of the relationship between technological and organisational change (Rice and Gattiker, 2001; Vaast and Walsham, 2005; Leonardi, 2007; Orlikowski, 1996). These studies are rooted in the view that discursive micro-processes organise standardization and scaling processes. Accordingly, discursive micro-processes reflect and reinforce the changes that occur in organisational structures and technological form and function during internal diffusion (Rice and Gattiker, 2001; Vaast and Walsham, 2005). Empirical studies show that, as organisational structures change, the micro-processes that organise standardization and scaling processes, will also change the form and function of diffusing IT innovations (Rice and Gattiker, 2001; Vaast and Walsham, 2005). Similarly, as IT innovations are appropriated, standardized and scale across different communities of organisational actors, the micro-processes around them will gradually transform organisational perceptions, work practices and interaction patterns (Leonardi, 2007; Boudreau and Robey, 2005).

Discursive micro-processes reflect the institutional organising processes of stakeholder communities, such as their shared perceptions (Kraut et al., 1998), their interaction patterns around a technology (Barley, 1990b; Aydin and Rice, 1992), and their ways of working (Scott and DeSanctis, 1992; Poole and DeSanctis, 1990). These organising activities in turn form the "logics of action" of the communities involved, and *'color[s] their understandings of what groups should be involved in the development, implementation, or use of a technology, what the technology should look like, what it should do, and how it should change existing practices'* (Leonardi, 2009, p. 297).

Infusion Variance- Multi-Dimensional Misalignments

Contemporary research into how discursive micro- processes shape IT evolution within organisations have also highlighted that the communication, interpretation and legitimation of innovation related discourse and material technological features is often more contentious and unpredictable than variance studies suggest (van Gestel and Hillebrand, 2011; Green, 2004; Kraatz and Block, 2008). These studies have in a sense departed from the variance tradition's pre-occupation with isomorphism, to focus on how the micro- processes around a technology are characterized by contestation and negotiation.

Empirical studies highlight that organisational communities may draw on very different logics of action when they are faced with radical shifts in objectives, highly complex and uncertain situations, or highly flexible and novel technology like ESN (van Gestel and Hillebrand, 2011; Tilson, Lyytinen and Sørensen, 2010). In particular, constructivists studies highlight that different stakeholders often have unique reasons for wanting to appropriate and change technology (van Gestel and Hillebrand, 2011; Kappos and Rivard, 2008). Thus, tussles often build up between different communities of actors. These tussles can lead to multiple, simultaneous organisational (multi-dimensional) misalignments when competing communities of actors aim to appropriate the technology according to their own, distinct interests (Hughes, 1987, Lewis and Seibold, 1993, Standing et al., 2013, Kraatz and Block, 2008). For example, in a discussion of e-procurement implementation in mature and complex organisational

environments, (Barca and Cordella, 2006) proposes that it is critical to consider mechanisms to address the multi-dimensional product-organisation misalignments (infusion variance) that arise when different departments draw on different institutional logics (departmentalism). Infusion variance often leads to limited penetration of technologies into business strategies and value chains (limited infusion), where the technology is only used within some organisational departments rather than across all relevant departments (Barca and Cordella, 2006).

Over time, these contestations can potentially transform (rather than reproduce) the dominant institutions, as different communities *'negotiate these interests and objectives into alignment through persuasive campaigns'* (Leonardi, 2009, p.296). However, the dynamics of negotiation and agreement processes have rarely received much attention in the process tradition (Mignerat and Rivard, 2009; Deephouse and Suchman, 2008a). In particular, in their review of institutional IS studies, Mignerat and Rivard (2009) highlight that very few studies have focused on contestation and alignment strategies, and *'this could be an avenue for IT institutionalists to make a contribution that would benefit organisation theory as a whole' (p. 389)*.

De-institutionalization

A consequence of process researchers' preoccupation with how innovation related discourse drives IT institutionalization processes is that they overlook important package-organisation misalignment dynamics during the initial de-institutionalization stage. De-institutionalization dynamics are important to diffusion since they potentially condition how community members construct and interpret organising visions for particular IT innovations (Lawrence and Suddaby, 2006; Van de Ven, 1986; C. Oliver, 1992). The way in which organisational actors rationalize (recognize and evaluate) new IT innovations is often shaped by the presence of competing technological artefacts that embody dominant organisational values, structures, processes and knowledge.

Audiences' alignment with an established, competing technology can significantly decrease the amount of cognitive effort that they are willing or able to spend on making sense of the new innovations (Maguire and Hardy, 2009; C. Oliver, 1992). These technological artefacts and their associated organisational structures need to be progressively de-institutionalized or unlearned in order for new innovations to effectively diffuse, especially within organisations (Greenwood, Suddaby and Hinings, 2002; Lawrence and Suddaby, 2006; Hislop et al., 2013; Starbuck, 1996; Garud and Karnøe, 2001). The concept of de-institutionalization is well established in the institutional and wider IS literature. Studies in the organisational memory tradition mostly examine de-institutionalization as an organic process, and find that the willingness of organisational actors to unlearn established organisational artefacts and practices, and embrace new innovations is greatly influenced by economic rational factors such as the cost of change, past experiences with technology, and adequate training and support (Dunbar, Garud and Raghuram, 1996; Starbuck, 1996; Becker, 2010).

Similar organic approaches suggest that de-institutionalization is hugely influenced by the degree to which key stakeholders formally and informally communicate the need for change, and support the collection of feedback for system enhancements (Greenwood, Suddaby and Hinings, 2002; Lawrence and Suddaby, 2006; Henfridsson and Yoo, 2013; C. Oliver, 1992). Based on these findings, researchers across these fields have suggested that the process of top-down de-institutionalization rests on the ability of key stakeholders to use strategic communications to convince the receiving audience of the existing artefact's ineffectiveness, cultural incompatibility, and the potential value of newer innovations (Garud and Karnøe, 2001; Lawrence and Suddaby, 2006; Becker, 2010). Such a process would essentially be the reverse of alignment efforts discussed so far. Instead, linguistic micro-processes would be aimed at increasing the misalignment between the logic associated with the established, competing technology. With respect to digital innovations, Garud and Karnøe (2001) examination of how the Post-it note idea successfully diffused within 3M shows that employing strategic top-down communications to encourage organisational actors to break away from the firm's

embedded belief of creating glues that stuck was crucial to mobilizing support for the creation of Post-it notes. Despite similar findings in various areas of academic IS enquiry, the literature is silent on how and what information should be communicated to encourage effective de-institutionalization during internal IT diffusion (Becker, 2010; 2005; Garud and Karnøe, 2001; C. Oliver, 1992).

Mutual Technology and Organisational Evolution

As the previous sections suggest, process research also holds the view that the process of linguistically aligning newly-introduced digital innovations and target organisations is characterized by mutually constitutive organisational and technological change processes (Avgerou, 2000; Mangan and Kelly, 2009; Mekonnen and Sahay, 2008; Leonardi, 2011). This is especially applicable to the study of digital innovations like ESN, which increasingly blur the lines between technological and social structures within organisations (Monteiro et al., 2012; Brynjolfsson and A. Saunders, 2010). Along these lines, Leonardi (2007) advances that researchers can only fully grasp the role of linguistic micro-processes, infusion variance and de-institutionalization in technological evolution if they adopt a synchronous empirical and theoretical approach. According to his synchronous framework, researchers must examine technology development, implementation and use processes together since,

> *[attending to] 'development, implementation, or use activities in isolation from one another (diachronically), he or she will be unable to grasp fully those sociotechnical transformations surrounding the one set of activities that occasioned the interpretive conditions that influence the next set (synchronically)' (Leonardi, 2009, p. 303)*

Similarly, in their review of a sample of contemporary institutional IT studies, Mignerat and Rivard (2009) highlight that 'through processes of standardization and scaling, formal institutions and informal constraints end up being institutionalized in work practices through IT implementation' (Mignerat and Rivard, 2009, p. 388). Within this sample, they show that technologies that were implemented and used with little adaptation either failed or gradually changed the intuitional properties of the host organisation (Hu, Hart and Cooke, 2007; Davidson and Chismar, 2007; Khalifa and Davison, 2006), while those that were adapted eventually replicated and reinforced organisational institutional

properties (C. Standing, Sims and P. Love, 2009; Noir and Walsham, 2007; Lapointe and Rivard, 2005). A framework of internal diffusion of technologies, particularly of digital innovations (Monteiro et al., 2012; Brynjolfsson and A. Saunders, 2010), should therefore be responsive to how the process of organising can generate technology appropriation and alignment processes that in turn, change the process of organising(Leonardi, 2009).

Summary

Overall, process research confirms that the standardization and scaling of especially novel digital innovations is significantly influenced by multi-dimensional product-organisation institutional misalignments (infusion variance). In line with this insight, these studies demonstrate that the notion of institutional logics is useful to conceptualize the dynamics existing between the situated practices related to the digital innovation in pluralistic contexts and the institutional order in which the practices are situated. Following this view, I argue that regularities in innovation appropriation may be observed across different communities of organisational actors, such as different functional departments, job roles and levels of hierarchy.

I also argue that de-legitimation and legitimation processes condition infusion variance. These processes are enabled and reflected in the contestation and negotiation around discursive micro-processes. Specifically, over time discursive contestation and negotiation may gradually narrow or widen the gaps between the local practices related to the diffusing digital innovation in pluralistic contexts and the prevailing institutional order in which the practices are situated. While these processes are clearly important to understanding how new innovations diffuse within organisations, they remain understudied in the wider diffusion literature, particularly in relation to their role in micro-organisational processes. Translation research offers a fruitful avenue for addressing these gaps since since it explores the mechanisms, dynamics, and agentic responses that drive misalignment and alignment dynamics (Ansari, Fiss and Zajac, 2010).

2. 3 Translation perspective: Consequences of infusion variance

Translation researchers address the issue of infusion variance by conceptualising diffusion misalignments as the norm rather than the exception, and focusing on the veiled re-alignment movements and flows that embody the cultural and linguistic nature of diffusion. In doing so, these studies embrace a view the introduction of new technologies may trigger simultaneous acceptance and resistance, which generate linguistic contestations and negotiations towards resolving infusions variance (Marakas and Hornik, 1996; Berente and Yoo, 2012). This diffusion perspective builds on Scandinavian institutionalism's focus on, the *'dynamic aspects of circulating idea; how and why ideas become widespread, how they are translated as they flow and with what organisational consequences' (Sahlin and Wedlin, 2008, p. 219).*

Thus, translation studies mostly emphasize how IT innovation ideas (linguistic objects and attached meaning) change and become legitimized as they travel from one organisational context to another, and de-emphasize how the ideas accepted at organisational level become legitimized and infused (materialize and change meaning) within organisational value chains and strategy (with the exception of Reay et al., 2013; Nielsen, Mathiassen and Newell, 2014 and; Scarbrough, Robertson and Swan, 2015). They do however capture subtle discursive factors like power, legitimacy, unpredictability and contingencies that are pivotal to how organisational actors navigate post-adoption decisions and construct collective meanings, but are de-emphasized in the diffusion perspectives discussed so far. Importantly, this body of research indicates that infusion variance inhibits the construction of collective meaning around diffusing innovations.

The translation view is therefore rooted in examining processes of aligning diffusing innovations. From this perspective, alignment is thought to be social and rational process of legitimation, where adopters make meaning and decisions as "cognitive misers" rather than "cognitive dopes" (Rao, Greve and G.

F. Davis, 2001), and organisations deal with uncertainty with the help of cognitive shortcuts (Tversky and Kahneman, 1974). Thus, resolving infusion variance within local settings is a process that entails change in how IT innovations are discursively legitimated or framed over time (Davidson, 2002; Olesen, 2014; Zilber, 2006), and variations in material technological features at different points in the diffusion process (Kennedy and Fiss, 2009; L. K. Lewis and Seibold, 1993; Jiménez-Castillo and Sánchez-Pérez, 2013; Swan and Clark, 2008; Zilber, 2006).

During this legitimation process, the embedded logics, characteristics, and organising visions associated with individual technologies can either enable or constrain internal IT diffusion by providing opportunities for adopters to interpret and respond to misalignments in different ways (Zilber, 2006). Mignerat and Rivard's (2009) review of institutional IS research for example shows that the translation of traditional enterprise innovations generally produces more uniform outcomes than more interpretively- flexible web technologies like e-marketplaces. However, other than advancing a few similar anecdotal observations and propositions regarding the role of strategic communications (Volkoff, Strong and Elmes, 2007; Ansari, Fiss and Zajac, 2010), we know little about how innovation adopters legitimate technological characteristics to enable, and particularly constrain the appropriation of IT innovations. In support of this view, Mignerat and Rivard (2009) also highlight that the existing literature on alignment covers *'only a limited aspect of this complex and crucial subject... and a more adequate formulation would contain careful, widely-accepted definitions, and would examine more aspects of the concept, and would incorporate more strategic and institutional views' (p. 389)*.

Accordingly, my overall intention in this review of the translation literature is to highlight findings that resonate with the institutional explanations of linguistic alignment that I have discussed so far. I specifically focus on how organisational actors navigate and resolve misalignments between their specific needs and organisational and IT innovation values and norms. With this, the balance of this chapter reviews relevant findings on technical, cultural and political alignment that make useful

contributions to the study of internal IT diffusion, particularly with regard to probing the internal organisational dynamics of infusion variance.

2.3.1 Technical Perspectives on IT Translation

Variations in how particular groups of organisational actors appropriate an IT innovation and the outcomes of these limited infusions, increases subsequent adopters experience and knowledge about the IT innovation (Kohli and Kettinger, 2004; Strang and Macy, 2001). For instance, academic literature is replete with accounts of success stories helping to generate wider diffusion, and stories of failure having the opposite effect (Baskerville and Myers, 2009; Gill and Bhattacherjee, 2009). This is echoed by researchers who argue that the availability of knowledge about an IT innovation is a key mechanism that affects how adopters align new IT with existing organisational characteristics (technical alignment) (Volberda, Foss and Lyles, 2009). These knowledge mechanisms shape how much subsequent departmental infusions will vary in scope and meaning, and how standards develop around each subsequent infusion.

For example, Francalanci and Morabito (2008) demonstrate that effective use and standardization of newer information infrastructures at a field level is greatly facilitated by the the degree to which prior knowledge about the IT innovation possessed by some organisational groups, is transferred to groups with less knowledge. This study also shows that effective use and standardization is also facilitated by subsequent infusions ability to absorb additional, relevant external knowledge such as technology and professional compliance standards. Knowledge mechanisms therefore also play a crucial role in IT innovation scaling, as knowledge availability, absorption and transfer help IT innovations to move from limited diffusion within specific organisational groups to wider diffusion across other departments.

Ansari, Fiss and Zajac, (2010) hypothesize that a similar dynamic may also occur within organisations. They advance that since increasing knowledge lowers uncertainty about the IT innovation, internal

organisational adopters in subsequent infusions are more likely to experiment and learn from previous infusions. Subsequent adopters are therefore expected to be better prepared to reduce infusion variance by appropriating IT to be more extensive (scalable), and more customized in terms of tangible (form) and intangible (meaning) features. Ansari, Fiss and Zajac (2010) crucially suggest that empirically testing this proposition could possibly advance an alternative view of institutionalization where innovations are increasingly adapted as they diffuse internally.

Empirical studies highlight that in addition to the degree of vicarious knowledge, the technical legitimacy of this knowledge also directly impacts on the form and meaning of subsequent infusions. That is, knowledge mechanisms are more effective at minimizing infusion variance when they themselves are aligned to supra-organisational factors such as technological and regulatory standards, organisational factors such as technological base and innovation experience, and intra-organisational factors like the technical orientation of users (Jiménez-Castillo and Sánchez-Pérez, 2013; Roberts et al., 2012; Mol, Birkinshaw and Birkinshaw, 2008). Despite the importance of technical alignment and knowledge mechanisms to the standardization and scaling of diffusing innovations, we still know relatively little about how organisational actors make sense of this knowledge and experiences (Volkoff, Strong and Elmes, 2007), and how it is filtered and framed during internal diffusion (Scarbrough, Robertson and Swan, 2015; Hsu, Huang and Galliers, 2014).

2.3.2 Cultural Perspectives on IT Translation

Work in a parallel cultural research stream however, offers some insight into how vicarious knowledge around a new IT innovation is transferred between organisational actors. Similar to variance and process views, researchers in this stream argue that IT innovations do not just diffuse into organisations that are cultural vacuums. Rather, corporate environments embody a web of cultural security mechanisms like pre-existing values, objectives and philosophical orientations, which outline the boundaries for how adopters assess appropriate behavior, and thus, shapes how IT diffuses within

organisations. Accordingly, research in this area indicates that actions to resolve infusion variance will be more effective when they attempt to position the new IT innovation as an organisational artifact that reproduces and reinforces values and practices that are pertinent and proper for the receiving audience's circumstance (Schein, 2010; Canato, Ravasi and Phillips, 2013; Rerup and Feldman, 2011).

For the most part, these cultural perspectives on IT translation are similar to institutional process studies since they generally indicate cultural security mechanisms gradually exert an increasingly intense conformance or institutionalization pressure to ensure that new IT innovations are aligned with the values and practices of the adopting audience. For instance, Ansari, Fiss and Zajac (2010) highlight that later adopters are less able to resolve infusion variance around a new IT innovation since conformance pressures create fewer "degrees of freedom" for them to customize the innovation's form and meaning. This situation often results in less extensive diffusion, as late adopting users struggle to make sense of the new IT innovation, or just ceremonially engage with the innovation's features and superficially change their behaviour (Kostova and Roth, 2002; Alvesson, 1993; Wang, 2010). Ansari, Fiss and Zajac (2010) therefore hypothesize that (early) adopters who are able to resolve local cultural misalignments as early as possible in the translation process, will more likely be able to standardize new innovations with a wider audience. Consistent with process studies view that IT assimilation is a process if mutual organisational and technological change, the authors show that cultural misalignments may be managed through organisational or technological (IT) adaptation.

With respect to IT adaptation, re-designing the technology's field-level form and function to suit the local context is a widely practiced approach for generating early acceptance. However, this approach often requires significant economic and social resources (Scarbrough, Robertson and Swan, 2015; Markus et al., 2010). In addition, excessive IT adaptation may also dampen the intended effects and benefits of introducing the IT innovation in the first place (Bloom et al., 2014; Bala and Venkatesh, 2015). On the other hand, adapting the local organisational culture in some way to be more receptive

to new IT innovations, can reduce resistance without the significant economic and social costs of IT customizations. However, the relatively intangible, robust and pluralistic nature of organisational culture makes organisational adaptation slow and difficult to manage (Orlikowski, 2000; Fichman, 2004; van Gestel and Hillebrand, 2011). Accordingly, internal IT appropriation efforts that rely solely on organisational adaptation strategies are more prone to being widely rejected or ceremonially appropriated.

In this regard, studies show that the transformation of field or organisational level ideas of an IT innovation to front- line practices (internal IT diffusion) is greatly facilitated when organisational and technological adaptation efforts are aligned with the local circumstances of the receiving audience (Markus et al., 2010; Reay, Golden-Biddle and Germann, 2006; Orlikowski and Gash, 1992; Smets, T. Morris and Greenwood, 2012). The relatively few studies that have attempted to understand this crucial dimension of internal IT diffusion have indicated that bottom-up institutional change is often more effective for generating contextual organisational and technological adaptation (e.g. Smets, T. Morris and Greenwood, 2012; Nielsen, Mathiassen and Newell, 2014; Reay, Golden-Biddle and Germann, 2006). Nielsen, Mathiaseen and Newell (2014), for instance show that the embeddedness of organisational actors in their local context importantly helps to drive contextual organisational and technological adaptation by positioning the new IT within the local technology landscape, experimenting with the IT to prove its value, and using the former and latter in pro-longed rhetorical legitimation practices to improve the ITs comprehensibility (also see Hsu, Huang and Galliers, 2014; Scarbrough, Robertson and Swan, 2015). There are even fewer investigations of top down attempts to drive this type of cultural alignment during technology appropriation (Nielsen, Mathiassen and Newell, 2014; Reay et al., 2013).

However, the literature on institutional entrepreneurship at a field and organisational level provides a useful blueprint of how top- down cultural alignment can direct internal IT diffusion. This body of

research suggests that "cultural insiders" are especially crucial to promoting top- down internal IT diffusion. Ansari, Fiss and Zajac (2010) indicate that these "cultural insiders" are able to effectively manage cultural misalignments because of their heightened awareness of how cultural legitimacy is affected by technological factors such as the cultural values and meaning structures embedded in IT, supra-organisational factors such as dominant industry logic and macro-level theorizations, organisational level factors such as corporate cultures and philosophical orientations, and intra-organisational factors such as group values and perceptions of appropriate practice.

These informed "cultural insiders" use skillful or artful mobilization to simultaneously adapt IT innovations to the "cultural security scanners" of receiving audiences, and re-wire these scanners to be more receptive the cultural values and meaning structures embedded in IT innovations (Wang and Swanson, 2007; Henfridsson and Yoo, 2013; Garud, Hardy and Maguire, 2007; Munir and Phillips, 2005). Henfridsson and Yoo (2013) for example argue that institutional entrepreneurs skillfully leverage their privileged access to organisational and wider knowledge and resources to legitimate new institutions (IT adaptation) (E. G. Love and Cebon, 2008) or 'ignite' organisational changes so that adopters eventually accept minimally adapted IT as legitimate (organisational adaptation) (Lozeau, Langley and Denis, 2002).

Overall, cultural translation studies draw attention to the importance of accounting for the vested interests of entrepreneurs and other organisational stakeholders, who help to shape how IT innovations spread and stabilize within organisations. A greater proportion of these studies also highlight that institutional entrepreneurs are better able to reduce infusion variance in the early stages of internal IT diffusion. However, similar to institutional process studies view that discursive micro-processes help to reduce cultural gaps between IT and organisations, institutional entrepreneurs can tailor and transform audiences' 'cultural scanners' that restrict organisational and technological modifications in later infusions through linguistic framing practices (Hargadon and Douglas, 2001; Azad and Faraj,

2011). The effects of this framing process in both early and late stages of diffusion are demonstrated in political IT translation research.

2.3.3 Political Perspectives on IT Translation

Unlike rational and social accounts of diffusion, entrepreneurial enquiry in the information systems and strategy literature emphasize that organisations are inherently *political* environments, where there are constant struggles over divergent interests, and where the introduction of new IT innovations can change work processes and reallocate resources and power (Jarzabkowski, Matthiesen and Van de Ven, 2009; Yoo, Lyytinen and Berente, 2007; Meyer and Rowan, 1977). In particular, collective action studies into IT diffusion and alignment shed light on often neglected processes of strategizing and competition between different interest groups for power and control of resources. From this perspective organisations are conceptualized as movement-based political systems where diffusion outcomes are rarely isomorphic but rather, are dynamically shaped by adopters' power structures, interests and norms (Markus and Pfeffer, 1983; Iacono and Kling, 1996; Barrett, 1999).

Empirical studies point to the crucial role of frames and framing contests in the process of IT innovation diffusion, on multiple levels of analysis (Azad and Faraj, 2011; Orlikowski and Gash, 1994; Davidson, 2006; Lin and Silva, 2005; Swan et al., 2010). Notably, studies show that institutional entrepreneurs can tailor and transform the *"cultural scanners"* that restrict alignment in later infusions by framing the contextual and local knowledge gained from early alignment efforts (first order change recipients) as *"second order change agents"*. For instance, Hargadon and Douglas (2001) demonstrated that institutional entrepreneurs may exploit established institutions to gain legitimacy for new innovations within an institutional field by framing the fundamental features of the innovation around established competing technologies. Specifically, imitating features of gas lighting in the design for Edison's electric lighting (*"design skeuomorph"*) enabled early adopters to easily understand, accept and use

electric lighting. In turn, the flexibility of these design frames eventually led to the displacement of the established institution of gas lighting.

Similar actions have also been observed but not fully examined within organisations. For instance, (Hargrave and Ven, 2006) illustrates that competing actors or groups, each striving to achieve their goals around a preferred IT configuration and design, *"struggle with each other to frame and reframe the meaning of relevant issues" (p.* 869*).* These struggles over meaning are often contentious since they entail actions by various stakeholder groups to build on existing and competing arguments to legitimate their preferred definitions for IT system design and functionality as the collectively accepted and preferred working IT system.

Orlikowski and Gash (1994), for example highlight the role of framing as a sense making mechanism (Weick, 1995), where a particular technological frame is the interpretive schema shared by members of a particular group that may shape their perceptions and actions toward technology implementation. *'Different technological frames imply different ways of knowing and making sense of technology'* (Orlikowski and Gash, 1994 , p. 203), and result in challenges for technology implementation and use. Different technologies may also possess the flexibility to be interpreted and framed in a multitude of different ways than others. For example, Garud and Karnøe (2001) highlight that since web technologies can be partitioned in a number of different ways institutional entrepreneurs may have the *"opportunity to share different chunks with different people at different points in time, and, in the process, shape emerging preferences of key stakeholders"*(p. 18).

Lin and Silva (2005) on the other hand focus on framing as a dynamic stabilization process, where over time, the discursive contestation and interaction of key stakeholder claims and interpretations around a new technology eventually lead to a stable technological configuration. Accordingly, IT framing can be understood as a process by which interpretive schemas (frames) are constructed and modified through social and discursive action, to eventually generate a collective definition of an IT innovation.

While these studies acknowledge that frames and framing are mutually reinforcing and dynamic constructs, they make clear analytical distinctions to either focus on one or the other.

Along these lines, macro-level computerization movements research (Iacono and Kling, 1996; Elliott and Kraemer, 2008; Barrett, Heracleous and Walsham, 2013; Kling and Iacono, 1995) advances a more dynamic, mutually reinforcing perspective of framing and frames. These studies examine how entrepreneurs filter and frame group interests and vicarious knowledge, and how competing stakeholder interests interact to shape limited departmental infusions and wider internal organisational diffusion. CM research suggests that in (re) framing, movement entrepreneurs intentions are mobilized through ideology-driven discursive devices. This discourse is strategic, as it can condition organisational actors beliefs about the relationship between the preferred social order and the IT innovation, and thus, importantly legitimizes or erodes support for the innovation(Iacono and Kling, 1996; George, Iacono and Kling, 1992). CM researchers conceptualize a distinct frame as an ideological boundary between what is "right" and "wrong", and framing as a process aimed at igniting social change by persuading organisational actors to interpret IT innovation related discourse in a way that is consistent with a particular frame's ideological stance (Orlikowski and Gash, 1994).

Social change occurs as frames that reflect the dominant organisational ideology about how IT relates to 'ways of working' are challenged, transformed and eventually replaced over time, by what actors perceive to be a more salient frame, or a more important definition of what is "right" and "wrong" (Elliott and Kraemer, 2008). This process exhibits a mutual reinforcement dynamic that is similar to the institutionalization-deinstitutionalization relationship, where framing processes may simultaneously legitimate particular ways of designing and using IT, and erode support (de-legitimate) for other, perhaps competing IT designs (Cadili and Whitley, 2005; Dunbar, Garud and Raghuram, 1996; Garud and Karnøe, 2001).

Relatedly, Ansari, Fiss and Zajac (2010) hypothesize that although a high degree of political misalignment between a new IT innovation and a dominant frame can constrain early realigning possibilities, institutional entrepreneurs may create opportunities for knowledge transfer and cultural alignment by challenging normative claims with competing claims *("counter-mobilizing").* Thus, contrary to what much of the translation and wider IT adoption literature suggests, full scale conformity to a dominant frame is therefore not required to implement a working system. Rather, a functional solution can be agreed upon by aligning competing frames. According to their hypothesis, *"Counter-mobilization"* generates framing contestation and compromise, where a *'back and forth ideological contest will lead to a gradual shift in the original position'* (Ansari, Fiss and Zajac, 2010, p. 81). This in turn generates a working system that reflects compromises that *'accommodate the political demands of a heterogeneous political environment'* (Ansari, Fiss and Zajac, 2010, p. 81)

In this regard, empirical research shows that institutional entrepreneurs are more effective at generating framing contestation and comprise when they are sensitive to the following sources of political legitimacy- (1) IT innovation factors such as the normative claims that make particular innovations more controversial (Treem et al., 2015; Cadili and Whitley, 2005), (2) organisational-level factors such as formal and informal power structures and resource dependencies that position powerful organisational groups to reject particular elements of technically feasible innovations (Mamman, 2009; Wilson and Howcroft, 2005), (3) intra-organisational factors such as cultural values (W. Lewis, Agarwal and Sambamurthy, 2003; Tingling and Parent, 2004) and interests (Barrett, 1999; Brass, 2002), and (4) supra- organisational factors such as corporate and professional policies that shape organisational power structures (Zeitz, Mittal and McAulay, 1999; Elliott and Scacchi, 2013).

2. 4 Summary of Institutional Diffusion Research

Translation research augments mainstream discussions of internal diffusion issues, summarized in Table 2.1, in several ways. Translation sheds light on how technical, cultural and political misalignments drive infusion variance, and how inter-related knowledge, conformity pressures and framing compromise mechanisms shape alignment dynamics at different points in the internal diffusion process. Communicative framing mechanisms in particular synthesizes these mechanisms and thus, offers an avenue to streamline how we conceptualize the mutual relationship between individual objectives and needs, and organisational and technological values and practices.

Table 2.1 Summary of Innovation Diffusion perspectives			
Diffusion Approach	**Focus and contribution to internal diffusion**	**Shortcoming**	**Level of Analysis**
Economic rational	Consider how and why the comparative efficiency and economic benefits of an IT innovation influences its diffusion processes, such as assimilation and infusion. Organisations that are more diverse, larger, have supportive top management, possess previous knowledge and experience of IT innovation adoption, will adopt more innovations, adopt and infuse them earlier and infuse them more thoroughly.	Studies are relatively silent on irrationalities of adopting and infusing innovations that don't have immediate or clear economic and efficiency benefits.	Macro, Filed and Intra-organisational level
Field variance	Consider the ways in which the social mechanisms that perpetuate dominant organisational norms, beliefs and practices, and material technological features influence the form and function of internally diffusing innovations The form and speed of diffusing innovations varies with the degree of "alignment" or "fit" between the IT innovation and the adopting organisation's institutional context.	Organisational values, practices and IT decisions are unrealistically assumed to draw from a single, uniform, overarching set of institutional prescriptions. Does not connect institutional antecedents of diffusion to more pervasive consequences of misalignment such as resistance, power politics, and extensive IT and organisational customizations that are inevitable during internal diffusion. Simply put, variance studies do not adequately explain misaligned	Primarily Field level Intra-organisational

		adoption and infusion successes, or aligned failures	
Institutional process	IT diffusion as a process of mutually constitutive organisational and technological change, driven and constrained by discursive micro-processes that widen (de-legitimate) or narrow (legitimate) infusion variance (multiple simultaneous package-organisation institutional misalignments) Examine *package-organisation misalignment* dynamics during the institutionalization of IT innovations, from the destabilization of prevailing institutional norms (*unlearning or deinstitutionalization*) through the materialization and diffusion of new IT ideas as new institutional structures, to their eventual assimilation and "taken-for-grantedness". *Infusion* as limited diffusion- materialization, standardization and use of IT innovation by functional organisational groups. *Internal organisational diffusion*- Captures dynamics of progressive infusions across different functional groups. The early presence of a stable and meaningful *theorization* promotes the rapid communication and adoption, and internal diffusion of IT innovations.	Does not explore- The contestation and alignment micro-processes that shape infusion variance. How and what information should be communicated to encourage effective de-institutionalization	Primarily field- level Intra-organisational
Institutional translation	Considers how infusion variance emerges and is resolved in different organisational contexts. Sheds light on how technical, cultural and political misalignments drive infusion variance; and how knowledge, conformity pressures and framing compromise shape alignment dynamics at different points in the internal diffusion process.	The relationship between mis/alignment, and knowledge, cultural confirmation and framing alignment mechanisms has not been widely empirically explored (Ansari, Fiss and Zajac, 2010). For example, why particular frames are contested and/or generate different patterns of stakeholder action around IT Innovation (Mignerat and Rivard, 2009)	Intra-organisational

However, much of the work reviewed here, and in particular, Ansari, Fiss and Zajac (2010) propositions on the inter-relationship between alignment and knowledge, conformity and framing mechanisms, would benefit greatly from more empirical work (Ansari, Fiss and Zajac, 2010; Mignerat and Rivard, 2009). Recent studies have pointed out that the majority of existing studies of IT evolution within

organisations tends to focus on static elements of framing since an adequate analysis of how frames co-evolve with technology and organisational change would require in –depth longitudinal analysis (Karasti, Baker and Millerand, 2010).   As a result, we still know little about why particular frames are contested and/or generate different patterns of stakeholder action and innovation outcomes (notable exceptions are Nielsen, Mathiassen and Newell, 2014; Scarbrough, Robertson and Swan, 2015). Addressing these underserved areas would particularly help to address the gaps regarding the role that adopters play in enabling or constraining the appropriation of new IT innovations, and the need for more explicit attention to the legitimation dimension of IT innovation translation (Mignerat and Rivard, 2009).

Barrett, Heracleous and Walsham (2013) partly attribute this oversight to a relative lack of research focus on conceptualizing the relationship between ideology and framing, particularly as it relates to the diffusion of novel IT innovations. Indeed, ideology often reflects the deep technological, organisational, intra-organisational and supra-organisational legitimacy structures that I have highlighted as having a significant effect on the success of entrepreneurial actions to manipulate technical, cultural and political misalignments. However, IS implementation studies have favoured a conceptualization of ideology that only attends to intra-organisational and organisational level factors, where ideology is central to actor's beliefs and values regarding the suitability of a new IT innovation. Moreover, existing research tends to oversimplify political concerns by conflating ideologies and frames (P. E. Oliver and Johnston, 2000), where ideologies can sometimes be mobilized as frames, but not vice-versa (Gomez and B. C. Jones, 2000; Snow and Benford, 2000). For this reason this study uses an institutional logics and rhetorical- legitimation lens (Harmon, Green and Goodnight, 2014) to capture how ideology and technology framing work together, and how they are linked to broader social institutions and intra-organisational diffusion dynamics.

In the next section I will discuss this lens using a synthesis of this section's findings with an original discussion of how institutionally embedded rhetorical legitimation practices help to explain why and how IT innovations vary as they diffuse within organisations. These discussions are synthesized in two main ways. First, I will focus on how the dynamics of framing contestations and compromises are made more visible and comprehensible by looking at the process of legitimation and the type and sequence of rhetorical claims underlying entrepreneurial actors framing strategies. I will also show how institutional logics can improve conceptualization of organisational pluralism and the ideological roots of framing contestations. Synthesizing these views leads to a conceptualization of internal diffusion as a process of institutionally embedded rhetorical legitimation.

3 Internal Diffusion: Intra-Organisational Rhetorical Legitimation

The notion of internal organisational diffusion is an attempt to move beyond classical diffusion's focus on invariant field level innovation adoption (economic-rational and macro-institutional), and contemporary Scandinavian focus on how IT innovation ideas change as they travel between organisations. Specifically, the previous chapter illustrates that the translation view is well researched in the IT diffusion literature and can usefully improve the field's current understanding of internal organisational diffusion dynamics. Notably, the translation view points to the formative role of multiple competing arguments by conceptualizing diffusion as a process that is constituted through various technical, cultural and political misalignments (Powell, Gammal and Simard, 2005; T. Morris and Lancaster, 2006). The previous chapter also highlights that while intra-organisational "legitimating accounts" (rhetoric) and legitimation play important roles in the appropriation of internally diffusing innovations (Currie and Guah, 2007; A. D. Brown, 1998), they have rarely received explicit attention in IS diffusion and implementation literature (Mignerat and Rivard, 2009).

In this chapter I advance an intra-organisational *"rhetorical legitimation"* (Harmon, Green and Goodnight, 2014) lens to conceptualize the internal diffusion of digital innovations. This lens places emphasis on the interaction between multiple prevailing organisational institutions, emerging frames, and tangible and intangible innovation characteristics (IT ontology). Here I use the term "IT ontology" to refer to the set of related knowledge such as product cues and usage conditions (meaning), and defining features that distinctly blueprints the 'logic of action' for implementing and using a particular technology. I elaborate on these distinct concepts to pose that the translation of IT innovations within organisations is constituted through a rhetorical-legitimation cycle of (1) using legitimating accounts

(rhetorical arguments) to frame and justify (2) re-configuring an innovation's ontology according to its elaborated organising vision and (2) the logic of specific communities of actors.

Accordingly, I define internal diffusion as the process whereby the symbolic and material dimensions of an IT innovation (IT ontology) and/or the constellation of institutional logics in which it is embedded, become generally appropriate or desirable to a diverse community of organisational actors. Finally, I will summarize what it means to analyze intra-organisational diffusion dynamics using this lens.

3.1 The Focus on Legitimacy

Legitimacy is a fundamental and axiomatic part of the rhetorical-legitimation cycle and consequently plays a crucial role in internal diffusion. Defined as a generalized assumption of appropriateness or desirability (Suchman, 1995; Zucker, 1977), legitimacy is imparted onto an object through its alignment with a social group's moral, normative, and cognitive cultural structures, such as interests and belief systems (legitimacy standards). Depending on the degree of alignment with these standards, legitimacy can enable or constrain the thoughts and actions of social actors (Berger and Luckmann, 1967), and is therefore critical to processes of institutional (organisational and technological) change and stability (Scott, 2001; Johnson, Dowd and Ridgeway, 2006). Accordingly, the internal diffusion process of generating technical, cultural and political alignment to reduce infusion variance is at its core, an instance of IT legitimation.

Authors have conceptualized legitimation and de-legitimation as cognitive processes through which an object or institution gains legitimacy by becoming stable and connected to a social group (Zucker, 1977; Tolbert and Zucker, 1996), or loses legitimacy by becoming unstable and dissonant from a social group (G. F. Davis, Diekmann and Tinsley, 1994). Similarly, Hannan and Carroll (1992) suggests that an object or idea attains its highest level of legitimacy when *'there is little question in the minds of*

actors that it serves as a natural way to effect some kind of collective action' (p. 34). Thus, on one hand, legitimacy is often conceptualized as a cognitive construct that is grounded in assumptions of an object's interpretability or comprehensibility, appropriateness and desirability (Meyer and Scott, 1983; Aldrich and Fiol, 1994). While on the other hand, legitimacy is also thought to have a cultural dimension where an object's comprehensibility or desirability is inevitably judged within a socially constructed system of values, norms, definitions and beliefs (Scott, 2003).

In his study of strategic and institutional strategies for managing legitimacy, Suchman's (1995) proposes that both cognitive and cultural dimensions of legitimacy can be captured in three different forms of legitimacy illustrated in Table 3.1: pragmatic, moral and cognitive.

Table 3.1 Legitimation strategies in translation		
Legitimation strategy	**Literature instances**	**Gains Pragmatic or Moral legitimacy by**
Pragmatic: Conformation		
build reputation	Technology vision and goals should align with stakeholder needs (Kohli and Kettinger, 2004; Ramiller and Swanson, 2003; Currie, 2004)	*Exchange legitimacy* - highlighting how the IT innovation will directly benefit the audience.
responsive to needs	Trust in IT innovation is one of the most important factors driving the adoption and use (Sollner, 2015; Lim, Jarvenpaa, and Lanham, 2015)	*Dispositional legitimacy*- highlighting how aspects of IT project shares the audience's values and interests
co-opt constituents	Involving users in IS development and implementation (Wasko and Faraj, 2004; Hartwick and Barki, 1994, Beath, 1991)	*Influence legitimacy*- highlighting how IT innovation will help the audience to achieve their goals or interests
Pragmatic: Select markets		
locate friendly audiences	Prioritize roll-out of IT among stakeholders who are most in need of IT benefits (Lapointe and Rivard, 2005; Kappos and Rivard, 2008)	Exchange legitimacy
recruit friendly co-optees	Select champions who are credible and influential to stakeholder community and share the ITs vision and objectives (Beath, 1991)	Influence legitimacy
Pragmatic: Advertise		
advertise product &	"Informating the clan" on the value of IT benefits through boundary spanning, community discussion (Kohli and Kettinger, 2004, Davidson and Heslinga, 2007)	Exchange legitimacy & Dispositional
	Communicating IT success stories {Kohli and Kettinger, 2004; Davidson and Chismar, 2007)	Exchange

advertise image	Communicating how charismatic leaders use IT {Johnson, Safadi, and Faraj, 2015}	Influence legitimacy
Moral: Conformation to Ideals		
produce proper outcomes, embed in institutions,	Adoption of fashionable innovations (Baskerville and Myers, 2009)	Consequential legitimacy- highlighting the IT innovation's track record of socially valuable consequences.
	Align IT idea with organisational and departmental norms (Barca and Cordella, 2006; Prasad, 1993)	
	Employing consultants using proven methods to implement IT (Wright, Sturdy, Wylie, 2012,;Bloomfield and Coombs, 1992; Bloomfield and Ardha, 1995)	Procedural legitimacy- highlighting that the IT innovation uses socially accepted procedure and techniques
offer symbolic displays	Appoint charismatic and respected leader as IT champion (Beath, 1991)	Personal legitimacy- highlighting that the IT innovation is supported by charismatic or influential actors
	Professional and anthropomorphic symbolism significantly shapes IT assimilation process (Prasad,1993)	Dispositional legitimacy
Moral: Select domain		
Define goals	Prioritize roll out of IT among adopters that share similar norms to that of transformation goals(Lapointe and Rivard, 2005; Kappos and Rivard, 2008)	Exchange legitimacy
Moral: Persuade		
Proselytize, demonstrate success	Communicate virtues of the IT (Strang and Macy, 2001; Cabrera, Cabrera, and Barajas, 2001)	Consequential legitimacy
	Showing benefits of IT through early use or external examples, validates procedures, structures and personal (Swanson and Ramiller, 1997, Standing, Standing, Love, Gengatharen, 2013)	Procedural legitimacy

3.1.1 Pragmatic Legitimacy

Table 2.1 highlights the strategies that Suchman (1995) advances for gaining each form of legitimacy (Column 1) and maps them to the basis on which he indicates that they are granted (Column 3). In this typology he suggests that pragmatic legitimacy 'rest[s] on the self-interested calculations of an organisation's most immediate audience, and may be gained in three ways.

Firstly, on the basis of direct exchanges by highlighting how the object or idea will directly benefit the audience (exchange legitimacy) (Dowling and Pfeffer, 1975). Empirical examples of strategies for

gaining support through exchange legitimacy include satisfying audiences' demands for an IT innovation with a track record of technical superiority (Kohli and Kettinger, 2004), which also meets their immediate needs (Ramiller and Swanson, 2003; Currie, 2004). Second, pragmatic legitimacy may be gained for an object on the basis of its expected influence (influence legitimacy) or whether the audience believe that it can help them to achieve their larger goals and interests(Selznick, 1949). For example, incorporating users in key IT development and implementation structures such as steering teams, is often more effective at motivating engagement than producing quick results (Wasko, Faraj and Teigland, 2004; Hartwick and Barki, 1994; Beath, 1991).

Thirdly, an audience may also grant pragmatic legitimacy to an object if they believe that the object is "trustworthy", "decent", "wise", "shares their values" , or has "their best interests at heart" (dispositional legitimacy) (Scott, 2003). In this regard, numerous empirical studies have demonstrated *that trust is one most important drivers of IT adoption and use* (Söllner, 2015; Lim, Jarvenpaa and Lanham, 2015; Vance, Elie-Dit-Cosaque and Straub, 2014). Other studies have demonstrated that pragmatic legitimacy may be gained appointing credible and influential champions that share the IT vision (Beath, 1991), and (2) organising collective lobbying efforts (Wasko, Faraj and Teigland, 2004; Hartwick and Barki, 1994).

3.1.2 Moral Legitimacy

Moral legitimacy on the other hand rests in how well the object or idea is aligned to the organisation's prevailing moral values and norms (e.g. welfare and justice) and may also be gained in three distinct ways (Suchman, 1995). First, it is gained on the basis of credible consequences (consequential legitimacy) or the object or idea's track record of socially valuable consequences (Scott, 1977). Empirical IS research is replete with examples of consequential legitimacy in action, where organisations adopt fashionable IT innovations and with the expectation that the myths of its virtue alone will drive user engagement (see Baskerville and Myers, 2009 for a review).

Second, since morally valuable consequences are inherently difficult to measure and negotiate, an object or idea can gain moral moral legitimacy in a more direct way by embracing socially accepted procedures and techniques (procedural legitimacy) (Scott, 1977). For example, empirical studies often attribute successful IT implementation projects to the use of standardized and proven management consultancy expertise (Wright, Sturdy and Wylie, 2012; Bloomfield and Coombs, 1992; Bloomfield and Danieli, 1995).Thirdly, moral legitimacy may also be gained on the basis of the personal charisma (personal legitimacy) of an entrepreneurial organisational actor (Zucker, 1977). Again, empirical research is replete with accounts of how entrepreneurial actors play significant roles in disrupting established organisational norms using IT innovations (Beath, 1991, Henfridsson and Yoo, 2013).

3.1.3 Cognitive Legitimacy

Suchman (1995) adds that cognitive legitimacy increases proportionally with increases in pragmatic and moral legitimacy. Cognitive legitimacy may be increased by motivating collective action through *'popularization (promoting comprehensibility by explicating new cultural formulations) or standardization (promoting taken-for-grantedness by encouraging isomorphism)'* (Suchman, 1995, p. 592). An object or idea may be "popularized" by constantly illustrating its reality through communicative actions such as advertising its technical advantages and image to gain pragmatic legitimacy (Swanson and Ramiller, 1997; S. Standing et al., 2013), and proselytizing its moral virtues to gain moral legitimacy (Strang and Macy, 2001; Á. Cabrera, E. F. Cabrera and Barajas, 2001) (see Table 3.1).

However, generating comprehensibility among communities of actors with contrasting values and objectives is often prone to chaotic path dependencies and requires added standardization efforts to generate collective action (Arthur, 1990; David, 1986). In this regard, the institutional entrepreneurship literature discussed in chapter two's review of the translation literature suggests that standardization is the product of discursive pressures, which are aimed at regulating or replicating successful

organisational and technological change patterns (Meyer and Rowan, 1977; Tolbert and Zucker, 1983; Avgerou, 2000).

Despite these observations, IS research has paid relatively little attention to examining the details of how legitimacy is gained, eroded or repaired through discursive, rhetorical and technical struggles (Deephouse and Suchman, 2008a; notable exceptions being Nielsen, Mathiassen and Newell, 2014; Hsu, Huang and Galliers, 2014). This study intends to address this underserved area of legitimacy research by illuminating how an internally diffusing IT innovation becomes comprehensible to heterogeneous organisational actors.

3.1.4 Comprehensibility and Collective Action

Research suggests that an innovation may be simultaneously "popularized" and "standardized" in pluralistic contexts through combinations of pragmatic and moral communicative actions (Greenwood, Suddaby and Hinings, 2002; Strang and Meyer, 1993). For instance, institutional entrepreneurs use "theorizations of change" to simultaneously present a new IT innovation as the solution to a shared organisational failing, thus granting the innovation pragmatic legitimacy, and justify an abstract solution by aligning the innovation with prevailing normative prescriptions, granting the idea moral legitimacy (Greenwood, Suddaby and Hinings, 2002; Suchman, 1995). Similarly, organising visions expand the reach of fashionable IT innovations within an institutional field by broadly explaining its usefulness and purpose, thus making it more universally applicable (Strang and Meyer, 1993; Swanson and Ramiller, 1997).

Political translation studies particularly demonstrate how new IT innovations become comprehensible and legitimate in the early stages of institutionalization. These studies hold the common view that prevailing institutional logics provide the standards of legitimacy by which actors judge the appropriateness or desirability of new IT innovations (Klein and Hirschheim, 1989; Hussain and

Cornelius, 2009). Empirical studies importantly highlight that communicative actions such as framing can reduce IT infusion variance and generate collective action by increasing the alignment between IT innovations and prevailing legitimacy standards.

They also show that framing constructs such as Hargadon and Douglas's (2001 design skeumorphs allow organisational actors to instantiate specific legitimacy standards rather than others when they communicate messages, so that they shape how these messages are interpreted by particular social groups. In this way institutional entrepreneurs can simultaneously de-legitimate existing technologies and legitimate new ones. Framing strategies embody institutionally desirable interests and values, and communicate these interests through observable 'legitimating accounts' or rhetoric such as root metaphors and central themes. Skilled actors such as institutional entrepreneurs generate collective action around their intentions for the IT innovation by using this rhetoric to connect their ideology and desired IT ontology to the adopting organisation's prevailing institutions (Suchman, 1995; Harmon, Green and Goodnight, 2014; Lammers, 2011). Berente and Yoo (2012) also observe that when an IT innovation is introduced into an organisation with contradictory practices, different groups of organisational actors loosely couple their practices from those of the IT, in different ways (temporal, material, procedural and interpretive). The type of coupling adopted by a particular group usually reflects the degree to which they perceive the new practices as legitimate.

These studies show that the use of persuasive language is crucial for encouraging a target audience to perceive a new IT innovation as appropriate and desirable. They also show that generating comprehensibility for an IT innovation requires pro-active actions to reconfigure dominant ideologies within the host organisation. Many of these studies also point to the central role of *institutional logics* in rhetorical framing and legitimation processes, and thus, in the process of internal IT diffusion. These studies also indicate that organisational pluralism tends to be the rule rather the exception in contemporary organisations. As a result, a number of rhetorical –legitimation episodes reflecting

conflicting institutional logics, legitimacy standards, and frames may exist concurrently or sequentially over the duration of internal IT-innovation diffusion.

3.2 The Focus on Ideology, Institutional Logics and Complexity

Empirical research in chapter 2 illustrates that the effectiveness of entrepreneurial actions to achieve technical, cultural and political legitimacy during IT translation depends on entrepreneurs' sensitivity to technological, organisational, intra-organisational and supra-organisational factors. Chapter 2 also shows that although ideology reflects these factors and has thus been used in a number of IS implementation studies, this ideological conceptualization neglects the important technological and supra-organisational factors. On the other hand, a number of recent IS studies have usefully employed an institutional logics lens to demonstrate the interrelations between these four factors and diffusing innovations (Yoo, Lyytinen and Yang, 2005; Berente and Yoo, 2012; Mola and Carugati, 2011; Currie and Guah, 2007).

3.2.1 On Ideology and Institutional Logics

Although there is an on-going scholarly debate attempting to draw clear conceptual distinctions between ideology and institutional logics (for an overview, see Thornton and Ocasio (2008)), it is generally accepted that they are empirically almost inseparable. The general pattern across this literature indicates that enquiries which do not intend to make explicit theoretical contributions to either of these concepts may conflate them or treat them as tightly coupled (Mutch, 2009; Archer, 1996; Boltanski and Thévenot, 1991). Following the lead of similar innovation diffusion studies(Suddaby and Greenwood, 2005; Heracleous and Barrett, 2001; Azad and Faraj, 2008; Delmestri, 2009), I also adopt a stance of empirical conflation. However, I conceptually embrace the view that ideologies are value-based (cultural structures), chains of cause and effect that link individual identities and actions to

institutional logics. My intention in adopting this view is to analyze the ideologies underlying actors' frames as distinct institutional logics that point to distinct ideologies.

3.2.2 On Institutions

Organisational institutions can be any persistent structure with *'an organised, established, procedure'* that is *'simultaneously material and symbolic'* (Friedland and Alford, 1991, p. 241). They are the material patterns of social action that organisational actors invoke to construct and maintain relatively homogenous ideologies, identities and practices in particular contexts (Friedland and Alford, 1991). Simultaneously, they are symbolic systems of linguistic and ideational processes that guide how organisational actors order reality, consequently making situated ideologies, identities and practices legitimate and meaningful (Friedland and Alford, 1991). Rooted in the notion of isomorphism (inevitable homogeneity), the majority of macro-social IT diffusion studies conceptualize organisations as institutions in their own right, and focus their analysis on sector, industry, and organisational level adoption of IT innovations. Yet, institutional research cautions that while institutions facilitate the chronic reproduction of micro-level practices, they are themselves generatively constructed through these everyday individual actions (Powell, 1991; Thornton, Ocasio and Lounsbury, 2012). In this regard, the institutional lens enables researchers to examine the values, goals and prescriptions that underlie and legitimize the symbolic and material behaviors of individuals and groups actors (Powell and Colyvas, 2008). The collection of values, goals and prescriptions related to a specific institution mold a distinct rationale or institutional logic.

3.2.3 On Institutional Logics

Institutional logics are sets of material and symbolic "organising principles" that draw on higher order institutions such as family, state, capitalism, and professions, to define *'rules of action, interaction, and interpretation'* for organisations and individuals to elaborate (Ocasio and Thornton, 1999). Through

elaboration, these organising principles outline the micro-level "logics of action" or the means, ends, and standards for assessing what objects and actions are appropriate in a particular context (Greenwood et al., 2011; Pache and Santos, 2010). Since the logic of the institution extends across individual, organisational and societal levels of analysis, the conceptual apparatus of institutional logics allows researchers to relate individual micro-level actions to broader societal institutions. The societal-level institutions associated with logics are continually replicated in the everyday actions of individuals, and are consequently reflected in organisational activities (Friedland and Alford, 1991). In order to capture the dynamics of this relationship I focus on four key elements of an institutional logic outlined in Table 3.1 in the following section.

3.2.4 Identifying Institutional Logics

Table 3.2 illustration of the characteristic of institutional logics is based on a synthesis of taxonomies outlined by Thornton and Ocasio (2008) and Cloutier and Langley (2013).

Table 3.2 Formative characteristics of Institutional logics		
Element	**Definition**	**Example and Source: Market logic**
Common Principles	Core goals and values characterizing the organising principles of a particular logic.	Profit maximization (Thornton, 2002; Thornton,2004)
Material manifestations	People, objects, procedures, and symbols that embody what it is to be legitimate within a particular logic	Profit maximization is legitimated by shareholders, stock price, financial measures, share price considerations, control- and efficiency-seeking behaviors (Thornton, Ocasio, Lounsbury, 2012; Pache and Santos, 2013)
Assumptions	The proper behaviours that organisational actors or objects must espouse in order to be considered legitimate within a particular logic.	Self-interests and individualism are basis of norms and individual behavior (Almandoz, 2012; Marglin, 2008)
Identifying Characteristics	Features or practices espoused by persons, ideas, objects, or IT ontology that establishes their legitimacy within a particular logic	Distant, efficient, controllable, transactional exchange relationships reflect self-interested assumptions (Almandoz, 201;Marglin, 2008; DiMaggio, 1997)

Thornton and Ocasio's (2008) work is aimed at highlighting the content and structure of explicit institutional logics, while Cloutier and Langley (2013) focus on the resources and mechanisms that actors invoke to assess the legitimacy of situated objects and practices.

First, institutional logics provide a higher common principle that defines appropriate forms of conduct, the degree of legitimacy for particular societal values and rules, and thus organises collective action (Friedland and Alford, 1991). Second, material manifestations and practices of institutions authorize and legitimate organising principles in specific contexts. For instance, prevailing organisational objects, symbols, practices (ways of achieving objectives), and actors' roles and identities tend to exemplify the institutional standards of legitimacy in different contexts (Thornton, Ocasio and Lounsbury, 2012; Sia and Soh, 2007; Boudreau and Robey, 2005). Third, institutional logics are based on means-ends assumptions, such as the appropriate behaviors and symbolic actions that actors and objects need to exhibit in order to gain legitimacy. This may either be discrete habits, emotions, and espoused goals, and/or symbolic demonstrations of commitment (e.g. sacrifice) to the values underlying a particular logic (Almandoz, 2012; Bacharach, Bamberger and Sonnenstuhl, 1996; Marglin, 2008; Boudreau and Robey, 2005). Fourth, assumptions are reflected in the characteristics of legitimate organisational objects and practices. These characteristics help organisational actors to assess the degree of legitimacy of organisational objects, practices and actors (DiMaggio, 1997; Jepperson, 1991). Distinct institutional logics are therefore formed of particular sets of characteristics. Whereas classical institutional research assumes that actor's elaborate these scripts in a non-rational and passive way, the institutional logics view embraces the notion of embedded agency, where actors do often act rationally, but always against situated institutional pressures that espouse taken-for-granted assumptions and goals (Thornton and Ocasio, 2008).

3.2.5 On Institutional Complexity and Misalignment

Contemporary organisations typically operate over multiple institutional fields, and thus encompass numerous, often conflicting institutional logics, simultaneously. Commonly referred to as institutional pluralism (Jarzabkowski and Spee, 2009; Dunn and C. Jones, 2010), this heterogeneous circumstance importantly influences infusion variance and re-alignment mechanisms during internal IT diffusion. While some institutional logics are complimentary and are easily reconciled, organisational actors do not easily switch to contradictory logics but fiercely defend the institutional logic that guided their actions and meaning-making in the past (Friedland and Alford, 1991; Thornton, 2002).

When a contradictory logic enters an organisation either in the form of a new IT innovation or management prescription (external jolt), organisational actors may experience cognitive and social dissonance as competing logics become more misaligned with each other, and newly- introduced innovation. The literature conceptualizes the consequences of this form of misalignment as loose coupling (Berente and Yoo, 2012) and co-mingling (Smith-Doerr, 2005; Swan et al., 2010). Both of these conceptualizations conclude that misalignments create difficulties for local inter-group interactions that front-line actors resolve by adopting distinctly different patterns of action, but still remaining responsive in some way to competing patterns of action (Clemens and Cook, 1999; Orton and Weick, 1990). For instance, a number of studies have established that financial and consulting services companies are often dominated by an extreme form of market logic that is innately co-mingled with underlying community and professional logics (Smets et al., 2014; G. F. Davis, 2009; Swanson, 2010). Despite institutional scholars acknowledgement that competing demands from numerous incompatible logics leads to local dissonance, scholars are relatively silent on how managers can proactively deal with this dissonance at an intra-organisational level (Greenwood et al., 2010; Berente and Yoo, 2012). Such research is vital to understanding how technological alignment can be managed from the top-down.

3.2.6 On Institutional Entrepreneurship and Rhetorical Alignment

Though interest in top-down institutional alignment has steadily increased to this point (Lawrence, Suddaby and Leca, 2009; Swan et al., 2010; Smets et al., 2014), few studies have explored how managers deal with and resolve the conflicts that pluralism generates (Zilber, 2011; Cloutier and Langley, 2013). Institutional entrepreneurship and social movements theory have provided useful examples of how individual agency (DiMaggio, 1988; Lawrence, Suddaby and Leca, 2009) and social interaction (Lounsbury, 2002; Clemens and Cook, 1999) play crucial roles in dealing with intra-organisational misalignments and social dissonance. Institutional entrepreneurship is a process where actors with sufficient resources or other forms of power seize opportunities to shift or replace prevailing organisational logics according to their interests (C. Oliver, 1992; DiMaggio, 1988; Munir and Phillips, 2005).

Research shows that while an external jolt may sometimes introduce a completely new contradictory logic into an organisation, it more often energizes entrepreneurial action to lobby for a peripheral logic to become insurgent (Lounsbury, 2007; Clemens and Cook, 1999; Maguire and Hardy, 2009; Garud, Jain and Kumaraswamy, 2002). A parallel stream highlights that contradictions and ambiguities in the language that reproduces specific logics make them especially mutable to appropriation. Such that, institutional entrepreneurs who are sensitive to these contradictions can skillfully use rhetorical practice to justify and recast change as "efforts to restore tradition" (Rao, Monin and Durand, 2003; Barrett, Heracleous and Walsham, 2013). Social movements research similarly propose that entrepreneurial actions are more effective when elements of the insurgent logic are connected via rhetoric to core organisational and field level values (Rao, Monin and Durand, 2003). Organisational actors are more likely to view a change as legitimate *'when they fit into the pre-existing cultural beliefs, meanings, and typifications of an organisational community'* (Ruef, 2000, p.661). For example, a number of studies highlight that the institutional logic of professionalism may be linguistically connected to

"community" or "market" logics, since although professionalism is rooted in historical "expert" and "trustee" language, its masks commercial market interests (e.g. Leicht and Fennell, 2001; Suddaby and Greenwood, 2005; Freidson, 2001).

3.2.7 Final Note on Institutional Logics

These studies suggest that institutional logics encode the criteria that organisational actors use to assess the legitimacy of new IT innovations as they diffuse internally. As new objects diffuse internally, competing logics are loosely coupled in a period of heightened strategic, symbolic contestation (rhetorical framing practices) to legitimate the object according to different logics. After multiple rhetorical- legitimation episodes, loosely-coupled logics may become tightly coupled or 'hybridized' as legitimacy standards are shifted, compromises are reached and the object starts to diffuse between organisational groups (Swan et al., 2010; Lounsbury, 2007; Battilana and Dorado, 2010). In some cases, this hybridization may lead to the complete transformation or replacement of the dominant logic and the diffusion of unintended material and symbolic practices (Pache and Santos, 2013). They also point to the central role of rhetorical-legitimation in entrepreneurial framing practices. Entrepreneurs use rhetorical practices to exploit and manipulate logics and legitimacy standards according to their own interests, and in turn, influence how internally diffusing IT innovations are mis/aligned within local organisational contexts.

3.3 The Focus on Rhetoric in Framing

As the art of persuasion, 'it is through rhetoric that agency is restored as actors attempt to shape the legitimacy of practices to suit their goals and interests.' (Barrett, Heracleous, Walsham, 2013, p. 204). Prior to the emergence of scientific rationality, academic theorists held rhetoric as the principal source of invention and inspiration in the production of social action (Burke, 1966; Bizzell and Herzberg, 2001). With the recent "linguistic turn" in organisational studies researchers have revived and extended

this rhetorical theory to emphasize how social actors' use strategic language to displace and shift meaning during social change (Suddaby and Greenwood, 2005; Harmon, Green and Goodnight, 2014). Along this linguistic turn, contemporary rhetorical theory has built on narrative analyses, hermeneutics and particularly discourse, which have also established that language does indeed help to direct social action. Independent from these streams however, rhetoric is theorized as a type of instrumental discourse that is used to 'persuade audiences, reach reliable judgments or decisions, and coordinate social action' (Green, 2004, p. 654). Accordingly, rhetorical diffusion theory suggests that framing practices are discursive justifications around a new idea or object. As these discursive justifications become more persuasive the new idea is seen as more appropriate and legitimate (comprehensible), and consequently diffuses more widely.

3.3.1 On Rhetorical Legitimation and Comprehensibility

The dominant diffusion paradigms have shown that the diffusion of new objects and ideas (*product ontologies*) are often accompanied by legitimating discourse that points to how the product ontology helps organisational actors to rationally pursue valued economic (economic-rational) and social needs (institutional) (Friedland and Alford, 1991; Abrahamson, 1991; Strang and Macy, 2001). These studies highlight that increasing legitimate product ontologies are accompanied by increasingly persistent and prevalent material features that change according to actors' valued economic and social needs (Tolbert and Zucker, 1983; Westphal, Gulati and Shortell, 1997). Rhetorical theory extends this observation to try to understand when and how these material practices are acquiring legitimacy—that is, diffusing more widely or becoming more institutionalized. Research in this stream empirically and theoretically depart from dominant rhetorical perspectives' tendency to sideline symbolic institutional aspects and overemphasize material aspects (Ansari, Fiss and Zajac, 2010). Rather they adopt a more cognitive and communicative (ideational) stance that explores how the structure, form and content of discursive

justifications shapes and reflects the changes in legitimacy of diffusing product ontologies (Suddaby, 2011).

In doing so, the theory of rhetorical legitimation enhances the dominant paradigms in three major ways. Firstly, it suggests that the rationale behind decisions and actions is embedded in readily observable and empirically measurable arguments (rhetorical arguments) or reasons, rather than in immeasurable beliefs and assumptions. In turn *"reasons or arguments reflect and shape the institutional logics and belief systems that guide practical action"* (Green, 2009, p. 14). Secondly, this view accordingly explains why particular economic and social needs become salient and why a particular institution or object satisfies these needs in specific contexts. The first two positions rely on ideas of situated social agency, cultural deviance and political adaptation, which therefore capture how established objects or institutions (and associated institutional logics) may be de-legitimated and how insurgent logics (and associated objects) can become salient and legitimate.

Empirical research along these lines highlight that while only social actors can directly use rhetoric to legitimate new ideas and objects, presentations and documents from prior adopters, academic and business press, and special events or meetings are proxies that reflect what organisational actors hold as salient or legitimate (Strang and Soule, 1998; King and Kugler, 2000). More importantly, organisational actors can use this rhetoric to justify their actions and institutionalize new objects and practices (Suddaby, 2011; Green, Li and Nohria, 2009), and explicitly construct legitimacy (Harmon, Green and Goodnight, 2014; Vaara and Tienar, 2008). For example, King and Kugler (2000) found that new practices were more efficiently and effectively comprehended by organisational actors when managers used increasingly persuasive discursive justifications (or sense making mechanism (Weick, 1995)) to rationalize and legitimize their usefulness (rhetorical legitimation strategies). These justifications were more persuasive when they connected the new practice to prevailing institutional logics and practical problems.

3.3.2 On Rhetorical Diffusion and Institutional Change

Empirical evidence on rhetorical diffusion advances a *redefinition of legitimation* (Hussain and Cornelius, 2009; Zelditch, 2001; Klein and Hirschheim, 1989; Mignerat and Rivard, 2009). Whereas Suchman (1995) defines legitimacy as a generalized assumption that actions or objects are socially appropriate or desirable, Harmon, Green and Goodnight (2014) argue for a reconceptualization that embraces mutual technical and organisational institutional change. They define legitimacy as *'a generalized assumption that an institutional context and/or certain actions within that context are desirable or appropriate'* (p.86).

These views are rooted in translation researchers' view that institutional entrepreneurs, their target audience, and the new product ontology are necessarily influenced by the symbolic prescriptions of prevailing institutional logics. These views also resonate with the institutional logics view of entrepreneurship and shifting logics by suggesting that although *'certain types of rhetorical strategies might maintain the boundaries of institutional arrangements and make them more resilient and reproducible, ... others might disrupt these boundaries and challenge the foundation of the institutional edifice'* (Harmon, Green and Goodnight, 2014, p. 89). Entrepreneurs may enhance the persuasiveness of their claims about a new product ontology through institutional maintenance or technology adaptation. This involved mobilizing rhetoric to align their justifications for the new product ontology with the institutional logics that guide the target audience's activities and interests. Their rhetorical arguments may also legitimate the new product ontology by pursuing institutional change or organisational adaptation. In this case, their rhetoric would be aimed at gradually shifting the logic that guides audiences' interests, members of the audience come to perceive the new object as legitimate. In the case of institutional change, when a newly- introduced product ontology challenges established ways of working in novel and unusual ways, diffusion is often characterized by contestation between different organisational stakeholders on how to redefine the institutional context so that the object

becomes more comprehensible and legitimate (Nielsen, Mathiassen and Newell, 2014; Scarbrough, Robertson and Swan, 2015). As such, rhetorical legitimation facilitates the diffusion of a product ontology by actively shaping how new objects and ideas are interpreted and theorized (Green, Li and Nohria, 2009).

As objects diffuse, the number and frequency of supporting rhetorical legitimation strategies are more intense in the early stages of diffusion, prior to the object achieving cognitive legitimacy or taken-for-granted status (Green, 2004). Green (2004) adds that rhetorical legitimation strategies tend to vary in *type and sequence* at different points in the diffusion process and across different institutional contexts. Harmon, Green and Goodnight (2014) add that diffusion research can better understand the dynamics and effects of contestation between diverse organisational actors by exploring variations in *rhetorical structure*.

3. 4 Principles of Rhetorical Legitimation

A rhetorical view of legitimation and diffusion can lead to a better understanding of variations in the pace and outcome of diffusion. since it holds the potential to explain why different organisational actors execute a specific strategy, or multiple strategies, in different ways. This is enabled through a combined focus on how variations in elements, types, structure, sequence and institutional groundings (logic) of rhetorical strategies build or erode legitimacy for an idea or object. Table 3.3 outlines these key principles, where elements, type, and structure are listed in the first column, and sequence, institutional grounding, and implications are summarized in the other columns. As I will discuss in this section, these principles are based on frameworks explaining and exploring the role of rhetoric in diffusion (Green, 2004) and institutionalization (Green, Li and Nohria, 2009; Harmon, Green and Goodnight, 2014). These principles also resonate with key issues and mechanisms of innovation translation (section 2.2.2) and converge on conceptualizing internal diffusion as a process by which an idea or object

develops comprehensibility through rhetorical strategies. Conceptualizing distinct rhetorical justifications as made up of data, claim, warrant and backing dimensions usefully points to how variations in rhetorical type, institutional grounding, and sequence shapes diffusion. Specifically, the content, type and institutional grounding point to the state of legitimation (Green, 2004), while the sequence of rhetoric strategies models the process of legitimation (Green, 2009; Harmon, Green and Goodnight, 2014).

Table 3.3 Principles of Rhetorical Legitimation		
Principles	**Empirical features**	**Implications**
Elements of Rhetoric	Data: Evidence that organisational actors use to support a claim e.g. success stories, benefits Claim: The conclusion that actors are seeking to establish as legitimate e.g. calls to action Warrant: The reason that legitimizes or sanctions the link between claim and data e.g. fundamental focus, business case Backing: Commonly held characteristics, principles, material consequences and assumptions of a discursive community (institutional logic) that organisational actors use to judge whether the warrant and data justifying a claim are legitimate. In reflecting the concerns of one or more elements of an argument's institutional grounding the backing therefore points to the logic behind a rhetorical argument. Syllogism: argument with warrant, data and claim Enthymeme: argument with data and claim Unsupported claim: argument with just claim	The state of diffusion may be traced by examining the presence and content of particular elements, while the diffusion process is constituted as changes in argument structure (*see row 3*). Syllogisms are more persuasive than Enthymemes, and these are all more persuasive than unsupported claims
Types of rhetoric	Pathos appeals link data to claims using passionate calls to an audience's emotions (e.g. greed, fear) and self-interests Logos appeals make logical calls to an audience's desire for efficiency and effectiveness	Pathos and logos appeal to an audience's self-interests to swiftly generate relatively transient pragmatic legitimacy; Ethos appeals to moral and social norms to slowly generate durable moral legitimacy. Pragmatic and moral legitimation processes are vital in internal diffusion since they help to

	Ethos appeals call on audiences to judge whether an action is morally and socially "the right thing to do"	generate the cognitive legitimacy that increases comprehensibility.
Structure of rhetoric	Intra-field rhetoric is used to argue the validity of warrants and data supporting a claim in a specific context Inter-field rhetoric is used to argue the validity of the backing (institutional logic) that authorizes warrants and data supporting a claim.	Different combinations of pathos, logos and ethos syllogisms and enthymemes over time correspond to the extent and speed at which new IT innovations are gaining or losing legitimacy. Syllogism → Enthymeme: A prolonged streamlining and decrease of rhetorical warrants indicates increasing legitimacy and comprehensibility. Inter-field to intra-field shifts in rhetorical strategies indicate increasing legitimacy and comprehensibility. Intra-field to inter-field shifts in rhetorical strategies indicate de-legitimation.

3.4.1 Elements of Rhetoric

Harmon, Green and Goodnight (2014) illustrate that 'an argument moves from data (i.e., the evidence social actors use to support the claim) to claim (i.e., the conclusion whose legitimacy social actors are seeking to establish) by virtue of a warrant (i.e., a reason that authorizes the link between data and claim)' (p. 79). The backing supplies the institutional grounds via which organisational actors judge whether the warrant and data justifying a claim are legitimate or generally acceptable (Toulmin, 2003). As such, researchers note that a rhetorical argument's backing reflects commonly held social beliefs of a discursive community (Areni, 2002; Toulmin, Rieke and Janik, 1984), such the common principles, material manifestations, assumptions, and identifying characteristics that define an institutional logic (see Table 3.2). Additionally, while warrants are more entrenched in backings (institutional logics), data draws from individual or local experience and knowledge (Corbett and Connors, 1999; Toulmin, Rieke and Janik, 1984). Accordingly, researchers note that rhetorical arguments with a warrant, data and claim (syllogism) are more persuasive than arguments with just data and claims (enthymeme), and

enthymemes are more persuasive than unsupported claims (Perelman and Olbrechts-Tyteca, 1969; Areni, 2002).

Empirical studies drawing on this principle show that variations in the presence and content of these elements in a justification, provides a readily observable way to judge the state of diffusion over time (Barrett, Heracleous and Walsham, 2013; Hsu, Huang and Galliers, 2014; Green, Li and Nohria, 2009). For example, a decrease in stating the warrant of a rhetorical argument over time indicates that the innovation is gaining legitimacy and comprehensibility (Perelman and Olbrechts-Tyteca, 1969; Green, Li and Nohria, 2009). The prolonged suppression of warrants (*syllogism to enthymeme*) may eventually lead to suppression of the data dimension of an argument (*enthymeme to unsupported claim*), indicating that the warrant and data have both become taken-for-granted by the audience (Perelman and Olbrechts-Tyteca, 1969; Green, Li and Nohria, 2009). These studies also suggest that variations in the relationship between a justification's backing and its warrant and claim is particularly pertinent for understanding how organisational actors passively and actively experience institutional complexity during internal diffusion. In complex institutional settings, there may be multiple, pertinent backings with different warrants and courses of action. Crucially, a number of studies have demonstrated that the dynamics of this complexity is best captured by looking at how justifications appeal to different types of legitimacy over time (Barrett, Heracleous and Walsham, 2013; Nielsen, Mathiassen and Newell, 2014; Green, 2004; Suddaby and Greenwood, 2005; Erkama and Vaara, 2010).

3.4.2 Types of Rhetorical Appeals

Prior research discussed in section 3.1 highlight that institutional entrepreneurs may use symbolic actions, such as those proposed by Suchman (1995) to explicitly generate pragmatic and moral legitimacy, and as a consequence, cognitive legitimacy (S. A. Brown et al., 2002; Hussain and Cornelius, 2009; Kaganer, Pawlowski and Wiley-Patton, 2010). However, enquiry into Suchman's (1995) strategies of advertising the innovation's benefit (Swanson and Ramiller, 1997; S. Standing et

al., 2013), and proselytizing its moral virtues (Strang and Macy, 2001; Á. Cabrera, E. F. Cabrera and Barajas, 2001) to respectively gain pragmatic and moral legitimacy (see Table 3.1), broadly converge on the view that non-linguistic symbolic actions often reflect rhetorical concerns (Strang and Soule, 1998; King and Kugler, 2000). In this regard, studies on linguistic symbolism highlight that different combinations of warrants, data and claims can make either pathos, logos or ethos legitimacy appeals to legitimate a diffusing IT innovation (Green, 2004; Hsu, Huang and Galliers, 2014; Nielsen, Mathiassen and Newell, 2014; Barrett, Heracleous and Walsham, 2013).

Pathos and logos appeals both rest on an audience's self-interested calculations of an object's direct expected value or whether it shares particular social interest and goals, and thus construct and build pragmatic legitimacy (Suchman, 1995; Scott, 2001). In particular, pathos appeals link data to claims using passionate appeals to an audience's emotions (e.g. greed, fear) and self-interests. This type of persuasive appeal is especially effective early in the diffusion process for challenging the status quo and grabbing actors finite attention span, but less so at sustaining this social action (Bizzell and Herzberg, 2001; Herrick, 2005). Logos appeals make logical calls to an audience's desire for efficiency and effectiveness (Putnam and Mumby, 1993). These warrants have more sustained persuasive power than pathos appeals since they elicit gradual, methodological means-ends calculations (Simon, 1976). In contrast, ethos appeals depart from a focus on individual interests (logos and pathos) to invite audiences to judge whether an action is morally and socially "the right thing to do". Ethos persuasive appeals accordingly build moral legitimacy that rests on an audience's judgments of whether a new object promotes and/or resonates with their shared moral values and norms (Suchman, 1995; Scott, 2001). Because of this social focus, ethos appeals have a slow and gradual effect but are the most effective at generating sustained social action and comprehensibility (Suchman, 1995; Herrick, 2012).

These findings suggest that pragmatic and moral legitimation are the most pertinent processes for the examination of innovation diffusion, in so far as they gradually generate cognitive legitimacy for

diffusing innovations (Suchman, 1995; Green, Li and Nohria, 2009; Suddaby and Greenwood, 2005; Vaara and Tienar, 2008). Specifically, diffusion research generally agrees that a pattern of declining amounts of pragmatic and moral justifications on the whole indicate that the diffusing object is gaining cognitive legitimacy and thus, becoming more comprehensible and taken-for-granted by a situated community of actors (Aldrich and Fiol, 1994; Tolbert and Zucker, 1996).

3.4.3 Structure of Rhetoric

The third rhetorical legitimation principle points to the role of rhetorical structure. Extant diffusion research shows that we can better understand variations in the extent and speed at which a new idea gains or loses legitimacy over time by observing how organisational actors combine different types of rhetorical appeals in particular sequences. For example, Green (2004) hypothesizes that new ideas and objects are most likely legitimated in a pattern where,

> *'pathos appeals help direct behavior away from the status quo. Logos appeals link new actions and behaviors to effective outcomes [and] Ethos appeals lock in new behaviors and hinder movement from the new equilibrium'. (p.661)*

However, focusing solely on the sequence of rhetorical appeals does not shed light on why different organisational actors adopt specific rhetorical strategies. Harmon , Green and Goodnight (2014) argue that this gap can be addressed by conceptualizing how rhetorical strategies relate to organisational actors' legitimacy assumptions on two levels, *inter-field and intra-field.*

Intra-field Rhetorical Justifications

Intra-field rhetoric is used to argue about ideas and issues around a specific backing but do not explicitly challenge or justify the backing (Toulmin, Rieke and Janik, 1984). The prevalence of this type of rhetoric around an internally diffusing product ontology suggests that the audience collectively perceive the related backing as legitimate. In this case, entrepreneurs acknowledge and use warrants and data that are authorized by the socially agreed backing to further align particular claims about the

internally diffusing product ontology with the existing institutional context (Friedland and Alford, 1991; McNulty, 2004). Intra-field justifications therefore reflect entrepreneurial action to generate institutional stability, compromise and maintenance, or align the product ontology with the audience's prevailing institutional logics.

For instance, Harmon, Green and Goodnight (2014) illustrate a case of uncertainty over a multi-national organisational merger, where the company argued that the merger was viable because it was forecasted to yield a 25% profit in the next two years. Financial analysts countered that the profitability estimate was exaggerated because the company's financial model inputs were incorrect; investors argued that the profitability projection did not account for unexpected foreign spending; and the company responded to the former with additional data to support its model and to the latter with financial proof of sufficient cash reserves to cover unexpected future expenditures. Despite each stakeholder group's disagreement about the merger's legitimacy, their rhetorical strategies of challenging the organisational data on financial grounds, implicitly indicated that they generally accepted financial evaluation as the dominant backing for the merger in this context. Thus, with intra-field rhetoric, while contestations do occur, these dynamics take place within a socially accepted institutional logic or backing (e.g. financial evaluations) that sets the boundaries for the types of warrants and data that are permitted in the local context.

Inter-field Rhetorical Justifications

However, persistent and persuasive intra-field rhetorical rebuttals may gradually weaken social consensus and lead to inter-field arguments, where organisational actors progressively experiment with backings that better explain and fit the diffusing idea or object. In fact, in most complex environments different organisational actors often draw on multiple backings (e.g. political, financial, professional) to support their claims. Entrepreneurs justifications remain as intra-field when the data associated with different prevailing backings legitimates similar claims(Toulmin, Rieke and Janik, 1984; Goodnight,

2006). However, when the data associated with different backings substantiates contradictory claims, organisational actors are likely to mobilize multiple inter-field justifications to decide which combination of backings (*loosely coupled or co-mingled logics*) or single backing is most suitable for the institutional context. The outcome of this contestation and negotiation is a shared understanding of the product ontology's usefulness or a product ontology that best meets the needs of key stakeholders (Toulmin, Rieke and Janik, 1984).

Re-citing Harmon, Green and Goodnight's (2014) example, while the financial data (25% increase in profit) may broadly sustain the merger's legitimacy, a special interest group may advance a political backing and contest that the merger threatens national security. When an alternative backing (e.g. political interests) for a situated phenomenon is introduced, organisational actors may suppress intra-field rhetorical elements (i.e. claim, warrant, data) and explicitly provide alternative rhetorical justifications to defend or challenge the dominant backing (e.g. financial evaluation) (Toulmin, Rieke and Janik, 1984; Suddaby and Greenwood, 2005). Similarly, proponents of the dominant financial backing will likely engage in similar inter-field rhetorical justifications to defend their backing. In particular, when the diffusing product ontology is especially novel there are unlikely to be readily available backings for rhetorical rebuttals. In this case organisational actors may mobilize inter-field rhetoric that draws on loosely coupled institutional logics to construct an original backing that generates legitimacy for the new object (Harmon, Green and Goodnight, 2014). Inter-field justifications therefore reflect individual, political and institutional change around diffusing IT innovations (Suchman, 1995; Green and Li, 2011), or attempts at organisational adaptation. So while intra-field rhetoric reflects actors perceptions about the legitimacy of a diffusing product ontology, inter-field rhetoric reflects and actively shapes organisational actors' perceptions about the legitimacy of the institutional context itself.

Studies around these principles have roughly estimated levels of legitimacy for product ontologies or institutional backings by examining corresponding amounts of related rhetoric. For instance, a decrease

in the amount of rhetorical appeals indicate an increase in legitimacy and comprehensibility (Tost, 2011; Jepperson, 1991; Green, Li and Nohria, 2009). While this view is useful, an extended focus on the transitions between inter-field and intra-field rhetoric enables researchers to pinpoint specific moments at which legitimacy begins to increase or decrease for an internally diffusing IT innovation.

3.4.4 A Closing Note on Rhetorical Sequence

An observed shift between inter-field and intra-field rhetoric reflects mechanisms driving the legitimation or de-legitimation of an idea or object. Specifically, a number of studies show that a shift from inter-field to intra-field rhetoric indicates that a community of organisational actors generally accept a specific backing as a legitimate way to shape and make sense of a diffusing product ontology (e.g. Green, Li and Nohria, 2009; Cole and Scott, 2000; Cole, 1999). In this way an inter-field to intra-field shift points to increased institutional stability because *"it creates a shared understanding and foundation on which social actors can build legitimacy for their actions and practices"* (Harmon, Green and Goodnight, 2014, p. 86).

In contrast, an observed intra-field to inter-field shift reflects mechanisms underlying the process of de-legitimating an established backing, where organisational actors are not just questioning the legitimacy of the practice (Vaara, Tienari and Laurila, 2006) but also the institutional context (Holm, 1995). A number of studies illustrate that as a community of organisational actors deconstruct the dominant backing they simultaneously undermine the criteria (warrants and data) that they have historically used to make sense of surrounding ideas and objects. This state triggers loose coupling between prevailing logics and the eventual displacement of the dominant institutional logic (Suddaby and Greenwood, 2005; Green and Li, 2011).

These studies are particularly pertinent and relevant to my research because they advance insights into how to apply rhetoric to translation research. They highlight a number of different rhetorical principles

that entrepreneurs use to frame justifications for diffusing IT innovations, and crucially shows how rhetorical legitimation reflects the dynamics of technological and organisational change.

3.5 Internal Diffusion Process

Whereas theorization is concerned with how new IT innovations are defined and legitimated within an industrial field, I propose that intra-organisational rhetorical legitimation is concerned with how IT theorizations are subsequently tailored, filtered and reformed as are aligned with institutionally plural front- line work activities and behaviours. So far I have outlined the key legitimation, institutional and rhetorical components of the rhetorical legitimation model, and highlighted how these components (Table 3.2) may be instrumentally leveraged by interest driven institutional actors, such as institutional entrepreneurs (Zilber, 2006; Røvik, 2011; Boxenbaum and Battilana, 2005). My intention in concluding this chapter is to outline how these components fit together into a holistic conceptual model. This model, outlined in Figure 3.1 is based on recent studies in the translation tradition's linguistic turn, where rhetorical legitimation dynamics are evident (Reay et al., 2013; Nielsen, Mathiassen and Newell, 2014; Scarbrough, Robertson and Swan, 2015; Røvik, 2011; Wang and Swanson, 2007).

The rhetorical diffusion process is triggered when an organisation decides to adopt a "fashionable" or proven innovation from the stock of circulating field level innovation ideas in order to solve a problem or satisfy a business need (Greenwood, Suddaby and Hinings, 2002). Organisations immediate response will be to elaborate the innovation's organizing vision in a way that aligns the technology to overall organisational needs (*organisational alignment*) (Nielsen, Mathiassen and Newell, 2014).
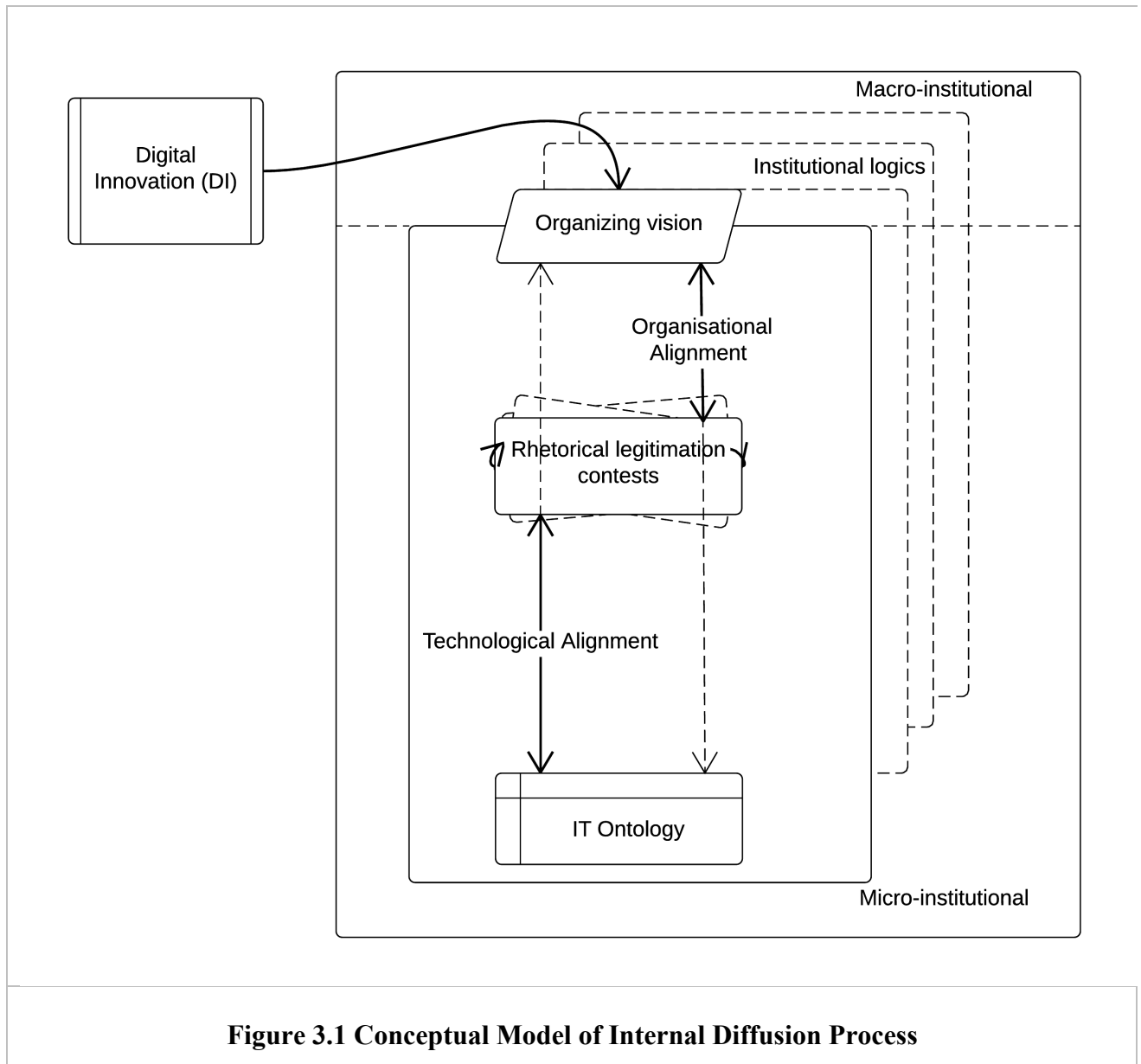
Figure 3.1 Conceptual Model of Internal Diffusion Process

As illustrated in Figure 3.1, the innovation's theorized label (e.g. "Green IT", "Enterprise 2.0") is firstly unpacked into an organisational level *organising vision* that serves as a set of standard practices and language for generating collective meaning making and legitimacy, and thus, standardizing the innovation according to organisational objectives (Swanson and Ramiller, 1997; Greenwood, Suddaby and Hinings, 2002). For example, although the ESN organising vision is relatively unstable because of its novelty, studies show that ESNs embrace an *"ideology of openness"* that promotes features and practices that enable engagement rather than disengagement, sharing rather than control and visibility

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rather than invisibility (Gibbs, Rozaidi and Eisenberg, 2013; Treem and Leonardi, 2012; Vaast and Kaganer, 2013). Entrepreneurial actors elaborate this vision in their communications to align their ideas for appropriating ESN with the common interests of their immediate audience. Relatively good alignment with a particular audience constitutes a distinct infusion, or instance of limited diffusion. For example, 'naming' the newly- introduced innovation using transient material artifacts like vision statements, presentations and early prototypes creates 'frames of comparability' that define the boundaries of how the IT innovation will be developed, implemented and used, and thus facilitates its rhetorical legitimation throughout the organisation (Røvik, 2011; T. Morris and Lancaster, 2006; Porac, Ventresca and Mishina, 2002).

Here, institutional logics are especially important. The institutions embedded in newly- introduced innovations (Gosain, 2004; Scott, 2008), and the institutions in which organizational actors (entrepreneurs and audience) are embedded, shape their interests and objectives, and how they elaborate the innovation's vision in their activities and communications (Thornton and Ocasio, 2008; Greenwood et al., 2010). If for example ESN was introduced into an institutionally plural context, the "open" logic embedded in ESN can either be in conflict or congruent with incumbent organisational logics that shape front-line practices across specific communities of actors. Accordingly, entrepreneurs targeting different audiences will often adopt competing ideas for appropriating ESN, and will mobilize competing communications to narrow the institutional misalignments between the technology and the target audience.

In cases where competing entrepreneurs elaborate different "names" or justifications for IT usage, 'framing contestations', marked by complex observable rhetorical justifications for legitimacy takes center stage. Contested justifications often depart from their original form as repeated rhetorical contestation eventually results in some ontological features (*IT ontology*) gaining legitimacy and rising to the forefront at the expense of others (Nielsen, Mathiassen and Newell, 2014; Sahlin and Wedlin,

2008). Over time, negotiated ontological features that survive this competition may become organisational imperatives and examples of good practices, and transform the original organisational level vision and logic (*technological alignment*).

The outcomes of rhetorical contests depend on how well entrepreneurs use different argument types and structures to promote the pragmatic and moral value (see Table 3.2) of more robust material practices and artifacts, such as training programmes, installed hardware and software, and work process changes(Nielsen, Mathiassen and Newell, 2014). It is typical for proponents of an idea to use rhetoric that firstly frames the idea as a call to action against a commonly accepted organisational failing in order to gain pragmatic legitimacy, and secondly aligns justifications for the proposed solution with the prevailing normative order, to gain moral legitimacy (Suchman, 1995). Over time, the collapse of discourse around the IT ontology is an indication that it is gaining cognitive legitimacy and becoming more institutionalized (Czarniawska, 2009; Suchman, 1995; Greenwood, Suddaby and Hinings, 2002). More often than not, the legitimated IT ontology is inevitably different from the initial idea (Orlikowski, 2000).

To conclude, the work in this chapter details the role of rhetoric and legitimation in diffusion through a model of institutionally embedded rhetorical legitimation (Green, 2004; Green, Li and Nohria, 2009; Harmon, Green and Goodnight, 2014; Berente and Yoo, 2012). This model views internal IT diffusion as a process whereby the symbolic and material dimensions of a newly- introduced digital innovation (IT ontology) and/or the constellation of institutional logics in which it is embedded, become appropriate or desirable to a community of organisational actors (Greenwood, 2002; Johnson et al, 2006; Harmon, Green and Goodnight, 2014). In this way intra-organisational rhetorical legitimation is conceptualized as an axiomatic micro-process of translation and is vital to understanding how and why an IT innovation is translated in a particular way, in different institutional contexts.

4. Empirical Approach

Theorizing about the legitimacy struggles and related institutional mechanisms driving the internal diffusion of ESN calls for a close examination of the activities and meaning-making of the actors involved in it (Walsham, 2006). To theorise about this phenomenon and derive practical strategies for managerial consideration, I conducted in-depth field studies of ESN implementation success a global consulting firm (iSource). The case study methodology is ideally suited to (1) exploratory studies (Benbasat, Goldstein and Mead, 1987) (2) developing knowledge of contemporary phenomenon (Yin, 2013) (3) that is relevant for managerial practice (Amabile and Mueller, 1999; Leonard-Barton, 1990). The case of iSource is also well suited for developing academic and managerial knowledge since it represents an extreme case of unusual success. Extreme cases are "considered to be prototypical of some phenomenon of interest" (Gerring, 2006, p. 101) and are therefore ideal for theory generation, particularly in the early stages of enquiry into a phenomenon.

A number of recent progressive studies have positioned ESN as a key part of the new "digital firm", and even more conservative studies have highlighted that it has an important role in more established business challenges like collaboration, innovation and engagement (Andriole, 2010). Despite this, ESN adoption success is extremely rare in large corporations because of its relative novelty and ideology of openness (Gibbs, Rozaidi and Eisenberg, 2013). Moreover, iSource's success is also an extreme case because they adopted a radically different top-down approach to ESN implementation that was most notably aimed at gradually phasing out email use.

I spent over 1 year at iSource, conducting in-depth interviews and observations of managers and line employees in all departments that were invested in enterprise social networking use. This inter-departmental data collection allowed me to compare the ESN impressions and actions of different groups to understand how and why key stakeholders granted or withheld legitimacy for ESN use. I also supplemented my interview and observational data with document analysis of strategy documents, email lists, employee records, meeting minutes and other relevant communications. In this chapter, I will outline my case site and detail my data collection and analysis approach.

4.1 Reflexivity in Interpretive Research

> *"What we call our data are really our own constructions of other people's constructions of what they and their compatriots are up to"* Geertz, 1977, p. 9) .

As this quote suggests, it is critically important that researchers be reflexive of their role in the research process, particularly when using interpretive data collection and analysis methods. In this section I will review the empirical guidelines that I followed in conducting and applying interpretive case research in empirical settings, and how these guidelines influenced my empirical approach. In the tradition of theory and method going hand in hand, I pay careful attention to choose guidelines that have also been employed by exemplar institutional logics and rhetorical analysis studies (Suddaby and Greenwood, 2005; C. Jones and Livne Tarandach, 2008; Treem et al., 2015; Hsu, Huang and Galliers, 2014).

Similar to these studies my research is also concerned with how competing actors mobilise justificatory accounts like rhetoric and other symbolic mechanisms to negotiate the process of implementing new organisational objects like technology according to particular 'logics of appropriateness' or beliefs, ways of working and values. Using prescriptions from these studies and the work of (Walsham, 1995; 2006) on "doing interpretive research" in information systems, I will outline four guidelines in the next section that should be used to judge this work (Klein and Myers, 1999), and explain how I use them in my study.

First, concerning the object of study, interpretive sociology suggests that researchers should reflect upon how their philosophical beliefs influence their choice of the object to study (Pan and Tan, 2011; Meyer, 2001). Similar to Walsham (2006) I accept interpretive sociology's epistemological position that (1) our knowledge of reality and human action is a social construction by human actors, but, in critical realist spirit (2) I strongly believe that there is an objective reality of structures that have the power to affect human action. For example in institutional analysis, as "speaking presupposes a language as well as material resources such as vocal chords", social action (observable actions in empirical domain) possesses causal powers to reproduce and transform institutions, but is itself always embedded in and enabled by higher order institutions and institutional logics in the domain of the actual and real respectively (Leca and Naccache, 2006; Ekström, 1992). While actors do not always perceive constructs in the domain of the actual and real, researchers training and knowledge of related literature allows them to reveal and describe these higher order constructs in order to generate theory. For these reasons my journey of constructing a phenomenon to study took many years of iterating between empirical field data and pre-constructed explanations of my empirical observations in the literature.

The latter part of this journey is illustrated in my introduction. First, I worked on a pre-constructed problem of "technology resistance" arising from low cultural fit (Lapointe and Rivard, 2005) between ESN's open, unstructured practices and traditional organisational values of efficiency and privacy. It was during my data collection, after being exposed to translation as an analytical lens and uncovering the conflicting interests and ideologies of practitioners within different functional departments that I started to focus on "intra-organisational diffusion". With this my analytic focus was on the competing discourse and legitimating strategies influencing the spread of technology between departments, and the interrelationship between the sequence and type of rhetorical claims underpinning actors legitimating strategies and institutional logics underlying their conflicting ideologies.

For the second guideline, Eisenhardt (1989) notes that *'[data] triangulation made possible by multiple data collection methods provides stronger substantiation of constructs and hypotheses'* (p. 538). In other words, she does not hold either qualitative and quantitative methods as "best practice" for data collection, but advocates using as many methods as possible that would allow for effective triangulation. Because my study concentrates on institutional views on technology diffusion and how actors' competing logics are mobilized to diffuse ESN practices through discourse and rhetoric, I thought it necessary to privilege intensive qualitative methods over wide scale quantitative analysis. I studied one organisation that was in the process of adopting enterprise social networking, using interview and documentary analysis data collection techniques to get a full understanding of the discursive strategies used, the rationale for employing these strategies, and actors' views and interpretations with regards to ESN's role in the organisation (Walsham, 2006, p.1995). To get a better understanding of the organisation and the logics prevalent among functional organisational departments I supplemented my interview and documentary data with observations of team meetings and everyday working practices, and archival analysis of company web pages, popular press reports, industry analysis and financial statements.

The third empirical guideline for interpretive case research is to follow the "the principle of suspicion". Rich empirical fields are filled with symbolic stimuli that can cause researchers and social actors to express bias or misinterpret the social order for what it really is. In my research, I consciously and necessarily drew on the Klein and Myers (1999) principle of dialogic reasoning to practice suspicion. According to this principle, researchers should embrace the possibility of contradictory stories emerging from the data under the light of different theoretical preconstructions or lenses, and continue to refine their findings under different lenses through multiple stages of data collection and analysis. For example, the early data collection and analysis suggested that early ESN implementation was a failure until the implementation team took action to improve its low cultural fit and lack of pragmatic legitimacy. However, with further data collection and a shift towards the translation lens we looked at

all the ESN failures and subsequent successes as an interrelated process of diffusion marked by instances of limited diffusion rather than failure, and eventual success or wider diffusion. With the shift towards conceptualizing the phenomena as a process of diffusion I embraced the literature on technology diffusion as a social movement and a discursive accomplishment and did further analysis on the nature of the discourse around the ESN implementations.

Finally, the fourth guideline regards generalizing from inductive research I try as far as possible to build a 'transferrable' model from the empirical case. (Lincoln and Guba, 1985) illustrates the concept of transferability in case research in the following excerpt:

> *"How can one tell whether a working hypothesis developed in Context A might be applicable in Context B? We suggest that the answer to that question must be empirical: the degree of transferability is a direct function of the similarity between the two contexts, what we shall call "fittingness". Fittingness is defined as the degree of congruence between the sending and receiving context. If Context A and Con- text B are sufficiently congruent, then working hypotheses from the sending originating context may be applicable in the receiving context" (p. 124).*

Using a preliminary study to build my model was also a good way of setting a base to later test the transferability of my methodology and findings (working hypotheses), and refining and extending these findings. A good model should combine the data in such a systematic way that it can be further tested through further data collection and can reveal invariants that describe the phenomenon beyond the particular case from which it was constructed. In line with this, my aim was to build a model from my case that would allow naturalistic generalizability, so that readers have- (1) an appropriate base of descriptive information to make judgments on whether my insights are applicable to other contexts, and (2) sufficient information to understand the findings (Lincoln and Guba, 1985; Hellström, 2006). To develop such a systematic model, I followed the eight steps of (Pan and Tan, 2011) structured-pragmatic situation approach to conducting case research, and the "retroductive" coding strategy that Walsham (1995) recommends to draw specific implications from empirical data.

Both of these approaches are built on a systematic iterative approach to comparing empirical data. Broadly, after the research phenomena is identified, alternative explanations for the phenomena are

constructed through a forensic review of literature and empirical data, then the mechanisms driving the phenomena are identified and described. In describing these mechanisms, the researcher should be sensitive to the role of the conceptions and actions of human actors, and the location of empirical events within a particular space and time. I applied these four guidelines to the conduct of my empirical research at a financial firm and a consulting firm. In the next sections, I will briefly discuss the empirical site and how my selection criteria for this site, and follow this with more detail of my data collection and analysis.

4.2 Research Setting

Why the choice of case studies?

The goal of my research was to understand how ESN practices unfolded within a complex and mature organisation, and how this unfolding process was affected by the interests and discursive actions of key stakeholders from different functional units. At the point of embarking on this research in 2012, many organisations were embarking on ESN projects in some way but adoption was much slower in mature organisations than it was in start-ups and SMEs. Notably, practitioner research noted that the bottom up and open nature of social media and its general lack of cultural fit, was a notable barrier to its adoption in mature organisations (Andriole, 2010; Kietzmann et al., 2011). Academic research on the other hand was concerned with ESN's impact on existing organisational practices after implementation (Leonardi, Huysman and Steinfield, 2013; Treem and Leonardi, 2012) rather than with the process of how organisations appropriated ESN over time (Aral, Dellarocas and Godes, 2013). These research sources therefore indicated that organisations were mostly concerned with understanding how ESN could be implemented to enable benefits in collaboration, innovation, and employee engagement.

I supplemented these formal sources of knowledge with more hands on knowledge that I acquired from my participation in the regular meetings of a network of practitioners (DWF- Digital workplace forum)

discussing ESN adoption barriers and best practices, as well as a preliminary study of ESN adoption at one of the most established banking and financial institutions in the UK (Banksi). These hands on research experiences confirmed the literature's findings, and also revealed that many senior managers and implementation teams were more concerned about how they could measure ESNs financial value to convince the most powerful stakeholder groups of ESNs value. Employees at these workshops and at Banksi particularly highlighted that the conflicting interests of different functional units was the most significant barrier to ESN adoption. Thus, central focus of my study shifted to understanding the dynamics of how the interests, and practices of stakeholders in different functional departments shape the trajectory of ESN within organisations.

With this in mind, I needed to select a research site that successfully adopted and implemented ESN, where I could readily access data on the full adoption process. I was also very conscious that it would be difficult to find a site owing to (1) the novelty of ESN implementations in large corporations and (2) organisational reluctance to have me ask questions relating to organisational technology strategy and conduct observations of organisational practice (Walsham, 2006). So, even though my ideal choice would be a large company that was highly successful in adopting ESN, I was open to any company that was willing to grant me appropriate access.

At the preliminary study site Banksi, I was granted a high level of access that was ideal for collecting rich empirical data. However, their ESN adoption approach was typical (bottom-up) and their level of use was relatively low. iSource provided the opportunity to explore a widely recognised and successful ESN initiative that was both atypical in approach (top-down) and had comparably high levels of use. Through my introductory encounters with representatives from iSource, I realised that they were both highly interesting and appropriate settings for studying the intra-organisational diffusion of ESN for the following reasons:

1. Like Banksi, senior leaders at iSource showed a high level of interest and support for my research since cutting edge technology like ESN was crucial to their business. A perusal their recruiting brochures, financial and mainstream and practitioner media reports indicated that they derive their competitive advantage from the use of cutting edge technology to support their employees' innovative practices. iSource's CEO also regularly communicated to employees and mainstream media that enterprise social networking was an integral part of their business strategy. Therefore, department heads and team leaders they were open to my research despite having their own reservations about ESN's benefits. For the most part, even those employees that were staunch resistors to ESN supported my research in hope that it would provide learnings and insights that would benefit their ESN initiatives.

2. Unlike Banksi, iSource would most likely provide the rich empirical data that I needed to effectively conceptualise this novel research phenomenon, since it was acknowledged as a world leader in the adoption of enterprise social networking and digital working. Additionally, the relatively top-down and structured nature of iSource's ESN implementation also meant that employees would most likely have documentation and other resources to support their recollection of past adoption events. iSource's journey was also undoubtedly unique to both the consulting industry and the world since unlike other companies their stated intention was to completely replace email with ESN.

3. The professional consulting environment is especially results and efficiency driven (Wright, Sturdy and Wylie, 2012), and is therefore an ideal setting to examine internal diffusion alignment processes. iSource was also highly pluralistic since it was formed of highly structured functional departments that developed conflicting objectives, interests and practices around ESN development, implementation and use. As highlighted in the previous chapters, pluralism plays a central role in how highlight flexible technologies like ESN is justified, appropriated

and eventually diffused. iSource was particularly complex since it grew to become one of the largest technology consultancies in Europe over the last 10 years, through a growth strategy of mergers and acquisitions. This gave me ample opportunity to observe how the interests of different stakeholder groups affected ESN use and its spread between functional units.

4.2.1 The Role of the Preliminary Banski Study

Prior to my main study at iSource, I conducted a 7 month pilot study of ESN adoption at the B2B sales division (Banksi) of one of the UKs oldest and established banking and financial services institutions. Banksi was widely recognized as one of the largest payment providers in the world, with over 10, 000 employees in 50 countries serving approximately 35 million customers worldwide. As its payment processing business grew to become more diversified, its operations also became marked by varying and often conflicting interests across supporting risk management, human resources and internal communications departments, and core service lines like consumer credit card lending, corporate charge and credit issuing, retail merchant payment processing. Additionally, each of these functional units had necessarily distinct sales strategy, product development and front- line sale departments (account development, telephony and mobiles).

This organisational pluralism became especially evident and salient when a number of Banksi's departments decided to initiate a number of different grass roots ESN projects from 2008 to 2012. During this period, different Banksi departments appropriated ESN to improve collaboration and job satisfaction following the subprime mortgage crisis in 2007, improve information management and sharing following unexpected and significant customer growth 2011, and support behavioural change and engagement after the inter-bank exchange rate (libor) fraud in 2012. I visited Banksi on average of 3 times per week staying 5 hours per day from November 2012 to April 2013. During my 6 or so months at Banksi I divided my time between following 13 in-office account development and telephony staff from two company locations, mobile sales staff, sales effectiveness team meetings and weekly

office meetings. I spent an average of 5 hours per day observing in- office staff and shadowed mobile staff for an average of 3 days.

During this time, I used ethnographic shadowing techniques to understand how mobile sales staff collaborated using ESN tools. I also conducted 41 scheduled interviews over 2 phases, during November 2012 to December 2013 and February 2013 to April 2013. My interview protocol was focused on understanding the teams (structure, practices, rituals, heritage), individual motivations for using ESN, how they used ESN, and significant events and engagement strategies. I supplemented observations and interviews with 39 company documents relating to the company history, business and technology strategy, work practices and policies, collaboration, and social media and ESN use. I coded this data in three relatively open and iterative stages according to the prescriptions of grounded theory (Glaser and Strauss, 1967; C. Oliver, 2011), and the modified content analysis employed in Berg's (2001) study of how different notions of "success" and "failure" hampered the implementation of a hospital patient care information systems. Using this as a guide I looked for broader theorizations for driving change with ESN and the institutional vocabularies and non-linguistic actions surrounding distinct theorizations.

My initial analysis indicated that Banksi's adoption of ESN was significantly shaped by historical political, cultural, economic and technological institutional pressures that I coded as distinct market, community and professional logics. Along these lines, Banksi's culture of distinctly different objectives and working practices significantly influenced the ESN motivation, objectives and adoption strategies of actors in different functional units. While this competition proved to be an impediment for much of their journey, I found that actors with competing market and community ESN interests were able to make collective sense of ESN when its features and ethos were focused on reinforcing the aims and means of professional logics. Further analysis into how this collective ESN design emerged revealed that institutional entrepreneurs were fostered collective meaning making and engagement by applying

pragmatic confirmation, selection, and advertising strategies. These results were presented in the institutional logics, IT adoption and technology strategy tracks of several conferences spanning 2013-2014, most notably at the International Conference on Information Systems 2013 in a paper titled *"Legitimating User Participation in Mature Organisations: Exploring Social Media Adoption in a Financial Services Organisation"* (see Ramotar and Baptista, (2013)).

After critical discussion of these findings, I concluded that the institutional logics and legitimacy lens were epistemologically and ontologically compatible (and thus, methodologically), and were ideally suited for conceptualizing the technological and organisational interest and value gaps, and implementation strategies that emerge during IT adoption. Accordingly, the first phase of data collection at iSource was conducted with this conceptualization and positioning in mind. However, these discussions also revealed that my attempt to position these findings in the IT adoption and technology strategy literature was too broad. The idea of mobilizing legitimation strategies to address legitimacy gaps lead to me to consider the cultural fit and alignment literature. At this point my advisor also suggested that computerization movements literature would be a good way to conceptualize how competing actors attempted to legitimate ESN use in different ways. After testing the suitability of these bodies of literature with two extended abstract workshops I found that that my initial work could make the biggest contribution to the diffusion literature. My advisors and other professors showed a lot of interest in my idea to position IT legitimation as a novel concept of internal IT diffusion.

Specifically, my review of this literature yielded a number of a number of gaps in terms of how new artefacts and practices can be proactively aligned with pre- existing organisational structures as they are translated into front- line practices (Ansari, Fiss and Zajac, 2010; Reay et al., 2013; Nielsen, Mathiassen and Newell, 2014). Further exploration of this avenue revealed a wealth of methodological research into the rhetorical legitimation and rhetorical diffusion of new ideas and artefacts, which were well aligned to my initial conceptualization of institutional IT legitimation (Suddaby and Greenwood,

2005; Green, 2004; Harmon, Green and Goodnight, 2014). Accordingly, I collected and analyzed the rest of my data at iSource with this new rhetorical legitimation lens in mind.

4.2.2 Access to iSource

In the Spring of 2011, iSource's CEO announced to the surprise of media and executives the world over, that they would completely replace all email communication with an enterprise social media solution in 3 years. They dubbed this ESN project as their no-email initiative. In the world of Enterprise Social Media iSource was considered to leading this digital revolution worldwide. This was evident from the time I started my initial desk research into internal social media adoption since the majority of the newspaper and practitioner articles I came across would extol the virtues of iSource's ESN efforts. In fact, proponents of ESN at Banksi often referred to practitioner media reports of iSource's ESN story as the "gold standard" for ESN implementation.

I first established contact with iSource in the Spring of 2013 when I was lucky to attend a university alumni event where an alumni colleague put me in contact with one of the global executives of iSource's ESN project, John. John signed off and arranged access for my study within a few weeks since he was quite excited about the prospect of supplementing the plethora of practitioner and media articles about the project with an academic perspective. I got a strong indication that iSource was ideally suited for my study after my first discussion with John, and one of the no-email initiative's ambassadors. He reported that from 2000 to 2013 iSource had grown exponentially with the acquisitions of larger and smaller technology firms to become one of the largest IT services firms in Europe. Over this time, iSource's strategic team (scientific community) developed an organisational goal of radically improving its current business areas by improving the quality and reliability of their products and services. They were also conscious of the fact that they needed to improve the connections among over 90, 000 employees in 52 countries, many of which were still working within the boundaries of their acquired firms. With this, the scientific community made the decision to adopt ESN to keep

employees engaged and motivated, to transform employee collaboration, and importantly, to develop ESN implementation as a new consulting offering. At the time of my initial entry into the field, iSource was in the last year of their 3 year deadline and was on track to achieve their objective.

On my first visit to iSource's UK HQ, I also observed that their working environment was in keeping with their recent award from the "Great Place to Work" survey and their goal of being the go to firm for cutting edge digital solutions, with vibrant open office spaces, cutting edge conferencing rooms and company branded iPads for employees. My visit also coincided with one of the weekly *"no-email day"* initiative. Employees (iSourcers) reported that "no- email day" was intended to be a day where iSourcers made a special effort to not send emails. As the day progressed however (and on return visits), I observed that no-email day had a number of objectives. Throughout the day, members of the no-email steering team organised meetings to conduct ESN training and update iSourcers on the no-email project's overall success. Almost every formal and informal meeting space, such as the canteen and bathrooms were plastered with posters and videos highlighting specific ESN features, the latest email usage survey results and job specific use case videos. At this point I knew that looking into how iSource's espoused strategic objectives were bound up with ESN usage and engagement strategies across acquired firms and departments would be a highly interesting empirical case of intra-organisational technology diffusion.

I also found that iSource's approach to ESN adoption and the nature of their progress from 2011 to 2014, was in keeping with my "extreme case" selection criteria and was ideal for extending my findings at Banksi. Unlike Banksi, the ESN project at iSource was viewed and implemented as a large scale change management programme. From its inception, the project was strategically directed by a steering team of scientific community members from key organisational groups, on which my project sponsor John, served as the head of change management. I immediately recognized that members of this scientific community and the supporting change hierarchy would be ideal informants to explain how

ESN spread between different organisational groups. The scientific community importantly conducted an academically supported investigation of how email was being used with the key takeaway being, that 80% of iSourcers thought that email use was causing them to *'waste time not doing their real jobs'*. The results of this survey were broadcasted across the world and within the company via whitepapers and screens in each office with rhetoric such as email is "digital pollution", "encroaching on our personal lives", and "we need to eradicate email pollution".

Despite this sharp rhetoric, John commented that the actual objective of no-email was not to totally eradicate email but was rather, to nudge iSourcers to collaborate "smarter" and more effectively by choosing the ESN communication or collaboration feature that was best for the task at hand. Additionally, John described their ESN promotion strategy as very consumer-oriented and compared it to advertising apple products. He described training material such as videos, manuals, and games targeted to specific job roles, and he talked about iSource's decision to purchase a company with an existing ESN product rather than developing an ESN from scratch or purchasing an off the shelf solution. With this I could see a wealth of empirical connections to my conceptual model. Especially since organisational actors employed a high degree of clear and readily observable symbolic actions and rhetorical justifications to justify ESN infusion.

From my initial discussions I also learned that from 2011 to 2013 ESN adoption level at iSource was surveyed at 20% and despite being successfully piloted with outsourcing consultants the early adopters were mostly members of iSource's "scientific community" and support departments. On exploring this trend in more detail I came across a company survey that pointed to a strong correlation between high ESN engagement and the actions of team leaders to explain the overall value of ESN in terms that individual stakeholder groups understood. I immediately saw a connection to my pilot study where institutional entrepreneurs employed linguistic legitimation actions to infuse ESN into the front- line

practices of employees. I therefore decided that iSource would be an ideal case to further explore whether these findings were transferrable in a different context.

Finally, although I was granted as much access as possible after signing a confidentiality agreement, I had limited opportunities for observation since many of the key informants were mobile or worked in different countries. However, I was able to refine my interview and observation protocol after the Banksi pilot study, and thus, use my access to conduct focused and in-depth interviews and observations. I also took advantage of this access by scheduling multiple rounds of follow-up interviews and collecting as much relevant documentation as possible. Particularly, after the pilot study I realized in-depth shadowing of employees was not necessary. Moreover, interviews and document analysis became the most appropriate sources of data after I shifted my empirical focus to the role of rhetoric in legitimating ESN. This approach was also the better option considering the timeline for completion of my thesis. I also benefited from playing an advisory role for a master's student and iSource employee who was collecting data for his thesis on barriers to ESN adoption at iSource. Based on this student's interview transcripts, open surveys and observational notes, I re-interviewed employees based on their candidness and relevance to my study.

4.3 Data collection and Analysis

Due to the dynamics of how and when I gained access to these organisations data collection and analysis were first conducted at the Banksi pilot site. So, some aspects of my data collection and analysis at iSource were refined based on my experiences at Banksi. Overall, I followed the 'retroductive' strategy that is recommended when conducting research with an interpretive epistemology but critical realist ontology (Walsham, 2006, Bhaskar, 1975). This strategy is also highly fitting for contemporary institutional studies like this one (Leca and Naccache, 2006). From my review of the methods literature I found Pan & Tan's (2011) structured-pragmatic-situational approach to be

highly fitting to this philosophy and area of research. In this vein data collection and analysis is conducted in an intertwined cycle of deductive high level theoretical conceptualisation, data collection, and inductive analysis. However, in this section I will discuss data collection, analysis and theory development separately for descriptive clarity.

4.3.1 Data collection

Observations

Consistent with my theoretical framework's focus on surface communications, the interpretive component of my data collection is comprised of interviews and document analysis. However, consistent with my critical realist ontology, it is important to go beyond actors' discourses and observe their actions and practices to understand how events related to the research phenomenon unfold and are connected (Leca and Naccache, 2006). Observations are also crucial to the study of institutional logics since logics encapsulate *'both symbolic systems of meaning and related material practices'* (Cloutier and Langley, 2013). Material practices may be instantiated in language and discourse but also in everyday work routines, hierarchical structure, policies, and other organisational objects like technology (Czarniawska, 2008). With these observations I hoped to gain an understanding of how this highly institutionalized environment functioned and how employees used ESN and other alternative tools to connect and communicate.

I used ethnographically-informed techniques that required the penetration of iSource's official lines and observation in iSourcers' natural context (Van Maanen, 1979; Zilber, 2002). My observations were focused on actors' everyday working practices, particularly relating to how employees and senior managers used ESN, and the role that they played in its assimilation. I observed actors everyday working practices, collaboration patterns, and ESN usage patterns. With the limited observation opportunities available I tried to observe the general working environment and the artefacts associated

with the job roles. Observing in this way provided valuable background information for asking more targeted questions when I conducted interviews. These limited observations were more than sufficient since most of the job roles I was interested in did not involve unusual practices such as those associated with Banksi's mobile sales employees.

With respect to my time in the field, I conducted data collection from February 2013 to August 2013, then again from February 2014 to August 2014. Most of this time was spent conducting formal interviews and document analysis, but whenever possible I asked to observe team's during the *"no-email day"* initiative. Using this strategy I was able to observe 7 teams within the UK from iSource's scientific community, technology support, sales and various consulting branches. Where possible and with the permission of actors I also made digital recordings of informal discussions. Since many of the iSourcers that I was interested in observing were located overseas or often spent their time at customer sites, my observation periods were generally very short, lasting an average of 1.5 days for each team. In order to maximize the range of activities observed with the limited time available for observation I paid special attention to in-office employees that looked the busiest or those that seemed engaged in unfamiliar tasks.

Observation opportunities during "no-email days" were especially very rich since employees were often engaged in face to face and teleconference team meetings, and training sessions. Team meetings were helpful for understanding team priorities, how they worked and collaborated together with staff within and outside of their functional departments and at customer sites. For example, there were frequent disruptions due to miscommunication with staff from other departments that could not be immediately resolved since they were communicated over the phone. Consultants would also frequently complain that it was difficult to find specific information on the ESN because there were many communities and that were not relevant to their work. Training sessions on the other hand were particularly useful since they were often very open, collective and candid discussions of employees

concerns with phasing out email use, barriers and advantages to using ESN and novel collaboration tools, and how and when to use ESN tools. These visits were also very useful for collecting documents for documentary analysis.

Documentary data collection

My observations were closely supported by high levels of micro-level documentary analysis to identify historical institutional structures and specific strategies emerging around collaborative work practices and ESN use (Alvesson and Karreman, 2000). The documents that I collected at iSource particularly helped to illuminate the organization's governing logics and work practices, ESN adoption motivation and objectives, adoption strategies, and further helped to validate my interview and observational accounts.

The discourses that develop around an empirical phenomenon, whether developed by organisational actors or external actors reflect structures that interact with and have causal power to shape events during the social construction of empirical phenomena (Archer, 2002; Alvesson and Karreman, 2000). In this regard my approach to document collection is consistent with Alvesson and Karreman's (2000) view that researchers should "study *talk versus using talk as an indicator*" and be sensitive to the framing power of text and context. Texts help to construct empirical phenomena when actors intentionally use them to advance their own ideologies/logics or interests (Fairclough, 2005). The objective of document analysis at iSource was therefore to explore how texts are involved in the process of internal IT diffusion and the tensions between the two. My documentary analysis is therefore similar to studies looking at,

> 'structure as a historical accomplishment in local settings rather than structure as an eternal property of formal organisation(Barley, 1986; 1990a) ... the vocabulary of motives rather than motivation(Mills, 1940), ... talk as an administrative device rather than as a carrier of abstract principles of administration (Gronn, 1983) ... symbols as agents of change and stability rather than as expressions of corporate culture (Gioia et al., 1994) '(Alvesson and Karreman, 2000, p. 153)

At iSource I collected and analyzed a fair amount of documents relating to company history, business and technology strategy, work practices and policies, collaboration, and social media and ESN use. I sourced many documents from sources external to the organisation such as practitioner publications, popular press accounts, and industry analyst reports. These provided rich historical context of the political, economic and technological institutional pressures that helped to shape these organisations as a whole and their business and technology strategies.

A larger proportion of documents were sourced from within the organisation throughout my time in the field. These ranged from internal memos, meeting minutes, information packs, and newsletters to professional and user generated audio and video and blog posts at iSource. This also included photographs that I took of whiteboards, posters, flipcharts and signs. Together with iSource's wealth of regular ESN adoption surveys and usage metrics, these documents were a very useful for understanding engagement patterns. Practitioner articles and case studies also proved to be an unexpected useful source of data owing to the large amount of firm-level interest in iSource's ESN implementation. In particular, I collaborated and shared documents and interview informants with the lead researcher of two recently published Gartner studies that were on-going during my research period.

Whenever possible I requested digital copies of documents and I was able to obtain digital copies of most of these documents to aid in faster and more comprehensive computer assisted data analysis. Collected documents were added to an Evernote database alongside my observation and interview data. For each document I recorded meta-data on where and when I collected it, document type and purpose. Table 4.1 provides a summary of the documents collected at iSource.

Table 4.1 Documents collected		
Document type	**Document content**	**Number of documents**
Email, internal memos, newsletters	work practices, governing logics, group interests and objectives, ESN adoption motivation, objectives and strategies	20
Meeting minutes	work practices, governing logics, group interests and objectives, ESN adoption motivation, objectives and strategies	5
Corporate Information packs	group interests and objectives, governing logics, ESN adoption motivation, group objectives and strategies	10
Photographs	work practices, governing logics	3
Audio and Video, Blog posts	work practices, organisational objectives and strategies, ESN adoption motivation, objectives and strategies	17
Practitioner publications	Company history, organisational objectives and interests, ESN adoption motivation, objectives and strategies, group objectives and strategies	10
Popular press	Company history, organisational objectives and interests, ESN adoption motivation, objectives and strategies	21
Industry and organisational reports	Company history, governing logics, organisational objectives and interests, ESN adoption motivation, objectives and strategies	11
Total		**97**

In order to trace how actors were involved in the ESN diffusion process I also recorded where each of the internal organisational documents originated, when and how they were created and their organisational reach. While there was a relatively even distribution of documents originating from iSource's technology support, sales and management consultancy departments, there was an expectedly larger number of scientific community documents. Evernote was enormously helpful for organising documents alongside the timeline of ESN adoption. Tagging these documents in this way enabled me to re-create and understand key events that I missed prior to and during the first 2 years of the no-email project. This organisation also helped to better supplement gaps in iSource's ESN journey that emerged due to my limited observation opportunities, and time and financial constraints. However, my main source of data for mapping the ESN journey was semi- structured interviews of key iSourcers.

Interviews

Apart from observations and document analysis, a substantial part of my time in the field was spent conducting semi- structured interviews in two phases. My first phase of interviews was conducted from February 2013 to August 2013, to understand the teams (structure, practices, rituals, heritage), actors' motivations for using ESN and how they used ESN. I conducted a second phase of interviews from February 2014 to August 2014 to learn about actors interpretations of ESN barriers, significant events and assimilation strategies that I identified during observations and document analysis (Lincoln and Guba, 1985). In this second round of interviews, I also conducted follow up interviews with most participants from the first round to learn about their respective teams' ESN assimilation progress since the previous year. In the second round I also asked about specific events regarding the firms' past experiences with ESN. These past accounts were important in shaping their current predispositions, and asking about specific events was a key tactic to overcome the limitations of retrospective accounts (Newman and Robey, 1992).

Table 4.2 Number of Interviews by Interviewee Role		
Interviewee Role	**First Round interviews**	**Second Round Interviews**
Scientific Community	5	6 (3)
Technology Support	5	7 (3)
Sales	8	4 (4)
Management consultancy	10	5 (5)
Subtotal	28	22
Total	**50 (3 informal)**	

Although my interviews were generally open ended according to the flow of the conversation, I used an interview protocol that was based on insights from my pilot study and my observations and data collection as a guide. The majority of my interviews were conducted via the ESN's integrated social video collaboration feature and lasted from 1 hour to 3 hours. Although conducting interviews using this tool were not as immersive as face to face interaction, I was able to get a good feel of some of the

ESNs functionality as some informants made use of the whiteboard, presentation, screen sharing features.   A total of 30 of the 50 audio or video recorded interviews were transcribed, and 3 informal interviews were recorded and not transcribed. Table 4.2 shows the number of interviews by department. The bracketed second round interviews indicate follow up interviews from the first round, which were not included in the total to give an accurate representation of unique interviews.

I started by interviewing informants who could provide an overview of ESN adoption at the company in order to validate and modify my assumptions of the phenomenon at an early stage. Also, because of my position as an external researcher, these initial interviews were also very helpful for identifying who I could subsequently speak with to get information on specific aspects of the research phenomenon. Subsequent informants for the scheduled interviews were mostly middle and senior managers from key operational departments, particularly those that I identified as early and late adopters of ESN. Middle and senior management were targeted because our analysis of the literature suggested that this group was most likely to engage in entrepreneurial resistance or promotion activities in response to the introduction of new technology. This selection strategy was especially appropriate for iSource since the early to middle stages of no-email engagement was driven by a steering team of senior, middle and departmental managers who volunteered or were appointed to be responsible for increasing ESN engagement rates within their departments and throughout the company.

Many managers were also survivors of the many acquisitions throughout iSource's history and were thus highly aware of the shifts in the company culture and integration efforts. Some of these managers were also senior and junior members of a multidisciplinary scientific community that was instrumental in originating, devising and coordinating the no-email project and strategy. This team crucially put me in touch with especially vocal project managers and shop floor employees that they recruited onto the steering team as the project matured. These local steering team members were responsible for a lot of the hands- on training, support and communications to justify and motivate iSourcers to engage with

ESN, especially in the latter stages of the project (2013-2014). As I spoke with these local steering team members I was able to learn about their experiences and understandings of translating the scientific community's higher level strategies and objectives to ground level employees in specific functional groups of business.

4.3.2 Data Analysis and Concept Development

Analytical Approach

I systemized and ensured rigor in my analysis in 4 steps. First, I maintained a structured audit trail using endnote archival software to manage data and my emergent understandings, maintaining records of all interviews, documents, observations and even email exchanges. Second, I organised all data in the qualitative analysis software NVivo in order to efficiently index, search, theorize, code and re-code as patterns emerged in my data. Third, I followed as far as possible, the logic of systematic coding advanced by Pan and Tan's (2011) structured- pragmatic- situational case study approach. I used my early observations, interviews and document analysis to validate and modify my literature- informed conceptualization of the research phenomenon. I then organised my data in a way that reflected this preliminary theorizing.

From this base, I constructed the initial theoretical lens described in Chapter 3 to act as a sensitizing device to guide subsequent data collection and analysis (Klein and Myers, 1999). Because my field study of iSource was conducted after Banksi, I started my data collection and analysis at iSource using the same conceptual model as a sensitizing device but conducted further analysis separately. I then used process and rhetorical analysis methods respectively to iteratively and systematically re-organise, code, and examine the data for related propositions, contingent conditions and constructs to develop new conceptual categories (Langley, 1999; Pettigrew, 1990; Heracleous and Marshak, 2004; Suddaby and Greenwood, 2005). I continued this until I had 'theoretical confidence' that my model accurately

described the empirical reality of the research sites and substantively contributed to both theory and practice (Klein and Myers, 1999). Finally, I validated selected findings with research participants to ensure that my findings were as accurate a reflection as possible of actors lived experiences (Neuman, 2006).

Retroductive theorizing

My analysis followed a process of retroductive theorizing (Bhaskar 1975; Archer et al., 2013; Leca and Naccache, 2006). In this process, researchers depart from a specific guiding theory that together with knowledge of the research phenomenon reflects their a priori knowledge of the phenomena. Driven by the guiding theory, data is organised, coded and re-coded as researchers clarify and question the basic conditions for the guiding theory or a priori assumptions (Danermark et al., 1997; Glaser and Strauss, 1967; Ragin, 1994). My analytic progression over the years was a process of reflectively engaging with a host of theories that could potentially explain or address the empirical dilemma and iteratively developing novel theoretical insights from the interplay of refining literature and the coding schema.

Based on observations and discussions at practitioner conferences and the pilot site, the dilemma that initially grabbed my attention was both theoretical and empirical as I was interested in how ESN was appropriated differently across departments in large, mature organisations. Combining this with practitioner insights on ESN adoption as a base, I hypothesized that this phenomenon was influenced by the differences in working practices in these different departments. I therefore initially located my research within the adoption literature and used institutional logics as my guiding theory for empirical research. Since institutional logics is thought of as a meta- theory it is an ideal initial guiding theory since it is developed and insightful enough to be appropriate for the intra-organisational level of analysis and the empirical realities of the research settings, but broad enough to allow for theoretical shifts based on empirical insights (Seo and Creed, 2002; Thornton, Ocasio and Lounsbury, 2012).

I considered alternative theories, such as legitimacy, computerization movements and translation throughout my data collection and analysis; not with the intention of retrofitting data to theory, but in order to best explain my empirical observations (Yin, 2013). After several iterations between this and my pilot study's data and theory I started to explore translation and rhetorical legitimation of ESN between departments, as a theoretical lens. This avenue refined my interest to conceptualizing the phenomenon of assimilation and appropriation of ESN as a process of internal-organisational diffusion. Since my data and this phenomenon are tied to an evolutionary process, specifically the spread of ESN technology and practices across organisational units over time, understanding the phenomena was attained through a focus on the process of new practice emergence and change and not just on the end results. For this reason, after my first stage of data collection I followed Langley, 1999 rationale that infers that researchers may gain a better understanding of a given problem by longitudinally organising observations of change. This helped to (1) provide a clear picture of the process of ESN assimilation alongside wider organisational objectives and changes, and (2) allowed me to structure my interviews chronologically with key ESN events at the research sites. At this stage it became apparent that different organisational groups did indeed have significantly different work practices, and possibly cultures that conditioned their motivation for using ESN tools.

To probe this suspicion we analyzed the data from both cases using Nvivo in 4 iterative stages *condensing, visualizing, clustering and comparing* the empirical data with my conceptual framework (Easterby Smith, Thorpe and Jackson, 2012; Pan and Tan, 2011). The first two stages were primarily aimed at isolating what Suddaby and Greenwood (2005) refer to as the *"manifest content" or 'elements that are physically present'* in the data (Berg, 2009, p. 269) such as empirical features of the rhetorical legitimation lens outlined in Table 3.3. The last two stages were more focused on isolating the "latent content" or implied categories of meaning (Berg, 2009) (or Table 3.3's implications) that underly the visible manifest themes.

To isolate *"manifest content"* I first went through each document, transcribed interview and field note and wrote 'thick descriptions' identifying the key points relating to actors everyday practice and values, areas where competing actors problematized ESN adoption and proposed solutions, and their impressions and justifications for ESN appropriation (Pettigrew, 1990). For each summary I also assigned a description that outlined actors and organisational groups general positions on ESN and their underlying rationale. In Nvivo this process produced 221 distinct data segments of at least three paragraphs. Here I was more concerned with capturing the range and essence of arguments at key points in ESN assimilation rather than identifying specific categories. I discussed these summaries with my advisors and the colleague who I worked with in the field at Banksi to probe their accuracy with our field experiences of ESN appropriation, improve them, and consolidate them into one story that resonated with our understandings of the events and actions in the data. This enabled me to challenge my taken-for-granted assumptions and also confirmed my suspicions that the degree of ESN technology appropriation across organisational groups was very closely related to the constellation of organisational institutional logics.

In the second stage I followed Langley's (1999) strategy of visually mapping the data segments to construct a chronological timeline of decisions, activities and key events relating to ESN appropriation. In this timeline I also included key events around ESN appropriation by the retail banking and corporate HQ divisions of Banksi's wider banking group since, other than the banking fraud, interviewees consistently mentioned that these events motivated their decision to adopt ESN. At this point the conceptual framework was also applied to this mapping to foreground the different competing discourses, justifications and positions around ESN appropriation. I observed that the ESN appropriation activities and decisions along this timeline were aimed at attending to 3 main challenges that I coded as on-going events 1) constructing an intra-organisational theorization for ESN; 2) persuading organisational actors to use ESN; and 3) appropriating ESN to allow collective meaning making amongst organisational actors. These observations are the basis for Figure 5.1 of ESN's

diffusion timeline in chapter 5, where I highlight key events and the intra-organisation theorizations around ESN.

The next step in the second stage was to analyze these events to identify distinct ESN justifications and appropriation activities. My goals in further analyzing these framing practices and their influence on internal ESN diffusion was to capture (1) the structural elements of rhetorical arguments, and prepare the data for further analysis of (2) the deep structures or institutional logics, and (3) the structure and type of rhetorical strategies that key stakeholders in different organisational groups drew on and deployed to direct ESN diffusion. I pursued the first goal by open coding the data segments to generate clusters of mundane practices and phrases, referential texts, and words. In both field studies, clusters of repetitive phrases and practices emerged and were coded according to the rhetorical argument elements highlighted in Table 3.3- data, claims and warrants. Institutional studies demonstrate that these readily observable clusters of discourse are the institutional vocabularies or structures of words, practices and meanings that are used to manipulate and articulate the standards of legitimacy (norms and values) of institutional logics (Meyer and Rowan, 1977; Suddaby and Greenwood, 2005). These vocabularies therefore reflect the backings or underlying institutional logics behind distinct rhetorical arguments.

Accordingly, for the rest of this stage I focused on clustering latent content to understand the mechanisms underlying actors framing practices and other symbolic actions. I outlined the content of rhetorical backings using the taxonomy of institutional elements in Table 3.2 as a guide to map emerging institutional vocabularies and practices to common principles, material manifestations, assumptions and identifying characteristics. In both cases three distinct institutional logics emerged, market, community and professional logics. I further validated this finding through discussions with Banksi's executives during follow up meetings with the key project stakeholders. Vocabularies and practices reflecting market logics espoused the ideals of profit maximization as organising principles,

and increasing numbers and sizes of customer accounts, efficiency and control as behavioural norms. Community logics were typified 'principally by relations of affect, loyalty, common values, and/or personal concern' (Brint, 2001), mutual monitoring and social ostracism practices as behavioral norms, group membership and belief in reciprocity and trust as identifying features, and collaborative engagement as a material manifestation. The professional logics espoused increasing sales of product and services and enhancing employees' reputation as organising principles, accountability to customers and professional associations as behavioral norms, standardized and high quality products and services as identifying characteristics, and professional accreditation and customer feedback as material manifestations.

At this point some the majority of segments early in the timeline had occurrences backings, with marked and community logics, warrants, data and claims, while later segments generally exhibited backings with a professional logic, data and claims. I discussed with my supervisors whether this was an indication that different communities of actors exploited resources and mechanisms around these different institutional logics over time to shape their ESN justification and appropriation actions. While we all agreed that this was a likely scenario I was advised to probe the data to trace how and why, some structural elements were suppressed, and different logics proved to be more salient to ESN legitimation at different points in the internal diffusion process. Further probing revealed that changes in salient institutional logics corresponded to different types and sequences of rhetorical appeals and legitimacy.

After researching the literature around these emerging concepts I coded the data segments according to the rhetorical form and sequence principles outlined in Table 3.2. Segments were first open coded according to types of rhetorical appeals, pathos, logos or ethos, specific instances of Suchman's (1995) everyday strategies for gaining specific types of legitimacy, and branches of rhetoric, "audience"-context of the argument, "kairos"- time sensitivity, and "decorum"- fittingness of the argument to both audience and moment. In the next stage of cross-coding I initially used the rhetorical appeal codes to

extrapolate corresponding forms of legitimacy for each segment using the academically established mapping that indicates pathos and logos appeals help to gain pragmatic legitimacy and ethos appeals help to gain moral legitimacy (Suchman, 1995; Scott, 2001).

Cross-coding forms of rhetorical appeals with Suchman's (1995) legitimation strategies (last row Table 3.2) broadly verified this mapping with a list of appeal-legitimacy codes: pathos- pragmatic, logos- pragmatic, and ethos- moral strategies. Each of these lists comprised of material and symbolic actions such technological or work process customizations, and steering committee actors discursive justifications for changes.   Cross-coding appeal-legitimacy lists with branches of rhetoric helped to pinpoint the audience and chronological sequence of rhetorical-legitimation actions.

As recommended by Suddaby and Greenwood (2005) I forced myself to code each argument into just one category based on which form of rhetoric was the most prominent. Regarding retrospective interview accounts, one very important form of filtering conducted at this stage involved making a clear distinction between quotes of "what the participant actually communicated at the time, and what was the intention behind their communication", which I categorized as "non-recall" versus "what they now believed was the effect of that communication", which I grouped as "recall". This was an important distinction to make since one of the main aims of my research was to illustrate what rhetoric managers actually used at the time to justify ESN. Accordingly, "what they now believed was the effect of their communication" was inconsistent with this aim, especially since this retrospective belief could have been coloured by any number of social factors and cognitive factors, the most likely being recall inaccuracies (recall bias) (Newman and Robey, 1992). Although I categorised a relatively similar number of pragmatic and moral (ethos) arguments as "recall", I categorised a disproportional number of pragmatic (pathos and logos) arguments, including the majority of documentary evidence, as "non-recall". This had a significant effect on my resulting findings (chapter 6) and model (chapter 7), where

I concluded that, although some justifications may have had the effect of indirectly gaining moral legitimacy over time, the actual justifications employed at the time, appealed to pragmatic legitimacy.

In my final stage of validation, I transposed these categories onto my chronological timeline of ESN appropriation events to better understand the general sequence of rhetorical legitimation actions. Again, using Table 3.3 as a guide I looked for changes in the form of rhetoric and legitimacy and movements between inter-field and intra-field rhetoric. I also sought independent reviews from my advisors and staff from both case companies. Selected findings around employee engagement and knowledge management that broadly conveyed the outcomes of my analysis were met with agreement from Banksi's senior Internal communications and human resources staff. Similar findings around ESN adoption strategies were also met with agreement from the head of iSource's change management group. Moreover, practitioners that I engaged with through my involvement in the digital workplace group (DWG) network frequently expressed that they experienced similar ESN diffusion dynamics in their respective firms, particularly with respect to my finding that pragmatic justifications are often more convincing when trying to sell ESN to their colleagues.

4.4 Limitations to the Approach

So far, my discussion of my approach to ESN adoption at iSource has touched on a number of methodological tradeoffs, such as only interviewing members of the steering team. More generally, an important limitation of this study was its basis on a single site study, which arguably makes the study less generalizable. A breath of similar or different case sites would provide a more accurate picture of what contextual factors helped to shape the trajectory of ESN diffusion. I attempt to offset this limitation by providing a detailed descriptions of the case site (chapter 5), and explaining as far as possible in my analysis, the context in which communications are embedded (chapter 6). My description of the institutional logics that structure communicative practices at iSource is also intended

to enable readers to identify similar institutional logics in other organisations and fields, where my findings will most likely be applicable. It is my hope that readers use these institutional descriptions and thick descriptions to identify whether my findings could be applicable to their individual contexts.

In addition, I interviewed mostly members of the change team in order to understand how internal diffusion could be shaped from the top-down, and so, there was less of a focus on how front- line employees responded to the change team's communications. Such data could provide clarification on a number of change team members' belief that their pragmatic strategies had moral effects on front-line employees over time. In the future, studies can build on the understanding of internal diffusion developed here by conducting a more extensive and detailed examination of rhetorical diffusion dynamics.

Chapter 5 Findings

In the previous chapters I outlined (1) a conceptual lens that illustrates my understanding of how the internal diffusion of technology is constituted of rhetorical, legitimation and institutional logics dimensions, and (2) a chronological approach for using this lens to analyze ESN framing (rhetorical-legitimation) contestation between different communities of actors in empirical contexts. The description of my empirical analysis in chapter 4 also suggest that over time there were overlapping states of isolated ESN infusions (or limited diffusion) before ESN eventually became widely diffused throughout the organisation.

In distinct infusions, different communities of iSource employees (iSourcers) appropriated ESN in ways that aligned with their own practices and objectives, and contrasted with the practices and objectives of other communities. Gradually, ESN diffused widely as these communities collectively agreed on practices and objectives with which to align ESN appropriations. My objective in this chapter is to chronologically illustrate how and why ESN was appropriated and infused in varying ways by different communities of iSource employees (iSourcers). I do this by describing the salient organisational groups and their practices and objectives, their motivations and justifications for ESN appropriation, and the form and function of each community's ESN appropriation.

5.1 Groups and Values at iSource

At the time of my study in early 2012 and 2013 iSource was recently acknowledged by the *"Great place to work"* survey as a top 5 employer of young professionals in several countries throughout Europe. The organisation had also recently merged with an equally large technology infrastructure company to cement its place as a global technology services giant, and the one of the biggest in Europe with close to 88,000 employees in 11 global business units (GBUs) (spanning over 40 countries), helping to generate 8 billion euros in annual revenue. For the most part, this position was not achieved through organic growth but rather through mergers intended to capture new customers and business, and build new competencies. As a result, iSource encapsulated complex hierarchies of highly institutionalized multi-disciplinary teams of individuals who gradually developed similar cultural characteristics around distinct geographical regions, departments and roles. In particular, iSource's cultural landscape encapsulated three distinct *"logics of action"* that influenced how iSourcers judged and prioritized the suitability and importance of emerging ESM objectives and practices.

Similar to a quilt that was stitched together from oddly shaped pieces of fabric, iSource grew through a rapid series of mergers to encapsulate a complex web of primarily three highly institutionalized communities of actors- business technologists, consultants, and senior management. In the early years (1990 - 2002) most iSourcers were technologists in IT solutions and outsourcing in the financial and manufacturing sector. At this time, employees valued building, implementing and maintaining high performing systems, then selling this as a service to local clients. In a relatively small local market, employees prioritized enhancing their technical skills by learning and sharing knowledge in their tight knit community.

In 2002, iSource became the 2nd largest European provider of IT services when it acquired two large consultancies to keep up with clients increasing willingness to pay for integrated strategic consulting,

and traditional technical systems management and integration services. While consulting and technical employees initially worked closely together, their ties were increasingly strained as iSource continued merged with other companies though to 2006, and won contracts for a host of larger consulting projects throughout Europe and China. Valued competencies also shifted towards project management, selling IT services and nurturing profitable client relationships. Technical staff acquired from mergers were mostly grouped and located into in-house operational and support functions according to a wide range expertise like database management, outsourcing, systems development and management, and security, to name a few. They inevitably developed strong *"communal"* ties as they worked to balance concerns of enhancing and expanding their skills to develop and maintain systems whilst being pressured to work more efficiently to support consultants. For the consultants however, constantly moving between teams and projects strained their communal ties and reinforced *"market"* values of making customer engagements more profitable.

By 2010, iSource's place as a global player in IT services was cemented. With this, their focus shifted to enabling more organic growth in order to address the negative consequences of their long history of mergers. Senior management therefore established strategic objectives to nurture a company culture where employees were motivated, happy and engaged in order to retain and attract younger and more talented millennials. For them, fitting this square peg into the round traditional business objectives of delivering quality and secure services to improve its bottom line and expand all areas of its business to improve its top line, was an unusual dilemma.

In 2008, a community of about 100 multi-disciplinary business area experts, and senior CIOs and CTOs were formally assembled as a "scientific community" to address this dilemma. The scientific community created a *"future strategy"* model in 2009 which highlighted that social networking could greatly benefit iSource and its employees as a potentially high profit business area, and a collaboration medium. Further research in line with this thinking lead the scientific community to conclude that

iSource's traditional ways of working, particularly around email, were hindering productivity and employee engagement. Accordingly, the scientific community assumed the responsibility of steering the no-email initiative when it was formally announced in 2011.

5.2 The ESN Project

Throughout adoption, implementation and use of the cloud-based social collaboration platform, orangeESN, iSource went against the commonly observed industry ESN assimilation norms. According to practitioner press, the firm not only dedicated an estimated 500 times more financial and human resources to ESN than the average company, but also departed from the ESN implementation norm of mobilizing grass-roots adoption or aiming to "improve productivity". Rather, iSource's ESN project was steered in a top down manner and was focused on cultural transformation.
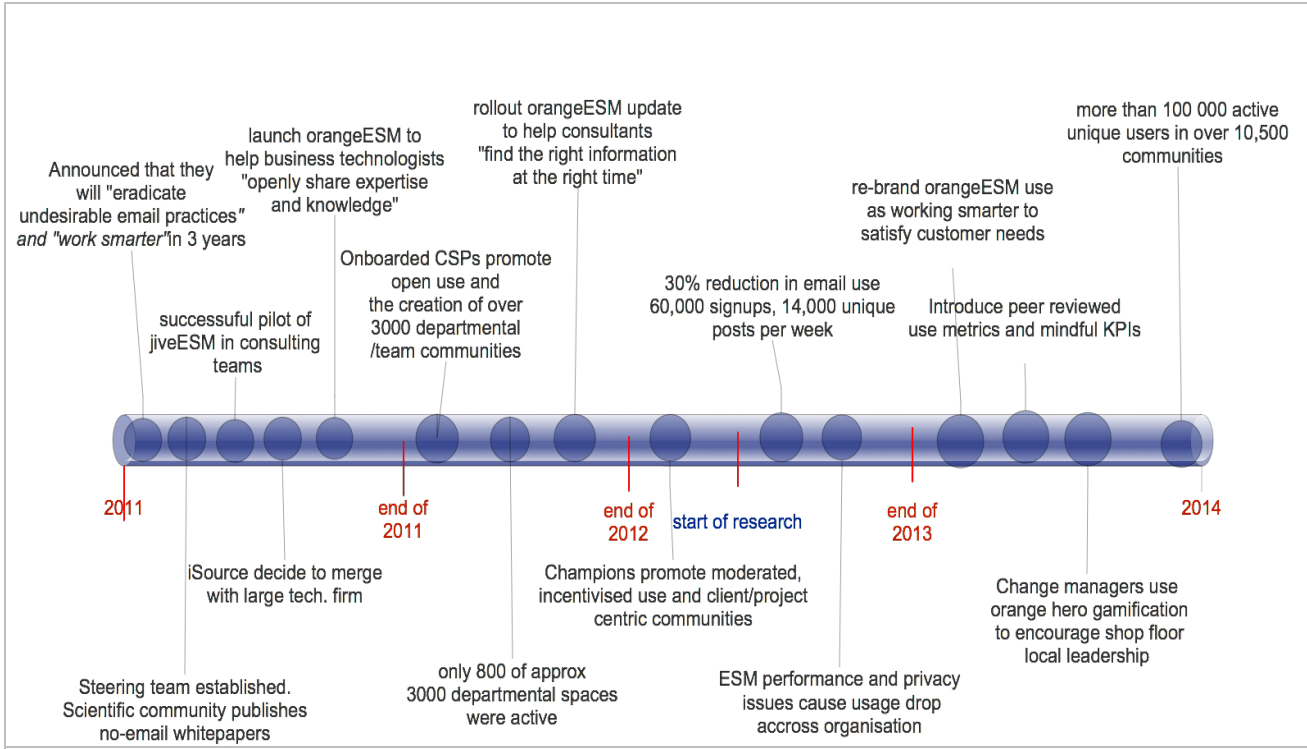
Figure 5.1 iSource's ESN Timeline

As illustrated in Figure 5.1, the steering team guided a process of internal diffusion where distinct communities of iSourcers adopted and engaged with ESN when justification strategies and material features were in alignment with the aims and means that they held as legitimate and salient at a particular time. This process was gradual, and enacted through a combination of the steering team constructing, mobilizing and reformulating new ESN features and justification strategies at various points, and the ability of competing communities of iSourcers to make collective sense of ESN's role and usefulness.

Following the CEOs announcement that iSource would completely phase out the use of email in 3 years, senior managers in the scientific community and smart work committee favoured ESN appropriation ideas aimed at supporting "the fight to eradicate iSource's email pollution", and sought to position ESN as a way "to work smarter together" throughout their ESN journey. However, the traction gained with their early justification efforts was lost after they decided to adopt an underdeveloped ESN solution (orangeESN) over a world-class solution that was hugely successful as a pilot. Nevertheless, the company's merger with a large IT firm saw an influx of new business technologists who gravitated to appropriating orangeESN's open and unstructured features as a way to "find and share expert knowledge with other technologists".

As orangeESN's features became more developed and streamlined, performance incentives were instituted with the central focus of engaging reluctant iSourcers with orangeESN. iSource consultants gravitated to these new developments and favored ideas for appropriating ESN to "get the right information at the right time". Although these developments successfully raised engagement levels, infrastructure and privacy issues towards the end of the 3 year deadline caused a drastic decline in ESN use across the organisation, and this situation continued even after these issues were addressed.

The steering team's investigation attributed this stagnation to a loss of trust in the system and more importantly, that some to the observation that extrinsically motivated communities of iSourcers were

only extrinsically motivated to use ESN to meet ESN use meet management KPIs, while those pockets of more intrinsically motivated users preferred to share in isolation from iSourcers that didn't share their values or aims. This provided the impetus for the steering team to come up with more innovative ways of encouraging business technologists, consultants and senior leaders to reach a common understanding of how to appropriate ESN in ways that help them "to work smarter together". By mid 2014, these initiatives were reported as successful at generating tremendous amounts of intrinsic motivation for using ESN across the organisation, with a 65% reduction in email traffic and close to 90, 000 iSourcers actively participating in orangeESN online communities.

5.2.1 The "No-Email" Decision

iSource's decision to adopt ESN was formally announced in 2011 when their CEO announced that *"email was on its way out"* and iSource would be a no-email company in three years. He justified this action as an important step towards tacking the information overload problem that was actively hampering collaboration and idea generation at iSource. At the time, iSourcers' activities and behaviours were highly contingent on their indifferent belief that emailing was inherently efficient, without much thought to how it not only hindered job satisfaction but also hampered efficiency and productivity by adding additional steps to existing task workflows (see Appendix A). Following the CEOs announcement that iSource would completely phase out the use of email in 3 years with the "no-email" programme, many iSourcers expressed the opinion that alternative technologies like ESN would promote more micro- management, information overload, and time wasting. Senior managers in the scientific community and smart work committee recognized that they would need sustained and persuasive justifications in order to encourage iSourcers to join "the fight to eradicate iSource's email pollution".

The head of the global change team would often reference Heath and Heath's (2010) behavioural change metaphor of "speaking to the elephant and the rider" to describe the "no-email" strategy as

'winning hearts and minds'. This strategy relied on making informal and formal verbal and written appeals to create and drive cultural transformation around ESN. An important part of this strategy was to mobilize early communications to create a sense of urgency for change around the negative consequences of email misuse. For this, the team invited academic and practitioner researchers to help them conduct an analysis into corporate email use in general and specifically by iSourcers, and later experimented with the yammer social platform to co-create three whitepapers from the research results. The whitepapers outlined in Appendix A were the first piece of widely publicized "no-email" texts and were central to initially motivating iSourcers to *join the fight to eradicate emailing pollution".*

The first whitepaper outlined the nature of email technology and email misuse, providing statistics on how email was affecting work practices and job satisfaction at a field level and at iSource. One survey of approximately 2000 iSourcers showed that on average, iSourcers spent between 5 to 20 hours dealing with about 1000 emails every week, of which approximately 180 emails were spam. Approximately 82% of participants also reported that they experienced difficulty keeping up with daily email, and spent more than a quarter of their day managing email. According to the change manager this survey and others showed that *'overall employees were unhappy about wasting this time'.* The second whitepaper positioned alternative practices and technologies such as ESN as suitable solutions to support iSource's cultural shift to more organic and collaborative practices, and away from the cumbersome and closed collaborative practices that are reinforced through email.

The final whitepaper surmised that a structured change management programme would be critical to achieving "second- order change" or shifting employee mindsets from iSource's deeply ingrained email-driven practices. The whitepaper also importantly positioned "no-email" as a key strategic business objective under iSource's *"healthy and smart work"* programme. This programme was which was focused on enhancing service delivery, and organically expanding its business by winning new

contracts and growing existing contracts. This strategic positioning was the basis for iSource's significant financial and human resources investment into the programme.

5.2.3 The "No-Email" Steering Team

One of the first and most important of these investments was the formation of a global steering team for no-email. The no-email steering team was comprised of CTOs, CIOs and other senior managers that were members of the scientific community (SC). Figure 4.2 provides an illustration of the steering team's roles and their broad responsibilities. The smart work committee and scientific community believed that this steering team was the best way to ensure that no-email justification strategies remained focused on people, processes and technology throughout its internal diffusion. Departing from this goal and the "elephant and rider" metaphor, the scientific community's stance was that the steering committee should drive adoption on two levels, *emotions* and *rationale*.

Figure 5.2 iSource's ESN Steering Network
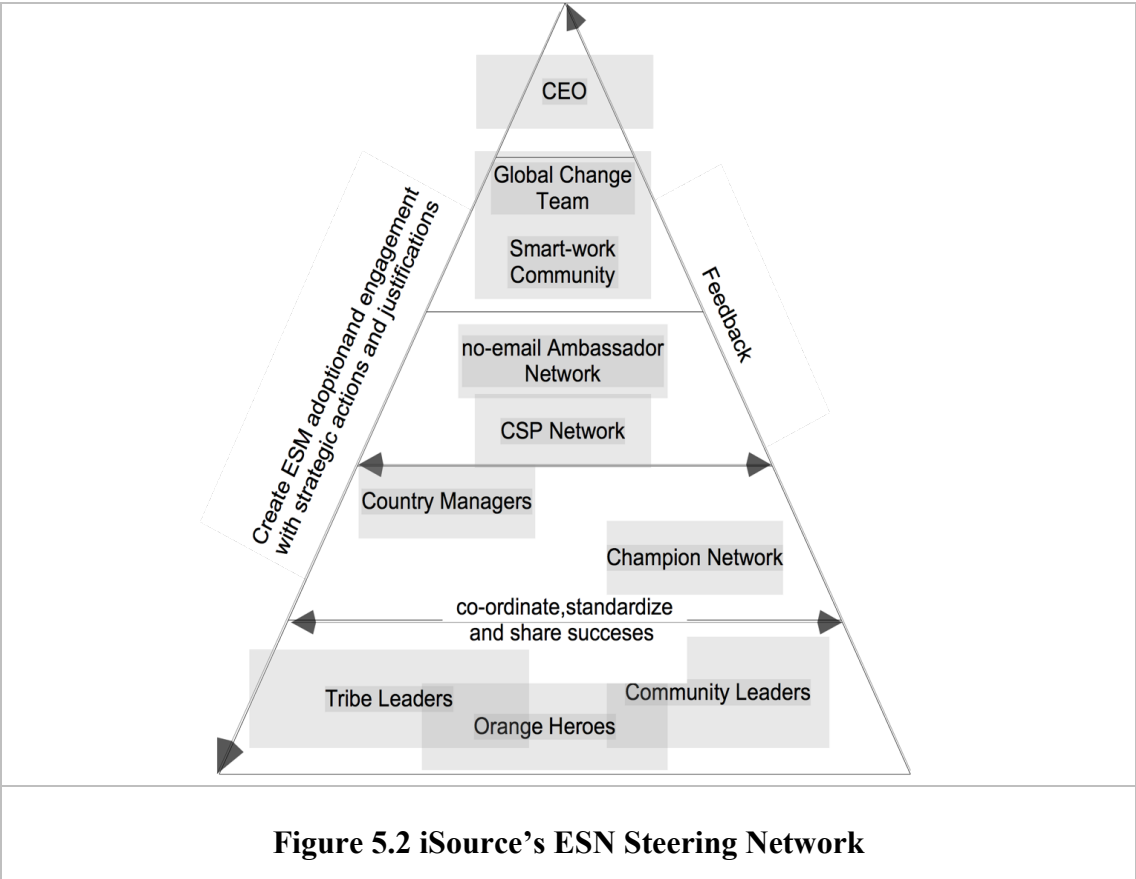
Accordingly, as the programme evolved, the steering team extended deeper into front-line functions, and its role became more defined in order to construct and execute justification strategies more effectively. Specifically, the global change team, ambassador network, and champion network were focused on winning iSourcers minds by appealing to their rationale through the creation, dissemination and refinement of information that iSourcers needed to enact new ESN-driven practices. Community support professionals and community managers on the other hand were primarily focused on winning hearts by appealing to iSourcers' emotions with hands-on training and practical use cases and examples of how they could use ESN to work smarter.

5.2.4 ESN evolution

Following the "no email" announcement, some senior managers in the scientific community and smart work committee expressed concern that the 3-year plan was unrealistic and ESN did not have a place in the business. They constantly grappled with their own reservations, and those of key communities of iSourcers when they encouraged iSourcers to usefully engage with ESN. Consequently, the ESN steering team often employed communications around distinctly different ESN ontologies in order to coordinate, standardize and encourage ESN engagement across other senior management, business technologists, and consultants. Table 5.1 illustrates key features of the different ESN ontologies that were communicated by the steering team and appropriated by different communities of actors over time.

Table 5.1 ESN Ontologies				
Level of strategy	**Design element**	**Business Technologists**	**Consultants**	**Scientific community**
Organisation	Project approach	Bottom up inclined: Grass roots, loosely-structured initiative where ESN naturally spreads across groups	Top down inclined: Measurable purpose, objectives, strategy	Middle management driven: Project managers, team managers, communications managers e.g. Personal assistants chosen as project champions and power users
	Release approach	Viral rollout	Phased roadmap	Demand driven
	Vision	Community vision and objectives- mutual trust, support, intense knowledge sharing	Commercial vision and objectives- profit maximization, productivity, efficient access to information	Professional vision- responsibility for providing high quality service to customers
People/ Participation	Content	Unstructured, un-moderated communities and content seeding	Moderated content and communities to prevent information overload	On-demand content- Focus on content needed for job. Moving content needed for job from traditional locations, such as legacy systems, shared drives, email and external sources to the ESN. Client focused communities.
	Incentives	Incentive is usage. No formal or informal recognition	Incentivized usage	Incentive is usage, Recognition through gamification and V.I.P access.
	Reputation	<u>Open and Collective:</u> Reputation is judged on number of posts, followers, or likes	<u>Objective:</u> Reputation is judged on commercial value of contributions, and rewarded financially	<u>Selective peer review:</u> Reputation is judged on usefulness of contributions
	People	Middle managers as no-email champions	Senior managers as no-email champions	All shop floor employees can become champions
	Promotion	Informal training and advertising to appropriate ESN to "openly share expertise and knowledge"	Formal training and advertising to appropriate ESN to "find the right information at the right time"	Formal and informal WIIFM advertising to appropriate ESN to "work smarter"
	Presence	Synchronous interaction, limited asynchronous tools. E.g. Instant messenger, video calls	Asynchronous interaction only e.g. blogs, wikis, discussion forums	Employees should be able to access all applications needed to work in a variety of contexts. Synchronous and asynchronous interactions e.g. expertise location, ideation, and connections to other enterprise systems

	Sharing	Exchange: Information push- Provide users with as much information as possible to do their jobs e.g. departmental pages, watercooler space, unstructured content Accountability: Every voice counts, minimal moderation	Exchange: Information pull: Users should be able to efficiently locate needed information and knowledge e.g. Focus on filtered search and information architecture Accountability: All content is strictly moderated	Exchange: Important corporate news is mandatory, but users can subscribe for everything else e.g. RSS, social tagging, Gmail-style smart lists Accountability: peer moderation
	Training	Peer to peer training	Middle managers conduct majority of training	Middle managers conduct majority of training

Scientific Community Infusion ("H1")

Despite some early reluctance, senior managers on the global change team were among the earliest adopters of ESN since the scientific community's research identified social technology as a major source of future strategic advantage and revenue. For many senior managers, early adoption was an opportunity to further explore their reservations and shape the trajectory of a technology that seemed to be inevitable. In this regard, the change team purposely used web 2.0 mashups to draft the key no-email whitepapers and a document of 50 ESN requirements. They also worked with the smart work committee on initiatives aimed at understanding email usage patterns (e.g. surveys, interviews, external research), creating a sense of urgency around no-email transformation (e.g. smart-inbox, whitepaper), and experimenting with solutions to support no-email transformation (e.g. orangeESN, jiveESN). With the exception of the smart inbox initiative that appealed to iSourcers' emotions, the scientific community viewed these early initiatives as primarily rational justifications aimed at motivating iSourcers to "join the fight against iSource's email pollution".

The scientific community were also instrumental in overseeing the pilot of jiveESN for 3 months with around 2000 iSourcers. This pilot helped the team to create an 80 page ESN operating manual, and importantly yielded a number of success stories among business technologists. These success stories helped the team to understand how to generate value for iSourcers using ESN, or as one member explained it helped them to understand *'when does it work, why does it work, why does it work here*

and not there' (Head of Knowledge Management). Change team members reported that the customer-facing successes from the H1 pilots were particularly powerful emotional justifications for showing other iSourcers how they could use ESN to work in better ways than with email.

Although the jiveESN pilots were largely successful, the change team made the crucial decision to adopt orangeESN as iSource's ESN solution in the third quarter of 2011. For iSourcers, this was an especially strange decision since orangeESN had only met 27 of the 50 ESN requirements outlined in the second whitepaper, while jiveESN met all the requirements. At the same time, *'[orangeESN] had basic social media features that were more suited to open and unstructured practices and viral engagement'* (Global *Sales Director, Change manager*), which was not well suited to large firms (as highlighted in third whitepaper), or iSource's plan to fully assimilate and market ESN in 3 years. For instance, many iSourcers complained about information overload as a result of not being able to filter posts in the "watercooler" space, and not being aware of duplicate communities until it was too late (see Table 5.1, Column 3 for early features). '*After the launch, it was more a content push… but we learned a lot about* early adopters and content generators, *and what we had to do to engage late adopters' ([orangeESM] CEO).* Further, selecting and eventually purchasing orangeESN's parent company was not just a means of transforming iSource's internal culture and practices but also gave them *'the opportunity to control the future development of the product and gain a competitive advantage over other consultancies in the social technology market' (Head of Change Management).* The team therefore decided that the best way forward was to recruit employees to extend the reach of the steering team in order to exert more control over the project.

The first extensions were no-email global business unit (GBU) managers and ambassadors. Based on the global change team's overall strategic guidelines, GBU managers were appointed to be single points of contact for the no-email programme within the cluster of countries that made up a GBU. Each GBU manager was also tasked with recruiting a network of no-email ambassadors. Ambassadors were not

expected to be ambassadors for the company or the change team, but rather, they were ambassadors for the the no-email programme, and the related ESN tools and practices. In this role they were tasked with dedicating a minimum of 1-2 hour per week to training and supporting 500 to 1000 shop floor iSourcers, and providing feedback up the chain on the outcomes of no- email justification actions. This team formed the strategic core of the steering team.

Business Technologists Infusion ("H2")

On the heels of a recent merger with a large IT company in 2011, iSource was engaged in a number of organisation wide initiatives to integrate the disproportionate influx of new business technologists into iSource's community. With this, the SC team surveyed that most of their early users were business technologists who were drawn to orangeESN's *online communities.* The H1 pilots also showed that "watercooler spaces" or ESN communities were natural sites for collaboration and the primary sources of value creation in orangeESN. The team were confident that orangeESN communities could usefully support the organisational integration efforts that were underway at the time. As a result, much of the SC team's early justification actions were focused on motivating the use of orangeESN communities among the growing population of business technologists.

However, some business technologists were concerned that ESN's open sharing ethos would undermine the communal ties, trust and satisfaction among employees by creating more opportunity for micro-management. Despite this resistance, the majority of technologists were advocates of ESN features and practices that were un-moderated, un-incentivised and grounded in the communal trust among employees. The steering team therefore aligned their early actions and communications to practices that were in line with technologists' communal values such as, un-moderated ESN communities, synchronous and push sharing with instant messaging and unstructured content, content seeding, peer-to-peer training and promotion, and little focus on incentivised use (see Table 5.1 Column 3).

In line with this focus on communal values, the change team also created the community support professional (CSP) role to support ESN community engagement in each GBU. The call for CSP volunteers was targeted to senior members of staff who were not members of the scientific community, and were dedicated experts and consultants in social media, ESN tools and collaborative practices. These CSPs were specifically responsible for designing GBU- specific strategies to ignite and nurture collaboration in ESN driven online communities. As a group of disruptive thinkers, CSPs were instrumental in testing orangeESN functionality in order to establish collaboration patterns that would benefit teams working in communities on a specific business activity.

They also moderated and manually created orangeESN communities based on employee requests, collected success orangeESN success stories in an online wiki of "lighthouse communities", and invited other CSPs from around the world to an online CSP community (CSP network) to share knowledge and experiences and co-create training material. CSP network discussions and experiments led to a decision use a departmental engagement approach to drive participating on orangeESN's online communities. Teams and departments were thought to be the "low hanging fruit". CSPs therefore encouraged team leaders and managers to create communities for their departments and teams, invite their team members and key contacts, and shift all their communications to these communities.

Soon, the CSF online community grew to be a widely distributed and well connected community of mostly iSource business technologists. At the same time, internal surveys showed that iSourcers from the largest and most important technical teams, database and security, were increasingly creating intra-departmental and team communities to "openly share expertise and knowledge with colleagues" (e.g. SAP expert community). With these successes, Gartner reported that the new orangeESN update that was rolled out at the end of 2012 (now compliant with all 50 technical requirements) was now ranked as one of the industry's top collaboration tools. New features included email-like smart-lists, dashboard and tabs to help organise content and de-clutter orangeESN's newsfeed. OrangeESN's community

workflows and policies were also streamlined to enable automated (bottom-up) but managed community creation and management.

Consultants Infusion ("H3")

These successes were short-lived. A mid 2012 survey of orangeESN community engagement revealed that of the 2800 formed communities, only 800 were active. Usage levels from the consulting group had dropped significantly and active communities were dominated by iSourcers from the steering committee and technical support teams. Many consultants believed that ESN had no place in the business, and would likely fuel inefficiencies like information overload and time wasting that is experienced with public social media platforms like Facebook. However, the ESN advocates in the consultant community were less concerned with ESN as a whole, and specifically concerned with how ESN was configured and used by business technologists. Instead, they advocated for features and practices to be tightly moderated, financially and socially incentivized, and grounded in commercial and productivity objectives. In response, the steering team re-fined their actions and communications to efficiency seeking practices like tightly moderated ESN communities, financial incentives for participation, asynchronous and pull- sharing with micro- blogs and structured search capability, and formal training and promotion (see Table 5.1 Column 4).

In line with this efficiency seeking focus, the change team decided to increase the local leadership around the new orangeESN features. They on-boarded no-email champions and community managers in order to construct and mobilize more targeted justification actions to motivate late- adopting and skeptical iSourcers, such as consultants, who were too busy to invest time to learn and experiment with orangeESN or were skeptical of its benefits. The no-email champions were recruited for individual GBU countries, with the aim of having at least 1 champion for every 15 employees in a specific business unit. The call for no-email champions volunteers specified that they needed to be iSourcers in middle management positions and/or members of iSource's "young leaders" community, who were willing to

volunteer their time to have a little more training on ESN features and practices. No- email champions trained other project leaders and departmental managers on how they could use specific ESN features to work more effectively, and encourage project managers to participate in communities with increased communications such as phone call campaigns.

Unlike CSPs who relied on iSourcers intrinsic motivation, champions advocated for tangible incentives and bonuses to motivate project leaders to get training and set up communities. Team leaders who did not attend orangeESN training sessions would not receive their full yearly bonus, and iSourcers in project communities would receive an additional team incentive for reducing their internal email traffic by 10% every quarter. They challenged to suitability of CSPs departmental approach to orangeESN community engagement and instead advocated for the prioritization of a client- based approach where iSourcers were encouraged to create communities around client accounts rather than just departments and teams. An important outcome of the client-based advocacy was to appoint dedicated community managers within each country. Community managers were tasked with the day to day management and support of all online communities within their country. In this role they decided on whether to approve or decline applications for new niche (not project or department based) or duplicate communities by reviewing information like the community's originality and purpose.

By September 2012, the extended steering team had managed to certify over 100 business processes as email free, onboard over 50, 000 iSourcers into the orangeESN platform, and lower the number of emails per inbox by 30% as compared to levels surveyed at the start of the no-email campaign. Crucially, 35% of these figures were generated by iSource consultants using ESN to "find the right information at the right time".

Wider Diffusion

However, during late 2013 to early 2014, the 'gift' of growing community activity was 'cursed' by scalability issues. Although the steering team on-boarded over 50, 000 active users by 2013, they soon

realized that their actions only encouraged extrinsically motivated ESN engagement and superficial behavioural change. This was especially evident when there was a prolonged drop in engagement after the combination of user growth and the ESN platform's cloud architecture lead to increasing concerns about performance and privacy.

OrangeESN's cloud architecture could not cope with increasing user numbers, and this lead to slow page loading times, broken links and accessibility issues. iSourcers also increasingly used these issues as an opportunity to express their concerns about the cloud architecture's privacy and security. Research by the steering team attributed user inactivity to superficial changes in iSourcers' behaviours and practices rather than technical issues. For example, extrinsically motivated sales consultants from different service and product lines were being selectively transparent in order to have a competitive advantage over competing sales teams by contributing just enough to get their team incentive. At the same time business technologists that were more intrinsically motivated were using ESN to primarily collaborate with other business technologists in their private departmental ESN spaces rather than in more open competency based communities. After assessing the failures and consolidating the successes that they had with the technologist and consultant communities, the steering team decided to focus less on the immediate needs of the individual communities of actors, and instead look for configuration and promotion compromises. The resulting communications promoted features and practices that were grounded in enhancing service quality such as, client- focused communities, on-demand content and sharing with tagging and Gmail- style smart-lists, peer moderation, and financial and social incentives with gamification and access to V.I.P spaces (see Table 5.1 Column 5).

In line with this customer- focus, the change team created new incentive systems, redefined community features and policies, and encouraged more local ownership, in order to increase the value and reach of their communications. The result was a four pronged metric based approach. They sanctioned leaders that continually engaged in unwanted collaborative behavior, and awarded managers and leaders

bonuses and incentives based on a broader range of activity focused KPIs (daily, monthly, quarterly iSourcer posts/views, responses, visit trends, original posts, comments on others posts) rather than the narrow objectives of reducing email usage and attending ESN training sessions. They also refined the scope of orangeESN community purpose statements to cover three areas, (1) the purpose for iSource as a whole (2) the purpose for members of the community (3) the purpose or benefits for individual members. The team also used digital and physical gamification methods to onboard "orange heroes" and "tribe leaders" in order to encourage local ownership across all communities of iSourcers. Top community leaders and community contributors could become "tribe leaders" and "orange heroes" based on a combination of achieving certain KPIs and user endorsements.

Tribe leaders and orange heroes also coordinated and ran global best practice webinars and practical training, such as the "What's in it for me" workshop (WIIFM), where iSourcers from different departments discussed how to collaborate in a way that was open and multi-disciplinary, and still aimed at a specific purpose. Workshops participants were encouraged to create YouTube video diaries and testimonials of their no-email journey's and how they used orangeESN to work smarter. These videos were added to the orangeESN "training vault" and were instrumental in helping front-line employees to train each other.

OrangeESN adoption levels in mid 2014 had surpassed previous highs recorded in 2013. Organisation-wide mail traffic fell by 65%, with over 210 business processes certified as email free. Approximately 100,000 technical, consulting and scientific community iSourcers were now working together in over 10, 500 primarily competency-based and customer- integrated communities, aimed at helping iSourcers to "work smarter together".

5.3 Summary of Case

With this success, no-email was often praised in the business world as one of the most successful ESN initiatives to date, and was thus the subject of a number of practitioner best practice studies. The majority of these studies highlighted that iSource was able to successfully change their corporate culture using ESN because of three key actions: creating a sense of urgency, committing substantial financial and human resources, collecting success stories. A commonly mentioned theme connecting these factors in these studies was, having clear and compelling communication and justifications. In particular, a Gartner study (Appendix A4) that was also ongoing at the the time of my research explained that iSource's no-email success was due to the following:

> *Changing corporate collaborative culture requires special attention to justifications to highlight sense of urgency issues, demonstrate commitment and spread success stories, - 'By gaining management engagement, senior leaders are delegating employee level justification to individual managers who interact more frequently at team or one-on-one levels. Managers are expected to translate the general aspects of a broad culture change effort into specifics that will resonate with individual employees. Managers are often not prepared to meet this expectation and will need assistance.*

Similarly, the head change manager explained the no-email engagement strategy as follows:

> *'Most of our time and effort was dedicated to providing guidance and leadership, and nudging our colleagues to experiment and use orangeESN, than on planning, prescribing and executing our ideas for what orangeESN should look like and how it should be used'*

Importantly, the Gartner study also suggests that iSource's various professional, market and community objectives played a substantial role in their no-email journey and the appropriation of orangeESN:

'First, because [iSource] is a professional services organisation, employee productivity is the foundation of business performance. And the business is highly collaborative by nature. The CEO and chairman, is relentless with the no-email campaign and believes driving higher productivity and advancing the capabilities of the company's workforce through social collaboration are absolutely critical to its future success.

Second, it intends to offer a set of professional services for helping clients become highly collaborative organisations. So it believes success with its Zero email campaign will give it a competitive advantage in sales and delivery, because the company has done it.

Third, it purchased the enterprise social networking/collaboration platform to use internally and offer externally as a product. [iSource] believes that using [orangeESN] for its internal no- email campaign effort will forge the product under an intense fire and provide it with a differentiated story against competing platforms.'(Gartner, 2014)

Accordingly, in the next section I intent to shed light on how iSource's conflicting cultural demands and change managers' "heart and mind" justifications gradually shaped and shifted isolated ESN infusions to widespread diffusion and ESN success.

6 Analysis: from Infusion to Diffusion

In this section I will illustrate in detail how ESN was popularized and standardized through focused communicative actions at iSource. I draw on the rhetorical legitimation approach outlined in chapter 3 to illuminate internal diffusion as a dynamic process of mutual interplay between institutional logics and rhetorical legitimation. I use the case of ESN evolution outlined in the previous chapter to illustrate in detail how the spread of ESN within iSource is process of internal diffusion, shaped by historically constructed organisational complexity on one hand and mutually reinforcing rhetorical justifications on the other. The combined actions of these dimensions gradually shaped and unfolded four main ESN infusions that culminated in widespread diffusion.

Firstly, in the aftermath of the CEOs announcement that iSource would completely phase out the use of email in 3 years, senior managers in the scientific community and smart work committee favoured "professional" justifications aimed at encouraging iSourcers to *"work smarter by eradicating email misuse"*. Next, following the introduction and purchase of an ESN solution (orangeESN), community support professionals (CSPs) favored "community" justifications aimed at pragmatically legitimating the appropriation of ESN to help iSource business technologists "openly share expertise and knowledge". Thirdly, following the institution of performance incentives and new features aimed at engaging reluctant consultants and late adopters, no-email champions favoured "market" justifications aimed at pragmatically legitimating the appropriation of ESN by consultants to "find the right information at the right time".

Finally, infrastructure and privacy issues with orangeESN caused a drastic decline in ESN throughout the organisation, just a few months before the 3 year deadline. This provided the impetus for change

managers and local shop floor employees to employ justifications to pragmatically legitimate the appropriation of ESN to "work smarter together" in order to deliver more innovative solution to customers. These justifications generated wider diffusion within iSource, as business technologists, consultants and senior leaders were able to reach a common professional understanding of ESNs use and importance. In this chapter, I will detail the dynamics of each of these infusions to illuminate the enabling and precipitating mechanisms that condition and trigger rhetorical processes of internal IT diffusion.

6.1 Enactment of Community, Market and Professional logics

'Our organisational culture is quite fuzzy, you have lots of latitude to choose, some of our employees have an incredibly regulated user experience and their desktop environments will be identical from desk to desk to desk around the world, and in other areas of our our business you can have a different look and feel from the person sitting next to you. This is our differentiator, it can have advantages and disadvantages but we'll take those because it gives us greater connections to the trends in our industry' (orangeESN CEO)

As this quote suggests, iSource's culture is quite complex and iSourcers operate quite fluidly to balance competing objectives, values and philosophies. In my analysis I found that iSourcers specifically balance the concerns of distinct community, professional and market logics that shape what structures, behaviours and objectives are viewed as legitimate at any given time.

At its core, iSource's "regulation model" still inspires a community logic among iSourcers that is manifested in a common identity and principles, allegiance to the community and oneness of purpose. Some collective responsibilities are formally enacted by iSource's corporate values, code of ethics, or the association of business technologists, and underpin performance assessments within iSource. However, most mutual obligations are unwritten. They rest in community members' shared expectations of appropriate behavior and are enforced by the expected social and professional costs of their contravention: *'if you can't be relied on then you won't be included in the big projects, and you won't get anywhere in the business'* (Database management CIO). As a result, they inform various

aspects of iSourcers' behaviour, from their socializing habits, to their everyday decisions, to their dress. Within these communities however, iSourcers in project teams also subscribe to market and professional logics.

Under a "market" logic, iSourcers operate independently and opportunistically for the purpose of performance review bonuses, work incentives, and revenue generation, and are directly and indirectly accountable to iSource's shareholders. These operating principles tie iSourcers to pursuing the firm's larger interests, such as stellar share price performance, consulting industry reputation and profits. Under a professional logic they operate responsibly and mindfully for the purpose of continuous product and service improvement, personal development, and professional certification, and are accountable to iSource's external clients and partners, and iSource employees. Subscribing to a professional logic commits iSourcers to pursuing the firm's interests, in terms of superior product and service offerings, customer satisfaction, and work practice standards. The coexistence of community, market and professional logics poses conflicting demands, as iSourcers work on projects and make decisions on new ideas as members of the iSource community (iSourcers), and employees in profit seeking and service(product) improvement project teams.

6.1.1 Straddling Different Logics

Under a community logic, iSourcers have a shared identity and legitimize their development and support behaviors by counting on reciprocal commitments. For example, members acknowledge their collective destiny and do not keep expert knowledge on key IT systems to themselves, trusting that their other business colleagues will reciprocate:

> *Work in IT security and most backend departments only gets done effectively when, 'We give and take here [IT security], if I help you with configurations and stuff for your security protocol when you're in jam and it wasn't really my responsibility, I expect that you will do the same when I need it. And most of the time it works out that way' (IT Security Manager)*

However, these community values often clash with behaviors prescribed by market logics, such as when members are expected to help colleagues on projects that do not directly or indirectly benefit them:

> The "working together" values in the regulation model makes sense but ' At the end of the day we target focused because we are cost focused, for example, from the start of the [no-email] programme we have been setting targets, [no- email] in 3 years, 20% reduction in email in the first year, 60% in the second year,- we are a target focused company…so you have to weigh the benefits with the losses when deciding how much to help others. When I have pressing deadlines of my own, I have to say sorry you know "I know you got me out of a jam last month, but I just can't do it". Otherwise I help "John" and I don't meet my targets and that's the bottom line' (Sales Manager)

Community and market logics also clash with professional logics, such as when members are asked to support "off the reservation" projects:

> As much as I like to encourage out of the box projects I always say 'If there's no clear customer or colleague benefit then don't do it… period' (Head of Strategy)

Logics also serve as the grounding for behavioral norms, directing iSourcers strategies and focusing their attention. Under the community logic, iSourcers are guided by principles that afford them personal stature and reinforces the community reputation. For instance, they take pride in their ability to demonstrate a high level of knowledge and technical skill on projects or services (products) that do not necessarily provide quick wins or significant profit. One iSourcer described her coding of database scripts as *'kind of like a pet project' (IT technologist)* to us. Such grounds for action often clash with market logic prescriptions, which are focused on enhancing the company's market status and profitability:

> 'As [iSource] employees we always strive to deliver every single solution, internal or client side in a way that makes optimum use of our resources,... maximizes our return, and generates some new business' (Technology Consultant)

And professional prescriptions, which were geared towards increasing customer satisfaction levels and, the quality of products and services:

> 'Yeah, I think everyone has this impression that consulting is like the book house of lies, but internally you know, we don't ever have a meeting, or any casual conversation in the lunch room or anything… where we don't talk about delivering the best solution for customers…creating better value for customers is our business' (Head of Consulting)

These logics remained consistently salient over the course of ESNs diffusion within iSource, and were particularly demonstrated through homogenous primary themes in different communities of iSourcers' rhetoric. Different themes emerged as more prominent at different times, but were always expressed in service of aligning ESN with the values, aims and means of one or more of these logics.

6.2 ESN Diffusion as Rhetorical Legitimation

'When we explained that it was necessary to use orangeESN in order to do our work better some people said okay yes, but I don't have time for it or I don't have priority for it. And others were eager to be the first who did it because they are always the first or the best at adopting new technology or because they want to win more accounts. So we tried to attract different types of people by explaining it to different groups in a different manner' (Head of Collaboration)

As this quote suggests, the diffusion of ESN within iSource can be conceptualized by not only examining the means and ends of ESN appropriation as institutional logics, but in the interplay of legitimation processes at the linguistic level of rhetoric across ESN infusions across iSource's scientific community, business technologists and consultants. The logic, legitimating rhetoric, central ESN features and key audience of each of these infusions is illustrated in Table 6.1.

Table 6.1 Institutional-Rhetorical legitimation Relationships Across ESN Infusions			
	Community OrangeESN	**Market OrangeESN**	**Professional OrangeESN**
Ideological goals as logics, standards of institutional legitimacy, working practices, norms mediating behaviour	Reinforcing community ties, loyalty, common values Trust and reciprocity among employees Collaborative engagement Common identity and group membership	Profit maximization Number and size of customer accounts Efficiency and control Self-interests, individualism	Improving expertise to fulfill customer needs Customer satisfaction Maximise profit through collaboration and engagement Accountability to customer and wider professional associations
Framing as legitimating accounts	Pathos and logos appeals to exchange, influence and pragmatic legitimacy *Theorization:* "openly share expertise and knowledge"	Pathos and logos appeals to exchange and influence pragmatic legitimacy *Theorization:* "find the right information at the right time" *Frame:* Increased productivity and efficiency	**Email de-legitimation** Primarily logos appeals to exchange pragmatic legitimacy. Underlying pathos appeals to exchange, influence and dispositional pragmatic legitimacy

	Frame: Open collaboration helps to strengthen communal ties	will help to win more accounts	*Theorization:* "work smarter together by eradicating email misuse" *Frame:* Email overload is polluting working environment OrangeESN legitimation Pathos appeals to exchange, influence and dispositional pragmatic legitimacy *Theorization:* "work smarter together by focusing on customer needs" *Frame:* Social media can help to make lives (employees and customers) easier
ESN Ontology	See Table 5.1	See Table 5.1	See Table 5.1
Diffusion	Limited Predominantly Business technologists, senior managers HR, IR Minimal adoption consultants	Limited Predominantly consultants, sales managers, senior managers Reasonable adoption by business technologists	Widespread adoption by business technologists, consultants and senior managers
Audience	Business technologists	Consultant service lines Sales consultants	All communities of iSourcers

In this section I will show how ESN evolved over time, by detailing the role that competing institutional logics (Ideological goals as logics) and rhetorical accounts (justifications) had on the diffusion outcomes and material features (ESN ontology) of different target audiences. On the surface these elements were somewhat indistinguishable since they occurred over a relatively short time period and were entangled in a cumulative web of inter-relations. However, my analysis of the content, structure and sequence of rhetorical justifications over time indicated that these these elements converged around relatively consistent and sequential legitimation phases: (1) Framing ESN rationale (2) Advertising potential value of ESN and (3) Motivating engagement around ESN.

6.3 The Scientific Community Infusion (H1)

6.3.1 Guiding Logics and Target Audience

The general organisational reaction to the CEO's no- email announcement in 2011 was initially of uncertainty about new collaborative technologies, and a proliferation of arguments defending "emailing" as a legitimate and fundamental way of working at iSource. Recalling the general organizational reaction on the day of the announcement, the Head of Change Management explained

> *'The [no-email] announcement caught us completely by surprise, and to be completely honest we wondered if he was serious… we could not imagine working without email. A lot of senior iSourcers were skeptical about [ESN]… was it really a business tool like email or would our shop floor employees just waste time on Facebook all day talking about their weekend and. sharing cat video'*

Typical arguments at the time were mostly unsupported claims, loosely grounded in different logics, which made the case that the practice of emailing was indispensable (claim) since it enabled them to communicate with colleagues and clients, and work effectively (warrant):

> *Responses to 2010 survey question asking, 'Why is email important to your work?'*
>
> **"Community" Response**: *'I use email for everything, … I wouldn't be able to keep in touch with colleagues without it '(int)*
>
> **"Professional" 2:**'*We can't get rid of any email, it's my life'(Int)*
>
> **"Market" Response** *3: 'Email is the main way that I assign, co-ordinate and check progress on activities in my team… I don't know how we would get anything done without it'(Int)*
>
> **Response 4:** *'Email is an institution. It has been here forever, it's a good tool '(Int)*

Email was so institutionalized across all iSource groups that the scientific community (SC) decided that they would need to construct a compelling and robust rationale in order to convince iSourcers to change their email practices. In this regard, from the time the scientific community was formed in 2008. their rationale for replacing email with ESN technology was driven by professional logic principles of continuous product and service improvement and being accountable to external clients and partners, and iSource employees. The quote below from iSource's Head of Innovation was typical of their rhetoric prior to the formal announcement of the no-email programme:

Our research showed that social networking was at the heart of our mid-term business strategy so 'We looked at the codification of social relationships beyond just a medium of communication yeah....and we looked at social graphing and we looked at social networking, and how to market social networking and how, different businesses could benefit from all of these new ideas. And from that investigation we came to the conclusion that email was pretty much a dead form of communication... it is fundamentally flawed.'

The aims and means of the professional logic remained salient to the members of this community throughout their tenure as no-email project leads (global change management team), and bounded their engagement strategies, prioritization of material features and assumptions of appropriate behaviours around ESN appropriation. Along these "professional" lines, members explained that reducing email overload was strategically necessary for enhancing iSource's competitiveness and long term survival ("professional" backing and warrant). These "professional" claims consistently made reference to the first whitepaper and even used similar language, such as explaining that *'employees in larger companies are struggling to deal with higher volumes of email'* (first whitepaper), that had negative consequences for *'all iSourcers, regardless of whether they were consultants, technologists, senior managers and even partners and customers'* (Head of Cyber Security*).*

To justify their "professional" email overload claims, SC members employed *inter-field* syllogisms (arguments with warrant, data and claims) aimed at pragmatic legitimacy. These justifications consistently and effectively employed an ordered sequence of primarily logos, and underlying pathos appeals to explain no-email's rationale, advertise its value and motivate engagement around alternative ESN-driven.

6.3.2 Rhetorical Justifications

Rational Framing for No-Email

Members reported that they frequently explained that no-email would ensure competitiveness and survival by enabling iSourcers to collaboratively create more value for their colleagues, partners and customers, alike ("professional" claims). They supported these claims with logos appeals to pragmatic legitimacy, which highlighted that reduced email use would enable more effective collaboration,

productivity and customer satisfaction (exchange legitimacy). They also appealed made underlying pathos appeals to iSourcers' desire to enhance their work satisfaction. This is illustrated in a 2011 radio interview where one of iSource's COOs explained the no-email vision by stating:

> *'Our vision with no-email is to move forward as a real tier one player by developing new leadership behaviours, new coaching, more collaboration. With more effective collaboration, we will have better quality for our customers, more, value creation in our proposals, so more growth, more satisfaction- more satisfaction for the customers, more satisfaction for us as employees' (COO, Radio4 Interview, 2011)*

In the language of the first whitepaper, SC members reported that they consistently explained that 'email overload was a consequence of undesirable email practices' (email misuse) and 'a general pattern of employee indifference to these consequences' (first whitepaper), rather than the email technology itself (claim). They primarily employed logos appeals to articulate that common antecedents of email overload, such as using email for "chat" were taking away from the time available to address work related tasks (exchange legitimacy). iSource's consulting VP illustrates these justifications to explain the business case for no-email in a 2011 blog post:

> *'Of course it's not the software but the user that is the problem, and there is no question that bad habits are a big contributor to email overload. Opened up first thing in the morning, it can be a constant distraction, with the urge to check and respond to messages preventing us from concentrating on more important '(Consulting VP, 2011)*

Similar justifications explaining that iSourcers needed to "work smarter" or radically change their behaviors in order to reduce email overload, employed primarily pathos appeals to pragmatic legitimacy on the basis of iSourcers' "personal responsibility" in causing email overload (influence legitimacy). This was clearly evident in the following quote from orangeESN's CEO, as he explained why iSource's no-email initiative was also a behavioral transformation effort:

> *'Our business plans say that we are primarily technology experts, so it's not good enough to be a victim of the technology, it's not good enough to say that the technology itself is the problem you know. A bad worker blames their tools... This is really about attitudes and values, email can be useful, the problem is that email evolved into something that is misused, which is something that hurts the company, could only be addressed by radically shocking our culture' (orangeESN's CEO)*

In many cases these pathos appeals to "personal responsibility" for causing email overload were blended with logos appeals to reinforce appeals on the basis of how email misuse was driving inefficient

and ineffective work practices (exchange legitimacy). iSource's chief psychologist illustrates these justifications as he explained the business case for no-email in a 2011 blog post:

> *'We now use emails as chat to avoid calling our colleagues on the phone or just walking on the shop floor to discuss with them. So there is something in the area of human interaction, by comfort, by habit whatever is the reason we transferred some of the communications that should really be interpersonal and synchronous into this more or less synchronous [asynchronous] environment… So really it is hurting the company, that we are not delivering as good as we can, and as uh, as good management, as good leadership, coaching as we should. So, Naturally, it's up to us to get involved in solving email overload'* (Chief Psychologist, 2010)

Senior managers started to use these inter-field syllogisms and pragmatic appeals to explain the business case for no-email immediately following their 2009 "future strategy" research report. They continued to justify no-email as necessary for iSource's long term survival and competiveness whenever they discussed the email overload business case in meetings, presentations, publications and interviews throughout the duration of my research (through to late 2013). In the next phase of justifications, SC members would highlight what reduced email misuse (and its negative consequences) meant for day-today work, and how it could enhance iSource's long term survival and competitiveness.

Advertising Potential Value of "No-Email"

Shortly after constructing the rationale for no-email, SC members reported that they invested a great deal of time and effort to highlight the "professional" (iSource's long term survival and competitiveness) value of reducing email misuse. These inter-field justifications were "professionally" focused on highlighting that reducing overload would enhance the quality and value of products and services for consultants, technologists, partners and customers alike. Members frequently used these arguments to highlight that email misuse was undesirable because it eroded employee productivity and job satisfaction (claim). They supported this claim by collecting data on the negative consequences of email use. For the scientific community *'while [iSourcers] indifferent attitude to email misuse was an impediment, it was also an opportunity'(Head of Change Management)*. The SC team's decision to invite 'respected' academic and practitioner researchers to survey iSourcers' email usage patterns

(second whitepaper), proved to be a clever and effective way to support their justifications, since iSourcers' indifferent attitude led them to make unsupported arguments in defense of email.

Their justifications employed logos and pathos rhetoric that emphasized pragmatic legitimacy. An email circulated to all iSourcers in 2012 demonstrates how their arguments blended logos appeals for time saving (*exchange legitimacy)* with underlying pathos appeals, conveying that email use was "not in their best interests" (dispositional legitimacy):

> *Our survey shows '... on average we receive 70 emails per day, ... about 56% of respondents spent more than 2 hours of their work time dealing with emails, more than 2 hours! These are raw facts. We also asked respondents, "how do you feel about this? Is it normal or is it hurting you?" And the answer, 80% said we are wasting time with email, we have better things to do and we should be doing our job as engineers, as project managers, as team leaders, more efficiently. This is not the best way to use our time... 80% of your colleagues are victims of their email. This really means that there is a problem' (Smart work committee, email, 2012)*

Similarly, SC members consistently referenced their qualitative survey data to highlight that emailing was not fit for the purpose of career focused knowledge workers who valued more engaging and meaningful work. These justifications used similar logos appeals and the surface and underlying pathos appeals:

> *Our own research and comScore data shows us that 'young millennials and knowledge workers prioritize career opportunities that allow for learning and development. They also want to do meaningful work. There's little more dispiriting than knowing you're wasting your talent and your company's time on low-value tasks, or getting to the end of a productive day, only to be greeted by a bulging inbox.' (Consulting VP)*

SC members also used similar rhetorical appeals to convince well connected and respected employees such as leaders and influencers, of the value of no-email. They reported that their aim was to highlight that email misuse was encouraging poor leadership behaviours, which were consequently affecting the quality of services and products, and iSourcers' wellbeing:

> *'Email hurts us because, indeed this is helping poor leadership, poor management. Leading behind email is pushing very bad attitudes, attitudes like you send an email to cover your ass and, do as if something has moved on the subject, but in fact sending an email doesn't move the subject, it just moves a few electrons. This is leading to poor leadership behaviors, poor coaching, poor collaboration, and ultimately poor quality of service and products. That is what hurts the company' (Head of Consulting Architecture)*

These pragmatic inter-field justifications were most prevalent in the period immediately following the draft of the second no-email whitepaper in early 2011. SC members continued to use similar arguments to highlight the possible benefits of the no-email initiative in their internal and external presentations, meetings and interviews throughout my research period. In the next stage of justifications, SC members turned their attention to illustrating how iSourcers could use alternative technology and behaviours to reap some of the benefits highlighted in this stage.

Motivating Engagement around "No-Email" Solutions

Shortly after the formal announcement of no-email I observed an important shift away from SC members explaining the value of eliminating undesirable email practices to encouraging iSourcers to make the first steps to actually changing their behaviour. These justifications were consistently grounded in "professional" concerns, supported by scientific data, and primarily focused on encouraging iSourcers to just try alternative email practices and later, alternative technology, without any prolonged commitment.

In order to motivate iSourcers to eliminate the undesirable practices that created email overload, the scientific community developed and communicated "smart-inbox" guidelines on how iSourcers could manage their inbox more effectively.

They highlighted that smart-inbox was based on Wotzlawick's industry leading change management framework, and was specifically an attempt at first order change aimed at motivating iSourcers *'to start changing now and practice the new, desired attitude internally with [their] colleagues'* (third whitepaper). They also cleverly and consistently made primarily logos and underlying pathos appeals to pragmatic exchange legitimacy by explaining the guidelines as "behavioral principles" for using email more effectively to "get things done" (efficiency claim) and relieve stress (emotional claim). For example, when iSourcers googled "getting things done" and "email" (as instructed in third whitepaper),

the top hits linked to blog posts where SC members graphically illustrated smart-inbox techniques and

its positive results:

> *To become more effective using email- set a zero email ambition to declutter your inbox. Pick up the phone*
> *or go and talk to colleagues. Switch off the new email alert and set allocated times in your diary to look*
> *at email … 'As a result of actions taken time spent on email dropped significantly and thereby gaining a*
> *few extra hours a week, but more importantly my inbox was not out-of-control anymore and delivering a*
> *great peace of mind. Maybe the GTD system will also work in your situation, maybe you already*
> *implemented another system to make you more effective.'(Scientific community member Blog post, 2011)*

SC members used similar justifications to illustrate how they used ESN mashups of Yammer social

networking, mindmeiester mindmapper, and confluence wiki, to seamlessly and effectively brainstorm,

organise and visualize ideas for creating a requirements document for an ESN solution. These

arguments employed logos and pathos appeals to pragmatic exchange legitimacy based on time savings

and innovation outcomes (exchange), and emotional need for "recognition" respectively (exchange).

This is illustrated in the third whitepaper as follows:

> *To reduce email overlook experiment with a social business network like [jiveESN] to generate creativity*
> *and innovation… 'With these tools the team was able to complete the task without email or formal face-*
> *to-face meetings, involve more people in the process, and deliver the end product in less time that would*
> *normally be required… the requirements document [was] finished in 2.5 weeks and included input and*
> *assistance from more than sixty people. [The steering committee] were impressed by the speed and quality*
> *of the result, as well as the lengthy list of contributors, resulting in an unanimous positive decision and a*
> *go for the next phase in the project.' (Third whitepaper, 2012)*

Members indicated that one of the most important actions emerging from the third whitepaper and the

ESN requirements document were the jiveESN pilots with 2000 iSourcers from different departments

around the world for 3 months. These pilots helped them to understand and document (ESN manual)

how to best create value in ESN, and generated disproportionate number of success stories among

business technologists. However, in the spirit of their "professional" focus they prioritized the

communication of customer facing success stories over business technologist-centric success stories.

These arguments primarily employed logos appeals to exchange pragmatic legitimacy by

communicating the efficiency benefits to services and products offerings. Logos appeals were often

blended with underlying emotional (pathos) appeals to iSourcers' desire for "satisfaction" and

reassurance that they can use ESN to do their everyday work (exchange). The following quote by the

Head of Change Management uses Heath and Heath's (2010) "elephant and rider" metaphor to demonstrate how these success stories were used at this time:

> *'So we could speak to the elephant and say hey Mr. elephant you are really a pro on service delivery, yes cool, we know that you want to do it good, and you know how to do it good. But I can tell you that one of our outsourcing customers wrote to us to say that they were much more satisfied with our services while we used the community to work internally. By sharing in the community the problem and the workaround with everyone around the world we were able to minimize the disruptions. And of course when we tell that to the elephant he is very happy, he is proud, he is keen to do the transformation. He is not keen to do the trans because the use case blah blah blah, does this and that. He is moved by the fact that he is even better and his customer is telling him he is doing a good job.'*

These pragmatic justifications became more prevalent in mid 2011, following the formal release of the three no-email whitepapers. Justifications were primarily focused on building and assessing iSourcers' desire to support and participate in future no-email change initiatives. Throughout my research period, SC members mobilized these arguments with the intention of encouraging iSourcers to begin experimenting with new tools and behaviours in service of the no-email business case and benefits. However, these justifications became significantly less prevalent from late 2013 to 2014, as change managers shifted their justifications to encouraging more customer-focused ESN appropriation.

6.3.3 Diffusion Outcomes

To summarize, the primary objectives of this infusion were to build and assess iSourcers' awareness of the need for moving away from iSource's email driven culture, and their desire to support and participate in future change initiatives. These objectives were achieved through consistent and concerted logos appeals and underlying pathos appeals over three legitimation phases.

"Rationale framing" justifications were intended to ensure that all iSourcers knew that email overload was a deeply ingrained behavioral problem that was affecting efficiency and job satisfaction. They also wanted to convey that "working smarter" required the eradication of undesirable email practices. This rationale was central to the mobilization of justifications to advertise no-email's value and motivate engagement around no-email solutions. "Value Advertising" justifications were intended to ignite

interest for eliminating undesirable email practices in order to enhance the wellbeing, productivity and quality of products and services for knowledge works and potential leaders. "Motivating engagement" justifications were aimed at convincing iSourcers that alternative tools and behaviours could help them eradicate undesirable email practices and work smarter to enhance their job satisfaction, collaboration, productivity and leadership skills. Over time, the justifications over these phases fostered meaning making around the commonly communicated theme of "eliminating undesirable email practices".

For iSourcers, this theme was an internally constructed and locally focused internal theorization for de-legitimating email. This theorization and the justifications around it, were importantly shaped by the ability of SC members to recognize and exploit opportunities in the institutionalized arguments that iSourcers used to defend the use of email. Specifically, SC members exploited email proponents' tendency to employ unsupported justifications to defend email, when they decided to support their arguments with internal and external data on email misuse. This research revealed that email misuse was negatively affecting collaboration, productivity, job satisfaction and leadership skills in iSource, and was thus, the primary driver for their "professional" focus and target audience. In this vein, SC members decision to enlist the help of academic researchers, and internal leaders, and young millennials helped to make their arguments more credible or legitimate with iSourcers.

While these email de-legitimation justifications were met with some resistance, they were relatively effective at gradually disembedding iSourcers from their institutionalized email practices. Responses to a survey conducted in 2012 demonstrated this shift away from institutionalized email practices:

> *Responses to 2012 survey question asking, What role do you think email should play in your work?*
>
> **Response**: *'We shouldn't be using email internally at all, we should just use it to communicate with clients and partners'(int)*
>
> **Response 2:***'It's clear that email is polluting our working environment, it's a beast that needs to be tamed. We as [iSourcers] need to mindful about the purpose of each email we send, we should only send email when we absolutely need to'(Int)*
>
> **Response** *3: 'We can't completely stop using email, it still has a purpose. But as a technology company we need to reduce the noise that comes with email, the email overload. We need to get away from the*

behavior where we sent email and think that the recipient takes action based on receiving that. Social tools can help a great deal here, and then we can see how email fits in' (Int)

The survey responses indicated that iSourcers had some understanding of the value of changing their practices, and were beginning to envision alternative ways of working smarter around the theme of "eradicating undesirable ("unprofessional") email practices". The ethos of this intra-organisational theorization remained salient throughout the no-email journey. It was specifically used to promote "professional engagement" from business technologists and consultants when orangeESN was eventually rolled out.

6.4 Business Technologists Infusion ("H2")

6.4.1 Guiding Logics and Target Audience

Prior to the launch of orangeESN towards the end of 2011, the change team (SC members, GBU managers and ambassadors) decided to focus their attention on driving engagement among business technologists. Business technologists had recently become the largest demographic of iSource employees (after merger), and were the earliest and most successful adopters of ESN communities during the pilots. Their goal was to use orangeESN to support the organisational activities underway to integrate new technologists into the company, and in doing so, ensuring iSource's medium term business strategy of integrating cutting edge technology. The team did however express concern that orangeESN's currently limited functionality (only meeting 27 of 50 ESN requirements) would likely engender an undesirably slow and capricious viral engagement process that was not aligned with their "professional" aims. As such, they employed persuasive appeals to firstly onboard "well connected", senior technologists with expertise in social media and collaboration, into the steering team as community support professionals (CSPs). Potential candidates from each country were all trained and encouraged to experiment with "professional" ESN ontologies in order to develop GBU specific

strategies for onboarding and sustaining "professional" engagement from their front- line colleagues with orangeESN communities.

Change team members made the case for ESN by employing intra-field syllogisms (building on "H1" professional justifications) that were "professionally" focused on carefully positioning ESN as an important "people" project for enhancing the quality and value of products and services for consultants, technologists, partners and customers alike (professional backing and warrant). Change managers also made concerted efforts to frame "professional" justifications around the idea of "survival" in an apparent effort to appeal to business technologists. In line with this, The Head of Knowledge Management explained that:

> *'The transformation to providing better quality products and services relies on leaders and managers, top managers, intermediate managers, and first level managers, they need to become coaches for their team members. We are completely aware that we are a people company, our asset is our people and what develops our people is our managers, so we need to develop our managers in order to survive in the long term.'*

However, business technologists work in developing IT solutions, and supporting consultants, and internal and customer facing IT systems, followed community values, aims. Most technologists viewed ESN as a natural complement or even a replacement for the internal forums, shared drives, and weekly meetings that they had always used to collaborate and share knowledge. A minority community of particularly French-based technologists did express concern that ESN's unstructured and open ethos would lead to increased micro-management and employee dissatisfaction:

> *"Yes on one hand you may have a bit more sharing with ESN on the shop floor, but at what cost? ... Maybe unhappier employees... You could have a situation where there is more blurring between home and work life than with email. I think people in general check their social media more than email you know, so managers will expect iSourcers to be always available, and know when they are online or not. " (Database Developer)*

The majority of technologists did however justify ESN appropriation as necessary to enhance iSource's social order by helping all iSourcers to "stay in touch and share expert knowledge with technologist colleagues" without the fear of being sanctioned for wasting time. They also frequently expressed their feeling that social tools with open and unstructured architectures were somewhat well suited to their

culture and way of working. The CSPs that helped to generate early ESN engagement would express these views when they discussed the role of orangeESN:

> *My interpretation of zero email is that 'it is all about improving collaboration in the business, getting rid of the noise that comes with email overload, have people communicating more, and also having better visibility of information that would be useful to them in their day to day jobs. Now on the wider scale of iSource, just in the UK we've got about [more than 50] offices give or take, we have a large number of distributed employees. So when we work, it's usually in remote teams, so we're not always in the same place, we rely more on technology to improve collaboration, it is paramount, you know. You can't just get out of your chair, get in your car and drive a hundred miles down the road to see somebody you know. And that's where our communications tools, forums, messengers, yammer helped us a great deal. And that's were orangeESN fits in' (Cyber Delivery manager, CSP)*

As a result, the predominantly "community" embedded CSP members employed inter-field justifications (challenging professional logics) that were still responsive to "professional" objectives, but aimed at positioning orangeESN as imperative for nurturing a more collaborative "digital first" culture where employees would not be sanctioned for "over collaborating" (community backing and warrant). Both change and CSP team members consistently employed an ordered sequence of primarily pathos, and underlying logos appeals to explain orangeESN's rationale, advertise its value and motivate engagement around specific ESN features.

6.4.2 Rhetorical Justifications

Rationale framing for orangeESN

Change team members carefully referenced the "working smarter" metaphor from the previous infusion to highlight that iSourcers, particularly those recent arrivals from the merger, would ensure their job security (intra-field professional claim) if they used ESN to enhance their productivity, collaboration, satisfaction, and actively reduce their email misuse. The primary type of rhetorical appeal employed in these argument was a pathos appeal to pragmatic legitimacy based on iSourcers desire to enhance their collaboration and leadership skill in order to remain a part of iSource ("survival"). The following shows how a change manager (Knowledge Management Director) used this rhetoric in their justifications:

When we spoke with technologist we explained that 'making the investment in enterprise social tools and transforming our behaviours was imperative to our long term survival, and to operating without downsizing or outsourcing some departments. Our research indicated that outsourcing and downsizing is the trend now in large IT firms, and that we absolutely needed to dramatically enhance the way we lead, and collaborate to solve business problems in the near to long term'

Change managers also explained that using ESN would allow technologists to enhance the quality of iSource's products and services for their colleagues, partners and customers. These justifications primarily employed emotional (pathos) appeals to CSPs desire to be empowered to help lead the drive towards the strategic no-email target, as demonstrated in the words of the [orangeESN] CEO:

'It was also imperative to reaching no-email, that leaders get involved in this change because the change is about human behaviours, and our leaders played a big part in coordinating and shaping the behaviours of other colleagues around the [jiveESN pilots]… As part of the steering team we would provide some guidelines on what to do and how to do it, but it was really left to them to experiment with the tool and see its benefits, and then devise and drive engagement from their reports in their GBUs. And we had a tremendous response!'

Contrastingly, CSPs reported that they carefully referenced research reports on industry trends towards using more consumer driven technologies like social tools, to explain that orangeESN would help technologists to connect and collaborate openly with each other ,without the fear of sanctions (community claim). Members reported that they expected that technologists would relate to the open and unstructured ethos of the web 2.0 architecture since it fit the way that technologists worked. Their arguments therefore employed primarily pathos appeals to pragmatic legitimacy based on technologists' desire to "belong" to a community and for job satisfaction that comes with collaborating without the threat of sanctions (exchange legitimacy). These justifications proved to be very effective at the time, as demonstrated in the following quote from a CSP technologist:

We generated a great deal of intrinsic motivation because 'You know they bring in these tools and they say you can use it to share anything you want, but when you do, you're punished. I think that's the corporate culture in which we work today. The idea with enterprise social networking is to move beyond this way of working using social tools to help us stay in touch and share knowledge in our departments in a more open way, and there's no consequence of being punished. So employees can experiment with these social tools to find a pattern of work that gives them more satisfaction and helps them to produce their best work… People need to have that feeling of community and ESN is the focal point for that feeling of community…' (Knowledge Management Manager)

Change team members initiated their respective advocacy for professional and community oriented ESN business cases, during the jiveESN pilots in the second quarter of 2011. While the change team would go on to shift the grounding of their justifications, CSPs continued to employ similar orangeESN justifications in their formal and informal communications throughout my research period, but with much less frequency towards the end of 2013. Change managers and CSPs used the next legitimation phase to highlight what the open sharing of expertise and knowledge meant for iSourcers' day-to-day activities, and how using orangeESN in this way would ensure their job security and iSource's survival. Change managers particularly used this advertising stage to speak directly to CSPs needs in order to onboard them onto the steering team.

Advertising potential value of orangeESN

Change managers reported that they frequently used survey data and success stories from the jiveESN pilots and their own ESN experiences (data) to explain to CSFs and technologists that business technologists who use orangeESN communities could collaborate and innovate more effectively to solve business problems (intra-field professional claim). The primary rhetorical appeal employed was a logos appeal to pragmatic legitimacy based on CSPs and technologists need for more effective collaboration and innovation (exchange legitimacy). The following quote from a change manager with responsibility for communication and collaboration demonstrates these rhetorical elements in his description of orangeESN's role at iSource at the time:

> *With the jiveESN outsourcing pilot we saw that the social network enabled more effective innovation through better collaboration since 'people would go to the community and ask questions about some business issue, whether it was hey, I'm having some issues with some internal system or company policy, or does anyone know how I can tweak this system to align more with what this customer needs. And the idea is that because everyone is part of it you might go on and see something that you can answer, and you go on and answer it and self-regulate that way, and people will chip in and out when they know something, when they see fit' (Blog Post, Communication and Collaboration leader)*

Change managers also made more direct appeals to CSPs by highlighting that leading orangeESN engagement by example would help them to become more effective leaders. They did this by blending

underlying logos appeals with surface pathos appeals, on the basis of CSPs desire to be recognized for their leadership expertise, and desire to be "empowered" to help lead a business critical initiative. In an interview response regarding the actions taken to convince CSPs, a change manager (knowledge manager) explained the following:

> *'we highlighted that the days of the manager managing from behind a screen are numbered because they need to be more responsive, and foster autonomous decision making. Without the involvement and support from departmental managers and team leaders we won't be able to build on the positives we saw with the Yammer watercooler space. The leaders that do participate will see like we did, that orangeESN will help them to develop better reputations as manager coaches, who collaborate much more effectively and empower their team members to make informed decisions regardless of their position in the organisational chart. This kind of decision making is what will lead to more innovation and creativity, and keep us at the top of the IT sector' (Knowledge Manager)*

On the other hand, CSPs continued to co-mingle community and professional concerns as they consistently explained to technologists that using orangeESN communities like an office "watercooler" would increase the intensity of knowledge sharing and thus, the possibility for innovation within their departments and teams (professional-community claim). They consistently supported these claims by highlighting the scientific community's yammer ideation. These justifications also employed primarily logos appeals to pragmatic legitimacy based on iSourcers' need to increase the intensity of knowledge sharing and innovation. They also made underlying emotional appeals to iSourcers' desire for job satisfaction (exchange) and empowerment (influence legitimacy) that came with having the freedom to use orangeESN in any way, without the fear of sanctions. The excerpt below from a CSF's blog post at the time demonstrates the rhetorical arguments that they used to explain orangeESN's value:

> *'With enterprise social networking platforms like [orangeESN], virtual meetings, chat and document sharing tools, businesses are set to transform how they communicate and work across previously siloed departments and virtual teams. It's these social networks and communications platforms which hold the key to unlocking our true potential – enabling us to share knowledge widely, find the right experts both internally and externally… Like the scientific community demonstrated with their Yammer mashup, [orangeESN] communities is about empowering and connecting people, offering them a platform that allows them to effectively discuss anything at any time without the fear of sanctions' (CTO blog post, 2012)*

Change managers and CSPs initially started to employ distinct professional and professional-community arguments to explain orangeESN's value after the scientific community decided to rollout orangeESN instead of jiveESN in the third quarter of 2011. Again, CSP justifications remained

somewhat opposed to change managers purely professional objectives, and strongly grounded in professional-community logics until the last quarter of 2013. Over time, CSPs justifications had the unintended consequence of also convincing change managers to support the appropriation of orangeESN in line with professional-community interests. Change managers also managed to successfully recruit about 100 champions in 1 month. With this, they decided to prioritize orangeESN rollout in departments where CSP support was strong in order to benefit from higher levels of guidance and support for their justifications.

Motivating engagement around orangeESN

After orangeESN rollout, managers gradually shifted their justifications away from encouraging iSourcers to try incrementally different practices (e.g. smart inbox) and explaining the potential value of orangeESN, to encouraging iSourcers to actually begin using this radically different technology as their main collaboration tool. Change managers justifications also shifted to promoting co-mingled professional-community interests.

They promoted "community" interests when they used the scientific community's use of Yammer to brainstorm, organise and co-create requirements for the ESN platform, as an example of how CSFs could use orangeESN to curate and share "digital first" practices (orangeESN best practices) and "lighthouse communities" (orangeESN community success stories) from around the organisation (Appendix B2). They also supported these claims with pathos appeals to pragmatic legitimacy, concerning being empowered to lead a strategic business initiative. The Head of Marketing illustrates this rhetorical argument structure in his reflection on the steps that change managers employed to initiate orangeESN growth:

> *We explained to CSFs that an orangeESN community was 'sort of like a garden, and actually we have a very large garden, so we want them to just concentrate on the pieces of the garden where the flowers are flourishing and the fruit is very healthy to see what is going on there, and we have then to even more improve, and then cascade it down by bringing information to community leaders and managers, and hopefully some of them will learn and improve their approaches'*

Change managers also promoted "professional" interests when they explained that iSourcers were more likely to reap benefits from communities and reduce email misuse, if CSPs supported them by providing training and guidance (e.g. community must have a clear purpose) (professional claim). They supported this claim with evidence from the jiveESN pilots and change managers own experiences with ESN. Their justifications also employed blended pathos appeals to CSFs desire to be empowered to lead a strategic business initiative, and logos appeals to CSFs need to increase the intensity of knowledge sharing, creativity and innovation within their individual GBUs. For example, the Head Change Manager explained that the scientific community's ideation network was successful because it had the specific purpose generating ideas for reducing email:

> *One focus for us when onboarding CSPS was to show them that communities needed a purpose in order to be effective 'Over the period of the pilot we found that the spaces that were popular were areas that had a specific use case, or purpose, in achieving a goal- like our scientific community where we invited [iSourcers] to give us ideas on how to reduce email misuse. So what I mean by that is if the goal was to have an area to talk about a particular issue or project or provide an information on a particular initiative, that worked well. As opposed to just creating a space for a department or a team, because it's a department, that didn't work. So, we said to them that they would be the ones approving all requests for spaces within the GBU, so they could take the first steps to ensuring the users collaborate well and generate new ideas by helping to refine and focus the purpose statements'*

In line with change managers' intentions, CSPs created their own orangeESN community (the CSP network) to experiment and share ideas and best practices on better ways to drive engagement with other iSourcers. Over time, this CSP network became the main CSP onboarding medium as CSPs invited other senior managers who were interested in orangeESN communities and success stories. By mid 2012, the CSP network grew to about 300 members around the world. These new CSPs "community"-focused intra-field arguments were primarily aimed at justifying a departmental engagement approach.

CSPs used their own success with the CSP network as well as "lighthouse communities" from the jiveESN pilots to illustrate that iSourcers could enhance their collaboration, innovation and job satisfaction when they created as many open communities as possible, to collaborate and share information within their teams, functions and departments. These explanations primarily employed

pathos appeals to pragmatic legitimacy based on iSourcers' desire to "belong" of the iSource community, and for empowerment (influence legitimacy) and job satisfaction (exchange legitimacy) as a result of being able to use orangeESN communities in any way, without fear of sanctions. The following quote from a poster created by CSPs to spread awareness of their departmental community approach illustrates these rhetorical elements:

> *'Departmental spaces are for most of the collaboration, where all people working on a project or whose expertize can create value are required /invited to collaborate. – it is up to the managers to create these collaborative environments and grow these collaborative environments by inviting their colleagues. It's your responsibility to lead by example... Who wants to be isolated in the old ways of working while others around them benefit from the new ways of working, sharing openly and creating more value. There will be new emulation in teams, each of us will collect (sic) a better reputation as a manager. Walking away from our old ways of working and collaborating more with colleagues will add towards a better work life balance, with fun and team work. Visit our CSP network to see how we did it.' (Training Document, 2012)*

Within departmental communities, CSPs created a social ideation page for iSourcers to openly share ideas that could be of benefit to other members of the community. They explained that sharing openly in these communities could deliver mutual work benefits. They further justified this claim by employing logos appeals to suggest that "open sharing" itself was a positive outcome to pursue because of its mutual benefits. This is clearly illustrated in the purpose statement displayed on the Social Ideation Page:

> *'Feel free to ask questions, post ideas and/or share your specific knowledge which could be of benefit to all members of your network'*

CSPs also used training opportunities to promote the professional objectives of reducing email misuse and creating communities with a clear purpose. They specifically illustrated that departmental leaders who had high levels of training and active participation, were more likely to reap benefits from departmental communities (professional claim). They supported these claims with a practical two-page community training guide (Appendix B1) based on jiveESN's "lighthouse community" best practices and their own experiences, that simply illustrated how managers and team leaders could create and grow communities with a purpose. The Deal Solutions Manager explained that:

> *'This two-pager identified three benefits of using ESN tools for key job roles and outlined 5 or 10 things that iSourcers in each job role should do in the first weeks of being part of a community.'*

The justifications around this initiative primarily employed logos appeals to pragmatic legitimacy based on iSourcers to improve the intensity of knowledge sharing and innovation gains (exchange legitimacy). They also employed emotional appeals to iSourcers desire to be empowered to lead a strategic business initiative. The following excerpt from the 2- page training manual demonstrates how CSFs integrated community and professional aims and means in the justifications that they used to train departmental managers and team leaders:

> *'After creating the departmental community, it is up to managers and leaders to transform them into beneficial collaborative environments by engaging contributors to collaborate in the community and driving innovation and results from the community activities. As a community leader you will perform a lot of your usual communication and sharing via the space… Managers may become effective community leaders by inviting their team members and main contacts, publishing that you have created the community to surrounding spaces and to your network. Post it also in the watercooler with a description of the purpose. You can start publishing content by posting links to reference documents, posting key previous emails, creating reference pages for milestones, dashboards with targets, and who does what… Saying "Good job" or "Thank you" or "Let's improve this" in [the] space is effective.' (Collaboration Training Presentation, 2012)*

Similar "professional-community" grounded arguments were evident in the purpose statement of the community that CSFs later created to invite iSourcers to contribute their own success stories and testimonials. In this purpose statement, CSFs advised iSourcers to structure their success stories in a way that simultaneously reinforced logos appeals to iSourcers' need for enhanced collaboration and innovation gains, and emotional (pathos) appeals, concerning their desire for job satisfaction and "belonging":

> *'Welcome! You can post here all your Success stories about Social collaboration. If, you're just here to have a look, take time to find one which will inspire you for your future ways of working as a manager, or as part of a team, to fuel collaboration and ["smart working"]. Please use the template to post your success story, try to quantify all business benefits- customer success, employee connectedness (to the company, to colleagues...' (Success Stories Community)*

CSPs also led by example by creating communities for key teams within their GBUs in order to demonstrate to managers how they could go about creating and nurturing communities in line with professional-community objectives. They chose teams that were, large in order to drive awareness and engagement to a larger audience; and flexible in order to change their workflows around the

community. They were then able to generate initial engagement from team members and demonstrate collaboration benefits by communicating that the community was the platform for keeping up to date with on-going and future workflow changes and collaborating with like-minded colleagues to improve the process. These justifications employed logos appeals to iSourcers need for more streamlined workflows (exchange), and their need to increase the intensity of knowledge sharing. Their appeals also employed underlying emotional appeals to their desire to have a say in their workflow changes (influence). A database manager illustrates these justifications in his description of how CSPs created these team communities, using the example of the DB architect community:

> *In order to drive engagement at the beginning we tried to communicate any changes in process or when we updated our processes, For example' we have frameworks that DB architects work within, so an architect needs to understand a customer's requirements, so they need to take them and catalogue them and come up with a solution for them and then a design, and then get the design approved and technically assured by the business and then send it through to the customer… When we originally set up the community for the architects we were changing the way that they did that and improving that. So that became a communications mechanism. We announced to everyone that this was the space where they could find out what stage we were at, where the documents are, where the templates are, you know, and leave your feedback on the processes. So we got feedback from anybody who's using that process back into the community so sharing it with not just the other architects but the people that were designing the process in the first place to get that fed back into any improvements.'(Database manager)*

After orangeESN was rolled out in the last quarter of 2011, both change managers and CSPs employed professional-community justifications in their blog posts, training manuals and interviews. While change managers justifications shifted in 2012, CSPs continued to use similar professional-community justifications until late 2013.

6.4.3 Diffusion Outcomes

The primary objectives of this infusion was to make iSourcers aware of the need to adopt and engage with orangeESN, and build their desire to actively participate in orangeESN communities, as a way to support iSource's larger behavioural transformation efforts and "community" objectives. Unlike the previous infusion, change managers and CSPs pursued these objectives with more focus on concerted pathos appeals appeals, but also employed underlying logos appeals over three legitimation phases.

In "rationale framing" and "advertising value", change managers and CSPs contested professional and community interests. However, the gradual intra-field to inter-field shift in change managers justifications indicated that CSPs professional-community interests were gaining legitimacy over purely "professional" justifications, and thus, had more overall impact over the three phases. Along these "professional-community" lines, CSPs intention in "rationale framing" was to conveyed that collaboration for the benefit of job security (and business survival) meant appropriating ESN to openly share expertise and knowledge. Similarly focused justifications in "advertising value" were intended to highlight the value of "openly sharing expertise and knowledge", and simultaneously, build interest for appropriating orangeESN to increase the intensity of knowledge sharing and innovation. These justifications gradually fostered meaning making around the common theme of using orangeESN to "openly share expertise and knowledge", particularly within the business technologist community.

This theorization and related justifications were importantly shaped by the ability of CSPs to recognize and exploit opportunities to build on the professional justifications of change managers and the previous email de-legitimation infusion. CSPs specifically recognized the opportunity to build on the professional objectives of enhancing collaboration, innovation and job satisfaction for iSourcers, partners and customers, to instead promote more community oriented objectives of increasing the intensity of knowledge sharing, innovation and job satisfaction within iSource's departments and teams. A consequence of building on these arguments that they also used a number of the successes and research reports from the email de-legitimation infusion to cleverly and effectively support their justifications. A more important consequence however, was the gradual de-legitimation of professional objectives that resulted in change managers eventually encouraging the appropriation of orangeESN in line with professional-community objectives.

The loss of legitimacy for professional objectives caused a drift towards more viral engagement strategies from this period to the second quarter of 2012. With this, change managers and CSPs devoted

significant time and energy to encouraging iSourcers to create and invite colleagues to as many open communities to collaborate and share information within their departments, teams and other functional areas. Change managers effectively on-boarded over 200 CSPs in a matter of 2 months, and together they encouraged the creation of over 3000 communities where technologists were appropriating orangeESN to "openly share expertise and knowledge". Aside from successful team communities like the architect community, the SAP competency community that was uniquely organised around an area of expertise, was also a notable success in this phase:

> *'In March, the [iSource] SAP Practice launched a new Expert community Ask the SAP Expert on [orangeESN]. Today, we have more than 450 members. People start to find their way into this space and asking the community for help. I would like to welcome and invite all the iSource technologists to join this community. Let us start using it and enhance the social collaboration within the SAP community.' (SAP Director)*

Like the SAP community, there were a number of other clear successes like the social helpdesk, social ideation communities (Appendix B3) that also grew virally to have positive business impact. However, the second quarter of 2012 saw many reports of low levels of engagement within departmental and team communities. Change managers also reported that *'CSFs had a lot of requests for spaces and approved most of them, so we had a lot of duplicate spaces'*. These successes and failures would be instrumental to shaping the future trajectory of the no-email initiative.

6.5 Consultants Infusion *("H3")*

6.5.1 Guiding Logics and Target Audience

A Gartner survey conducted in the second quarter of 2012 showed that despite the spike in new orangeESN communities among business technologists in H2, only 800 of the 3000 communities were active. Less than 10% of these active communities were populated by iSource consultants. These surveys highlighted that consultants were skeptical about orangeESN's benefits, too busy to invest time to learn how to use orangeESN, and needed clearer objectives:

[While demonstrating [orangeESN] features]… "Social media like [orangeESN] don't really have a place in the business, it doesn't add anything that email doesn't already do… Some talk about the email information overload problem, but with social media it's easier to get distracted and inundated with things like this watercooler page, the most common posts here are about what everyone did on the weekend or their new dog. It has nothing to do with the business or our objectives"(Sales consultant)

With 1 year left in their original three year no-email deadline, the steering team decided to focus their attention on driving engagement with iSource consultants. The change team had recently updated orangeESN to be compliant with all 50 ESN requirements and were confident that with the right communications, they could drive increased engagement from late adopting consultants.

In a similar strategy to "H2" infusion, they decided to increase local leadership around the new orangeESN updates in order to provide more attention to focused strategies. They accordingly employed frequent and concerted strategic communications to firstly onboard and motivate iSourcers into the no-email steering team as no-email champions. They expected that these champions would apply similar communications to drive engagement with "shop floor" consultants. Their aim was to have at least 1 champion for every 15 employees in each GBU. Ideal champions were iSourcers who were in middle management positions and/or members of iSource's "young leaders" community. Importantly, change managers highlighted that volunteers did not need to have expert knowledge of enterprise social media or collaboration since all champions would be receive training material and hands on training sessions from either CSFs, country managers or ambassadors.

Change team members made the case for ESN by employing intra-field syllogisms (building on their "H2" professional-community logics), which were focused on "co-mingled professional-community" interests. Their professional justifications promoted orangeESN's role in enhancing the quality and value of products and services for technologists, consultants, partners and customers alike. Unlike H2's professional justifications, these justifications seemed to frame point to center on the idea of "competitiveness" in an apparent effort to appeal to consultants. However, change managers also employed a comparative amount of "community" justifications that positioned orangeESN as a key

vehicle for fostering a more collaborative "digital first" culture, where iSourcers could openly collaborate without the fear of sanctions. This co-mingling of professional-community interests is illustrated in the following quote:

> *'We explained to champions that we are going to move to a new way of working for our business, and for more open collaboration, and for better connections than we have now, and now is the time to step in. You have a choice of course but the success of move depends on your involvement in leading, supporting, showing the right way forward' (Head of Social Collaboration)*

However, with the new orangeESN update, "market" interests and objectives became especially salient to iSource consultants. Consultants frequently expressed disagreement with the prevailing ESN ontology of *"openly sharing expertise and knowledge"*, and actively advocated for more focused objectives that positioned ESN as a way to *"get the right information at the right time"*. This philosophy was frequently expressed by the no- email champions that helped to generate orangeESN engagement with iSource consultants:

> *The departmental approach was not at all efficient, 'everyone had the freedom to start an orangeESN community whenever they wanted, log in, create a profile, see what's happening there and we see the same effect like we saw in Yammer and these other free tool. People are looking around but they don't see it as a place that is useful to be, because they are busy and have to get to their targets one way or another, and you don't get to your target when you are looking around in an empty spaces. Everyone is talking about how [orangeESN] gives you all this information but there is no information so it's not for me, I don't have time for this nonsense, so that makes it difficult to experience [orangeESN] as a useful tool ... But we all agree that we need better access to information' (Offering Manager)*

With this, champions advocated for the development and deployment of clearer ESN use incentives and targets, new email-like smart-lists and tabs to de-clutter orangeESN's newsfeed, and refined community workflows to enable more streamlined community creation and management. Throughout this advocacy, they consistently employed inter-field pathos and logos rhetorical justifications (against professional-community logics), which on one hand, were responsive to "professional" interests. However, justifications were also "market" –focused on positioning orangeESN as a platform for ensuring competitiveness by enhancing employee productivity and revenue.

6.5.2 Rhetorical Justifications

Rationale framing for orangeESN

In the language of the "H2" infusion, change managers frequently explained that orangeESN would help to ensure iSourcers' job security and iSource's long term competitiveness (professional claim). These claims were often combined with "community"-focused justifications that explained that participation in orangeESN communities was important for remaining connected to other colleagues, collaborating and sharing more knowledge. They consistently supported these justifications with pathos appeals to champions desire to "belong" to a community (exchange), and underlying logos appeals on the basis of enhanced innovation exchanges, as illustrated by the Head of Change Management in the following quote:

> 'We had to frame orangeESN a little differently with the late adopters or laggards. We showed them that according to our research and lighthouse successes, business social networks are here to stay, you can ignore them and you will be left out of the group, your colleagues will move on. And eventually, the bottom line is that you will have to go because you are not contributing to helping us remain a top tier player. Or, you can embrace the change, take control and help to drive more effective collaboration and innovation in your teams'

On one hand, champions embraced the view that orangeESN would enable iSource to be more competitive and ensure job security for all iSourcers. On the other however, they consistently explained that iSourcers who embraced community objectives and aims ran the risk of generating inefficiencies and wasting time, and instead advocated for a "market" grounded rationale that was more focused on measurable outcomes. In line with this view, they made the case that iSourcers could use orangeESN to improve their access to information and knowledge, and their ability to achieve KPIs (market claim). They justified this claim by employing blended logos and pathos appeals to pragmatic legitimacy based on iSourcers need to be more productive, and their desire to be recognized for reaching KPIs and increasing revenue, as the following quote by a Sales Director:

> 'The reason we have so many dormant communities right now is connected to our early approach where we set the objective as just being able to collaborate. I mean, there's nothing wrong with just saying it

will help collaboration because some people can understand that and are convinced by that, but for a lot of us that is a very fuzzy hook, you know, collaboration for what, for what purpose? ... So the sort of what's in it for me is not directly related to money or profit in the business, and if I want to show consultants and senior people that it is useful to have social collaboration, then I have to express it in terms of money-getting access to information the information and knowledge you need to reach your KPIs, or promotion opportunities, those are other ways of measuring money. So, the employee who is promoted for the results that he gets in the business is more looking forward to seeing results because that's what's in it for him, and they are willing to sacrifice their satisfaction, because he believes that his satisfaction is coming later when he has a better job or more money'

Justifications aimed at making professional-community and professional-market business cases for orangeESN initially emerged after the Gartner survey revealed low community adoption levels in the second half of 2012. While change managers' justifications eventually shifted from being grounded in professional-community objectives, champions continued to employ professional market justifications until the last quarter of 2013. While change managers justifications eventually shifted from being grounded in professional-community objectives, champions continued to employ professional market justifications until the last quarter of 2014. This professional-market logic would go on to shape how orangeESN was advertised and appropriated amongst consulting iSourcers. In the next stage in particular, change managers shifted their justifications to reflect professional-market intentions when they highlighted what using orangeESN to "find the right information at the right time", would mean for iSourcers' everyday activities, and how using orangeESN in this way would ensure iSourcers job security and competitiveness.

Advertising potential value of orangeESN

In this phase, there was an observed intra-field to inter-field shift in change managers' justifications, as they moved away from "professional-community" interests and instead promoted co-mingled "professional-market" interests. These professional-market justifications were often blended to consistently convey that orangeESN was a people project, aimed at generating measurable enhancements in the value and quality of products and services for iSourcers, partners and customers. With this new focus, change team members reported that they dedicated a lot of time and effort to

explaining the potential benefits of using orangeESN in order to onboard champions and other iSourcers.

Members reported that they would often use "H2" lighthouse successes like the SAP community, and social helpdesk to highlight that orangeESN had the potential to enhance champions and iSourcers access to important information and knowledge, and thus, could help them to effectively reach their KPIs (claim). These justifications primarily employed logos appeals to pragmatic legitimacy based on champions need to enhance the efficiency and effectiveness of accessing information and knowledge. The following quote from the training presentation for champions demonstrates this:

> *One of the benefits social collaboration will bring is 'productivity, [in] connecting people with relevant knowledgeable peers and content, [and thus] drive efficiency of business functions and [enable them to] leverage information for business optimization and raise processes agility' (Champion Training Presentation)*

Change managers also frequently used training presentations as an opportunity to make emotional appeals to pragmatic legitimacy based on champions desire to become better leaders:

> *Another benefit of social collaboration is regarding 'employee satisfaction, in enabling more agile, responsive, efficient and effective leadership' (Champion Training Presentation)*

Change managers were also keen to highlight that orangeESN communities were already starting to have a significant positive impact on reducing email misuse. To support these justifications, change managers launched an initiative to award "email-free" certificates to business and work processes that did not generate any email. They created momentum around this project by firstly eliminating automated and system generated email, and highlighting that they had redesigned over 65 processes to be email free. They integrated these results with their latest survey on internal email use to make logos appeals to iSourcers need enhance the overall efficiency and effectiveness of their activities, and emotional appeals to their desire to enhance iSource's reputation in the market. A Consulting VP demonstrates this in his illustration of how a group of consultants effectively appropriated a departmental community for the purpose of *'doing more with less'*:

'A department with over 280 consultant across UK GBUs have been implementing their "going more with less" change programme to increase productivity using orangeESN communities and new practices. Since December this has resulted in a 64% reduction in internal email usage. This is a fantastic achievement. To me it's critical that we are seen by the market to make progress with our [no-email] story. This kind of progress will generate client interest that we can steer towards our "doing more with less" and "workforce operations" solutions'

Champions employed similar "professional-market" justifications to motivate engagement from front-line iSourcers. Members reported that they strategically chose non-departmental "H1" and "H2" lighthouse successes to explain that orangeESN had the potential to increase productivity and revenues by reducing the "cost" (time and effort) of accessing information and reaching KPIs. Importantly, they would often compare these successes to the dormant departmental/team communities to explain that communities were more likely to generate measurable benefits when they helped iSourcers to manage multiple sources of information. These justifications primarily employed logos appeals to pragmatic legitimacy based on iSourcers need to effectively access to the right information in order to meet their KPIs and customer needs. The quote below from a programme manager and champion illustrates these arguments and particularly exemplifies how champions view of value and benefit differed from that of CSFs in "H2":

'I do understand why some [iSourcers] would be hooked to [orangeESN] just on the promise that it will make them happier and less stressed but other [iSourcers] like the sales consultants need a hook that is a bit more tangible. And with H2 we saw a huge drop in usage after about 4 months so I think just saying it will make you happier isn't enough. That's why we went a bit further to explain that when you use [orangeESN] communities with a clear purpose you can be much more productive. We supported this with some testimonials from spaces like the SAP expert community where [iSourcers] were saying that when they use the SAP community to get answers, they get a wider variety of answers from [iSourcers] around the world in a much faster time' (Programme Manager, Champion)

In addition, champions also frequently used jiveESNs (from "H1") customer facing success stories to make direct emotional (pathos) appeals to iSourcers' desire to satisfy their KPIs and be recognized for their work. This is demonstrated in the following testimonial from a champion's training presentation:

A team of 20 [iSourcers] used a community to find solutions for their outsourcing client's problems' In a period of 2months we minimized the mean time to find an expert on a given subject moved from 2 days to 2 hours, significantly minimizing client disruptions when they had a problem. This was really big for us, our managers were impressed, the customer was impressed and [iSourcers] we are now the example in our GBU' (Bid manager, Champion)

As a result of champions contestation of professional-community justifications, there was an important shift in change managers to promoting professional market concerns. Both change managers and champions initiated these professional-market justifications in tandem with the launch of the email-free certification programme in the third quarter of 2012. They continued to use these justifications in their formal and informal communications to advertise the value of orangeESN until the end of 2013. These justifications crucially helped to onboard close to 1000 champions in about 2 months. In the next stage, they turned their attention to building on this momentum by encouraging iSourcers to appropriate orangeESN in ways that help to reap some of the benefits highlighted in this stage.

Motivating Engagement around OrangeESN

In this stage change managers shifted their justifications towards encouraging champions to lead by example in order to encourage reluctant iSourcers to use and appropriate orangeESN as their main collaboration platform. As part of this, change managers were keen to firstly rebrand orangeESN as a "serious" business social network rather than a "social media" platform to demonstrate that it was a business tool for improving iSourcers access to information and knowledge, and improving their ability to reach their KPIs. They did this by primarily employing pathos appeals to champions desire to be recognized for satisfying KPI targets and increasing revenue:

> *'We don't position [orangeESN] as social media but as a business social network. Which means that it replaces internal email and all kinds of collaboration and communication related to our jobs is moved from email to the social network because we want to have people see each other's information, contribute to it, learn from it, and exploit it to hit your targets and make money for the company. Which is more business related and less like the usual talk that you have on Facebook or google plus or whatever you use. Tools like Facebook, why should we duplicate them in our company, If you want to chit chat with you colleagues then you use Facebook' (Head of Marketing)*

After re-branding, change managers actively encouraged champions and managers to lead by example by contributing their own testimonials of how they used orangeESN communities to "work smarter" and reduce their email misuse. These justifications employed pathos appeals to champions desire to be empowered to help advance a strategic business initiative, as illustrated in a slide used to explain the success story community to champions:

'You want to be part of this adoption of smarter ways of working into the company. You want to inspire others through your leadership, to contribute their own success stories. That is what this community is about!! Let your colleagues know how you are using orangeESN spaces to deal with the No-email challenge, encourage them to discover and contribute their own stories of how they started on the Journey to No-email' (Champions Network Presentation, 2013)

Change managers were very serious about encouraging iSourcers to contribute their "working smarter" success stories and explained that champions who did not help to advance the strategic business initiative of reducing email misuse through orangeESN use would not be able to work effectively with their colleagues, and would additionally be removed from their leadership positions. These "threatening" justifications primarily blended pathos appeals to champions' fear of being removed from leadership and desire to "belong" to the leadership community, with logos appeals to champions need for more efficient access to information and knowledge:

'As junior leaders at iSource and members of the future leaders group, our champions know the importance of being part of a team and working across boundaries ... With over 2000 communities already created, and many managers only collaborating within orangeESN, it was inevitable that if they ignore orangeESN they would fall out of the loop, out of the culture, out of the leadership group' (COO, Communication)

They also consistently explained to champions that based on "H2", they found that training and guiding iSourcers on how to create, use and nurture communities was essential to ensuring that orangeESN was used in the right way. They supported this claim by creating training KPIs and awarding bonuses to managers and champions who attended training sessions and trained others. These justifications primarily employed blended logos appeals to champions need for more efficient and effective innovation practices, and pathos appeals to their sense of responsibility as leaders, and their desire to be recognized for satisfying their KPIs, as illustrated in the following quote:

'We expect that our champions will act as "intrapreneurs", taking responsibility for driving innovation and turning ideas into profitable services or products. To do this they need to lead the change in the organisation by driving effective engagement in [orangeESN] communities. One way of doing this change is through training and support... To be absolutely clear that we are damn serious about adopting smarter ways of working using [orangeESN], training team leaders and other managers is part of the bonus of all champions and top managers. They will have their H3 bonus if and only if they achieve this objective, that more than 95% of managers in their GBUs are trained. This is not about a tool, this is about transforming the way that we work to be smarter ' (Client Engagement Director)

By mid 2013, change managers successfully on-boarded about 2500 champions around the world. These champions justifications were aimed at encouraging iSourcers to appropriate orangeESN communities based on their potential to produce measurable business benefits, particularly enhanced revenue and productivity. Members reported that they frequently used customer facing successes from "H1" and "H2", like the jiveESN pilots, to demonstrate to reluctant leaders and managers that unlike the dormant departmental communities in "H2", communities can be appropriated in ways that help to reduce the time and effort required to reach KPIs and access knowledge and information. In line with this, they advocated for an alternative community engagement approach based on customer projects, rather than on departments and teams. They specifically encouraged iSourcers to create communities around specific client projects, and invite iSourcers from around the world to contribute, discuss and take action on client opportunities. These justifications primarily blended logos appeals to iSourcers need to efficiently access information to reach KPIs and enhance their revenues, with pathos appeals to their desire to be recognized for their contributions to the company. These rhetorical justifications are illustrated in the following quote where a Business Information Manager presents the idea for client facing communities, which were later widely appropriated:

> *'For a big client there are several service lines enforced. Normally they are competing with each other because they have their own P&L so we brought these people together in a community so they would share what is happening at the client side, where are the opportunities, what everyone is doing, we get a more clear view of what is happening at this client by making use of the space. You just have to take into account that it can happen that there are lots of different sales people handling a single account yeah. So [with orangeESN spaces] you would be working in a more streamlined and transparent way thereby satisfying your P&L much more effectively and creating more opportunities for the company. Normally, we had a CRM system where you can put in this information but it was not always very solid'*

In training sessions, champions encouraged team leaders and managers who to manage all communities as business, especially departmental/team communities. This objective was partly achieved by streamlining the community creation workflow so that communities with similar keywords and purposes would automatically be integrated into existing communities. Champions also specifically explained to managers that a community would only be approved if it had clear purpose and clear ways of measuring its progress towards that purpose. They explained that less duplication and clearer

purposes would foster easier access to relevant sources of information. They convinced managers of these claims by employing logos appeals based on their need to effectively access information to reach their KPIs and enhance their productivity, and pathos appeals to their sense of responsibility as leaders:

> *'Each project manager, each team leader, should run their team as a business. We expect each manager to be business developers, working and meeting their budgets, being sharp with reporting and everyday management. These behaviours need to be transferred to the online community, so if community leaders want their community to be responsive to clients and KPIs they must design and lead their communities as business developers, so they should define clear purpose statements and community tags, conduct due diligence on whether there is a community out there that suits their team's needs … This way they can continuously improve client satisfaction and business unit performance' (orangeESN Training Presentation, 2013)*

Champions also encouraged engagement with orangeESN communities by advocating for the definition of KPIs and incentives for using orangeESN. As a result the change team specified that leaders who did not attend orangeESN training sessions would not receive their full yearly bonus. Additionally, all iSourcers would receive an additional incentive for reducing their internal email traffic by 10% every quarter. Champions justified these orangeESN KPIs by blending rational(logos) appeals to iSourcers need efficiently reach their KPIs and emotional appeals to their desire to be recognized reaching their KPIs. This is demonstrated in the following quote by a Sales Performance Manager:

> *'What we are trying to enforce within our community landscape is making everything measurable, If you can't measure it, you can't manage it. People at iSource are used to only moving based on financial targets because we are a cost focused company. So with orangeESN you cannot expect that they will start using it if they are not given specific incentives and KPIs.'*

In line with their arguments for running communities as businesses and making everything measurable, champions also advocated for setting quarterly email reduction targets within consulting teams in order to drive more orangeESN engagement. Accordingly, champions in each GBU set targets in the consulting departments to decrease email use by 60% from November 2012 to June 2013. These communications primarily employed pathos appeals to consultants' desire to win and be recognized for their accomplishments (exchange), and logos appeals to consultants need to reduce inefficiencies (email misuse) (exchange). One champion reflects on how these justifications effectively drove orangeESN engagement in a UK consulting location:

Since we were an organisation with an international footprint 'When we kept track and invested in getting email reduction numbers, we also made them visible to encourage country by country comparisons. And then people took the initiative to say hey, we need to beat Germany, lets reduce our email. That's what helped us in consulting. We had a target to reduce email by 60% and we reached that target, we reduced email significantly and that was something we were proud of because we knew we reduced email inefficiencies and did better than the others' (Consulting Business Information, Champion)

Change managers and champions first started to use these professional-market justifications to encourage orangeESN participation after the software was updated in the last quarter of 2013. They continued to use similar rhetorical arguments in the majority of their communications until the last quarter of 2014.

6.5.3 Diffusion Outcomes

Like the previous infusions, the goal of this infusion was also to increase iSourcers awareness of the need to adopt and engage with ESN, and build their desire to actively participate in orangeESN communities, as a way to support iSource's transformation efforts, and "market" objectives. The change team and champions did this by mobilizing concerted and consistent pathos and logos appeals over three legitimation phases.

In "rationale framing" and "advertising value", change managers and champions contested "professional" and "market" interests. Like the previous infusion, the intra-field to inter-field in change managers justifications signaled that co-mingled "professional-market" interests were gaining legitimacy and having an overall greater impact over "professional-community" interests. Accordingly, champions "professional-market" intentions "rationale framing" was to explain that appropriating orangeESN to openly collaborate without a purpose was inefficient and ineffective. Instead, they made the case that orangeESN could ensure job security and competitiveness by enabling iSourcers to "find the right information at the right time".

In "advertising value", both champions and change managers had the "professional-market" intention of highlighting the value of "finding the right information at the right time", and accordingly, building

interest for appropriating orangeESN to increase productivity and revenues. In "motivating engagement", their combined justifications were aimed at encouraging the appropriation of orangeESN to "find the right information at the right time" in their day-to-day work, in order to increase productivity and revenues. These justifications gradually fostered meaning making the theme of using orangeESN to "find the right information at the right time", especially within consulting departments.

Champions constructed this theorization and the justifications around it by exploiting the opportunity to build on the previous infusion's professional-community justifications, and events. They specifically used the professional-community objectives of enhancing knowledge sharing, innovation and job satisfaction for iSourcers, as the foundation to promote their market interests of reducing the time and effort required for consultants to find relevant information and knowledge. They also used a number of key "H2" failures like the dormant departmental communities to de-legitimate the viral appropriation of communities for open collaboration.

The combination of these de-legitimating justifications together with justifications building on "H1" and "H2" successes helped them to instead legitimate the appropriation of customer-centric and departmental/team communities with clear strategies, purposes and measurable goals. This outcome was directly in line with their larger professional-market objectives of appropriating orangeESN to enhance revenue and productivity. Another important consequence of the way that they constructed and mobilized their justifications, was their ability to quickly compel change managers' to support their professional-market interests for orangeESN.

The loss of legitimacy for professional-community objectives resulted in the restoration of increasing top-down engagement strategies from this period until about the third quarter of 2013. By this time, the drift to professional-market justifications produced a 30% reduction in emails per inbox (as compared to levels surveyed in 2011), and over 14, 000 unique consultants posting to orangeESN communities at least once per week. Additionally, there were close to 60, 000 iSourcers (35% of which were

consultants) participating in over 4500 client-based communities to "get the right information at the right time". Similar to the previous infusion however, consultants also created a number of successful competency (expertise) based communities. For example, consultants reported that the contract management community enhanced the productivity and management of what was previously an "inefficient and unstandardized" process for customizing contracts to local needs:

> *'The community environment allows for a level of mass collaboration among more than 100 people that is not achievable with email. The community collectively creates, adjusts and determines exceptions to contracts. As a result, the new contracts and new contracting processes better serve local operations. So the number of customized, nonstandard contracts has dropped by more than 50%, saving the productivity cost of downstream triage and corrective actions. As an added benefit, relations between [legal] and the local offices have never been better.' (Gartner research)*

There were also frequent references communities like the social project management hub and social procurement community (Appendix B4), which were also created with the purpose of solving an existing business problem, and ignited by orangeESN KPIs. However, change managers were compelled to rethink their engagement justifications in order to repair orangeESN's reputation after a technical failure caused a significant decrease in orangeESN's momentum.

6.6 Wider Diffusion

6.6.1 Guiding Logics and Target Audience

Towards to end of 2013, the performance of the orangeESN platform dropped significantly since its cloud architecture could not scale with the increasing number of new users (over 70, 000). At the same time the change team also reported that consultants, technologists and other senior managers were increasingly reporting concerns with the fact that their sensitive work data was being stored in the cloud. Subsequent surveys revealed that there were less than 3000 unique posts per week compared to highs of 14000 in 2013. Even after relocating the orangeESN database to more secure and reliable in-house servers, usage levels remained low and continued to decline. One technology consultant explained her frustrations saying:

> *"After a couple months of having to use different log in options, not having access, waiting 10 minutes for pages to load and other things, I just didn't try to go to it anymore because it was so unreliable… Even when I did use [orangeESN], I'd also been sending all my messages and documents by email, especially the really sensitive ones. Email is much more reliable right now, … and better for sensitive data, much more than [orangeESN]"*

Overall, iSourcers trust in orangeESN was very low and change managers acknowledged that they needed to take urgent action in order to meet their 3 year deadline. Internal research by the extended steering team concluded that the root cause of the low engagement was a lack of intrinsic motivation across business technologists, consultant and other senior managers for professional objectives of enhancing the quality and value of services and products for *customers*, *iSourcers* and partners alike. This was especially evident in the client-focused communities where iSourcers who were more focused on satisfying orangeESN usage KPIs were being selectively transparent at sharing information with their colleagues at the expense of the customers:

> *'Three or four years ago before we launched no-email we discussed the idea of motivation and what drives it. And we came to the conclusion that we wanted to encourage [iSourcers] to be intrinsically motivated to change their behaviours and use the business social network. But over time as we explained [orangeESN] in different ways to different groups we moved away from that, to having today a lot of individuals only using [orangeESN] because of some external motivation or incentive. For example, in the sales communities everyone we have sales people from 3 or 7 different teams going into the same client account, each of these teams has their own P&L and [orangeESN] KPIs so they share just enough information, they might just copy and paste something from google or whatever to meet their [orangeESN] KPIs but don't share useful information in order to get more from that client than the other team and reach their P&L targets.'(Head of Marketing)*

Early adopting business technologists were also displaying low levels intrinsic motivation for professional objectives since they primarily collaborated amongst themselves in their department and team spaces.

In the following months, change managers reported that their goal was to restore trust in the orangeESN platform and generate more intrinsic motivation for participation. They did this by employing strategic communications and actions to directly onboard shop floor employees from these groups into the steering team as local leaders or "orange heroes" and "tribe leaders". This enabled the change managers

to dramatically extend the reach of their *"professional"* agenda, and influence the actions of CSPs and champions from the ground up. More importantly, they refined their "professional" agenda to be directly focused on customers. Rather than positioning orangeESN as a survival (as with technologists) or competitive imperative (consultants) as with the previous "professional" agendas, they instead dedicated more focus on explaining that orangeESN use would help enhance the quality of product and services for customers. Members reported that based on their observations of what worked and didn't work in the previous infusions they realized that communities and teams with a strong customer focus were especially effective and vibrant. Moreover, a survey of iSourcers views on "smart work" conducted at the time revealed that regardless of whether members spoke about orangeESN's role in decreasing email misuse, or enhancing collaboration and productivity, the common theme was a customer focus.

As these refined "professional" justifications helped to gradually increase the number of local front-line leaders, CSPs and champions justifications also shifted to reflect a purely customer focused "professional" logic. Local leaders helped CSPs and champions to provide crucial support and guidance to members of local orangeESN communities by primarily offering informal day-today training to support change managers' more formal training sessions like the Pitch workshop. Zero heroes and tribe leaders were also the earliest contributors to the video training community where everyday employees could contribute video testimonials of how they use orangeESN for their day-to-day activities. These actions and the strategic communications around them, created more opportunities for distributed (inter-group) collective meaning making among business technologist and consultants, and crucially led to the growth of professionally focused competency-based communities. To justify this refined professional focus, Change managers and local leaders (orange heroes and tribe leaders) employed inter-field syllogisms, which primarily made pathos appeals to pragmatic legitimacy in explaining orangeESN's rationale, highlighting its value, and motivating engagement around its form and function.

6.6.2 Rhetorical Justifications

Rationale framing for orangeESN

Change managers a result used general references to the communications around "H2" SAP and contract management communities to explain that orangeESN was proven to help iSourcers deliver more innovative and "smart" solutions to customers. They further justified this business case with iSourcers by employing purely emotional (pathos) appeals to iSourcers sense of responsibility to deliver better products and services to customers. For example, a video message frequently broadcasted in informal meeting spaces around iSource highlights this customer focus:

> *'At the end of the day, regardless of where you work in [iSource] you should be doing something that will help deliver a better service for customers. And when your customer is happier then you are obviously doing a better job yeah… Serving the customer better should be all iSourcers number one priority, and we know from success experiences that that [orangeESN] has helped us to be more collaborative, productive and deliver more innovative solutions to customers. this is how we work smarter!… So as an iSourcer its your responsibility to find a way to use [orangeESN] to do just that, because we know and you know that it is possible.' (Video Advertisement)*

Change managers also refined their justifications to emphasize that at its core, working smarter is about customer satisfaction. In these arguments they primarily employed pathos appeals to pragmatic legitimacy based on iSourcers desire to be recognized for their contributions to the iSource community. For example, this message was consistently communicated to explain the purpose of the newly-introduced *"what's in it for me"* (WIIFM) training workshop:

> *'It's not enough to say that we are working smartly because we have changed our behaviours and adopted orangeESN to reduce email overload, or helped our colleagues solve a problem, or improved the efficiency of our work processes and workflows. Our no-email journey so far has shown us the most successful and recognized communities are those that have had a significant customer impact… These stories have also shown us that job satisfaction, increased revenue and profits are best measured by with customer impact' (Knowledge manager, CSP)*

Change managers initially started to communicate this customer focused message about a month after the orangeESN database was relocated internally in 2013. This message was consistently reinforced throughout 2014 in their presentations, meetings, training and interviews. While their target audience was not specifically CSPs and champions, they did adjust and fine-tune all their communications and

awareness campaigns involving CSPs and champions (such as WIIFM workshop) to reflect this shift to more professional means and aims.

This rationale was crucial for shaping the content of future advertising and motivation communications. In the next phase in particular, change managers focus was to demonstrate to iSourcers what "working smarter" looks like in practice, or how orangeESN could be used to enhance customer satisfaction.

Advertising Potential Value of OrangeESN

Members reported that they carefully drew on success stories like the SAP community to highlight that the collective intelligence that comes with having more visibility of experts and information would enhance individual iSourcers' ability to meet customer needs. The idea of collective intelligence benefits simultaneously appealed to business technologists who valued collaboration and open sharing of expertise, and consultants who valued productivity and being able to access the right information at the right time. These arguments also employed rhetorical appeals to iSourcers' desire to "belong" to the iSource community and be recognized for their contributions to the community. The Head of Cyber Security explained the value of collective intelligence as follows:

> *'If you think about how we use orangeESN in our personal capacity, we use it for sharing information, for finding out what's going on, for telling people what's going on. And if you translate that into the business side and going the extra mile for customers, regardless of which part of the business you're in, it makes sense for building a network of relations and knowledge with colleagues around the world, and using those connections to deliver more innovation to customers. For instance, this week I did a presentation at a client site on big data. I immediately went out to the community and said right, give me some cool stories from all over the world, I mean I know a whole pile of things but I know there will be other things out there, tell me what they are? And I know the communities where people will be actively watching that, and I know they will respond, and I can probably predict some of the people who will respond, and I can guarantee that they'll be some people who will respond that I've never heard of before.'*

Change managers also advanced the customer focused view that working smarter with orangeESN can improve the bonds and social relations between iSourcers and their customers, and consequently lead to more innovative customer solutions. These communications coincided with a new organisation wide initiative to encourage more innovation by increasing the opportunities for internal collaboration, and

partnering with third parties on new and existing products and services. Members used the successful

customer focused communities from the previous infusions to explain that working smarter also meant

shifting the iSourcer-customer relationship from supplier-customer to equal partners. These

explanations also mostly employed pathos appeals to iSourcers' desire to be recognized for their

innovation contributions:

> *'We now have more of an emphasis on driving innovation on a customer level, whereas previously, its wasn't that there was less drive to do it, but it was less clear how to achieve until now. With the support of orangeESN communities we now have a lot of innovation reviews where we all share the latest, greatest of xyz, service offerings, what's happening in the market place. we want to do a lot more partnering with organisations who will go to market with us on certain services. There's a lot more happening in that space than I can recognize previously. Just recently we've started to check that iSourcers innovation contributions either yearly or half yearly, and recognise and reward them for that. That has happened at least 3 or 4 time in the past year in my department' (Network Service Unit Manager)*

Change managers also spent a lot of time and effort explaining that iSourcers who tapped into the

collective intelligence and innovation benefits would gradually develop the entrepreneurial skill and

profile that is required to become iSource leaders. These justifications were directly related to their

primary objective of encouraging more local leadership. Again, the primary form of rhetorical appeal

employed was a pathos appeal to iSourcers desire to belong to a community of internal entrepreneurs,

and become leaders, as demonstrated in the following quote from the Head of the Smart Work

Committee:

> *The aim is to use orangeESN to help deliver more innovation to customers because over the year we have lost that entrepreneurial spirit in identifying need sand delivering services to customer, 'As we are getting bigger as an organisation and more global, the responsibilities to make those decisions are being taken away and put into a global organisation to consolidate and get the right people looking at the right thing and standardizing on service offerings and technologies like orangeESN, to match that. When we rolled out orangeESN we purposely adopted a top down approach to development and communication to drive that standardization and the efficiencies that come with it, but we lost some of that agility and the ability to respond to requirements and think out of the box because, our change team and the employees as a result were limited by the toolbox that was given by the global people, which may not necessarily put iSourcers in the best position to meet customers' requirements. What we want to get to is a position where all shop floor employees embrace an entrepreneurial spirit and takes risks to innovate, take direct responsibility for turning ideas into great customer products, and really lead the change in the organisation to get buy in and ensure orangeESN success… Essentially leaving it up to them to use the range of orangeESN technologies in whatever way best allows them to tap into knowledge around the organisation meet customer needs.'*

Change managers started to frequently communicate these messages prior to the formal launch of the orange hero initiative in early in 2014. Similar to the rationale arguments, these justifications were also continually expressed in training material like the WIIFM workshops, presentations and meeting throughout 2014, but became less prevalent as the orange hero community grew. In the next stage, change managers looked to build on this momentum by encouraging iSourcers to begin appropriating orangeESN in order to reap some of the benefits highlighted in this stage.

Motivating engagement around orangeESN

Justifications in this stage were focused on encouraging technologists, consultants and senior staff to appropriate orangeESN to work smarter towards enhancing customer satisfaction. Along these lines, change managers redesigned training videos to be less employee specific in order to drive the innovation and customer focus to a wider range of shop floor employees (Appendix B5). These videos were frequently displayed in formal and informal meeting spaces across the world and were also easily accessible on orangeESN. Members reported that they purposely created a single two minute video for engineers, team leaders, project managers and service delivery managers role because iSourcers could relate to at least one of these roles.

The justifications in each video were also carefully constructed to ensure that 'each video spoke to iSourcers hearts and minds by using cartoons and humour, but also absolutely serious, by illustrating how orangeESN fits in, and improves each role's workflow and ability to reach client objective' (Head Change Manager). These videos therefore employed primarily pathos appeals to employees desire for enhanced job satisfaction, as illustrated in this excerpt from the bid manager training cartoon:

> *'At her desk, Kim has identified the need to involve Kirpal to make a decision on the pricing principle. This is easy with [orangeESN]. She simply adds Kirpal to the recipient list of her collaborative posts. He now has access to all the information required for the decision. With all this going on, the end of the working day arrives quickly. Kim checks the percentage completion of the deliverables with a glance on the status tracking page in the [orangeESN] bid space. She can go home now feeling confident. Things are under control' (Bid manager Use Case Video)*

Another key goal of these videos was to improve the reputation of orangeESN by demonstrating how orangeESN was "in iSourcers best interest", and suggesting that it was a necessity in both their work and personal lives. Change managers did this by employing pathos appeals to iSourcers' desire to have reliable and high performing technologies to support their work. This was especially illustrated in the conclusion to each of these videos, as illustrated in the following excerpts:

> *'Kim is looking forward to the weekend, she has invited friends over to watch the grand prix. She realizes that [orangeESN] tools are like the tools used by a pit team to find tune a formula one car in super quick time. Or in Kim's case, develop a winning bid.' (Bid Manager use video)*

> *'John leaves work. Infront of the theatre where he is meeting his girlfriend [Kate] he checks his phone in the [orangeESN] watercooler space for comments and ratings on the latest avengers film. Kate seems happy with this choice. Thank you [orangeESN] for super powers !'(Engineer use video)*

At the same time, change members introduced the "What's in it for me" training experience (WIIFM) where CSPs and champions worked with 4 teams of iSourcers to design orangeESN workflows. Workshops were purposely comprised of senior and front-line iSourcers from different consulting and technical departments in order to create opportunities for learning and discussion between teams that would not normally collaborate. Workshop trainers explained that the purpose of the WIIFM was to enable iSourcers to envision usage patterns that were uniquely suited to their context and needs and would put them in a better position to deliver more innovative solutions to customers. Change managers believed that this claim was more professional than their less successful attempts to push a well-being and job security agenda, since it was more inclusive of all stakeholders needs.

In most cases change managers did not support these justifications with specific pieces of evidence since they knew that iSourcers were highly aware of success stories from the previous infusion. Instead, they justified these claims with pathos appeals to iSourcers' desire to be recognized for delivering innovative customer solutions and for enhanced job satisfaction. The following quote for the Head of Business Information illustrates how trainers explained the WIIFM workshop to iSourcers:

> *So we had to find good reasons in the area of what is important for all [iSourcers], 'An [iSourcer] who is promoted for the results that he gets in the business is more looking for a tangible results because that's what in it for him, and he may be less interested in having fun at work because he doesn't get paid for having fun. On the other hand, other [iSourcer] get satisfaction from collaborating openly, being able to*

work together, unique their expertise to help others, and come up with smarter solutions… I think that if you conceptualize these cases, it's the same as what's in it for me, the button or carrot that's in it is the same, because it's just that you are recognized for something and you want to know that it will help you deliver better service to your colleagues and customers, and that social media can have a place to support you to do it better.'

Change managers also focused training sessions on encouraging iSourcers to create more competency based communities. Change managers noted that over the previous infusions, communities like the SAP and contract management were operating in ways that were aligned to their customer focus by continually delivering innovative solutions to customers. They also encouraged iSourcers to create customer integrated communities, that offered clients the opportunity to be community members and collaborate directly with relevant iSource team members. Change managers justified both of these new communities as ways to help shift the customer-iSourcer relationship from customer-supplier to partners, in order to foster an entrepreneurial spirit and generate more innovation. They supported these claims with pathos appeals to iSourcers' desire for enhanced job satisfaction, and their desire to be recognized for their innovation contributions. This is demonstrated in the WIIFM training presentation that illustrates the benefits of the SAP expert community:

> *'When [iSourcers] had difficulty with a SAP project at a customer environment they could find an expert to solve a problem in about 45 minutes, so 'the benefit for the user to participate is that they have a platform where they can ask their question and get support in a timely manner when needed. On the other hand it is also about sharing their knowledge, views & insights to help other [iSource] SAP colleagues. Our expectation is that this becomes a community that will support itself, that is fun to use and that will improve [iSource's] performance by helping each other. The goal we want to achieve to is to help connecting those who need to know with those who know and as such help each other in gain quicker access to SAP Expertise & reduce time to resolution'* (WIIFM Training Presentation)

Another goal of the redesigned WIIFM training programme was to foster an entrepreneurial spirit amongst shop floor iSourcers. They did this by creating opportunities for iSourcers to collaborate with senior leaders and different teams of iSourcers to come up with their own orangeESN use patterns. In this spirit, change managers also introduced several gamification initiatives to enable iSourcers to develop an entrepreneurial spirit, and to take the first steps to becoming orangeESN leaders.

The first of these initiatives was the "orange hero" initiative. Shop floor employees could become orange heroes by leading the change to dramatically reducing their email use and driving traffic to orangeESN. For instance, in a similar manner to how champions encouraged engagement from consultants, the majority of orange heroes set an automatic email reply explaining that they would only be communicating via orangeESN or in person, and not via email. Additionally, these criteria were also measured through orangeESN profile metrics such as having a certain number of user generated endorsements for orangeESN activity skills such as *contributor, reader, and leader*. Employees that satisfied these criteria were rewarded with special badges on their orangeESN profiles and personal workspaces, and an invitation to the secret "orange garden" community where they could collaborate and learn from other orange heroes. Orange heroes who were also community leaders were additionally rewarded with membership to an 'orange travelers' community (Appendix B6) where they had the opportunity to directly shape no-email strategy with senior leaders such as the CEO.

Change managers reported that they justified the orange hero initiative as a way for shop floor iSourcers to play an integral role in the steering team on a strategic business transformation initiative. They were also keen to highlight that those shop floor employees who took action to reduce email misuse, and use orangeESN in new ways would significantly enhance their reputation and upward mobility in iSource. Accordingly, they convinced iSourcers by employing primarily pathos appeals to their desire to help lead a strategic initiative and "belong" to a highly respected community. The following excerpt from the orange travelers community purpose statement illustrates these justifications:

> *'It's a big challenge, but together we can make it work and you are invited to join the no-email journey with us… A [Orange Hero] is someone who took this decision and support the strategic [no-email] target, knowing that the world is watching us. A growing number of colleagues support this initiative. You will recognize them with the badge in their orangeESN profile picture and their out of office reply in Outlook. They stopped the unnecessary internal email. Are you one of the people who also will be mentioned as creator of success?'*

Change managers' justifications around these initiatives remained customer focused and driven by the theme "working smarter" throughout 2014, but declined in frequency at the start of 2015. Change

managers did not specifically outline what working smarter meant in their communications but instead focused on motivating iSourcers to work in a more entrepreneurial way.

6.6.3 Diffusion Outcomes

Like the previous infusions, the goal of this infusion was also to increase iSourcers awareness of the need to adopt and engage with ESN, and build their desire to actively appropriate orangeESN according to customer –focused "professional" objectives. The change team, and eventually orange heroes and tribe leaders did this by mobilizing concerted pathos appeals to create new meanings across three legitimating phases.

In "rationale framing", change managers' intention was to ensure that all employees, regardless of their position or role in the company, knew the importance of having a more customer focused view in their day-today work, and understood the meaning and significance of "working smarter". In "value advertising" their intention was to build interest for, and highlight the value of using orangeESN to "working smarter" towards customer satisfaction. They specifically highlighted that iSourcers who used orangeESN to work smarter could increase their collective intelligence, innovation, and entrepreneurial and leadership skills. In "motivating engagement" their intention was to encourage shop floor iSourcers to proactively build on the orangeESN usage patterns of other iSourcers, and appropriate orangeESN in ways that would put them in better positions to deliver more innovative solutions to customers. Justifications across these phases gradually generated collective meaning-making across consultants, business technologists, and senior managers, around the common theme or intra-organisational theorization of appropriating ESN to "work smarter together".

Champions constructed this theorization and the justifications around it by building on previous infusions' business cases, success stories, failures, ESN features and functions, and supporting

organisational structures and procedures. These consolidated justifications proved to be very effective, as illustrated in the following quote:

> *Within a month these initiatives and justifications were already motivating significant amounts of local leadership among shop floor employees. The orange hero community grew virally and exponentially with every passing week as orange heroes reported that 'iSourcers were asking us what are these badges and how can I get one, and what are you guys doing in this secret community, how do I join?' (Technical consultant, orange hero).*

As orange hero numbers grew to about 10,000 members around the world by mid 2014, the change team's surveys showed a 65%reduction in emails per inbox (as compared to levels surveyed in 2011). The Head of Collaboration summarized these technological and cultural change successes in the following quote:

> *We have significantly progressed to becoming a truly collaborative and social business with our expert communities. Right now, 'We moved from a traditional hierarchy based organisation to a collaborative, community led organisation. Without the limitations of country borders or business unit silos, we are bringing together very diverse teams to unlock our creative and innovation power for a successful future business. In this continuity, we are simplifying our leadership model to become more agile, customers communities oriented, fully networked and Digital compatible organisation; mainly because high number of our knowledge workers are moving from a traditional pyramidal model to a collaborative networked community model with less complexity and more crowd collaboration'*

Along with these successes, surveys showed that there were over 10, 500 primarily competency based, client centric and client integrated communities, where about 100,000 technologists, consultants and senior managers were signed up and about 40% of sign ups were actively engaged asking questions, offering suggestions and solving customer problems.

6.7 Summary of Analysis

I introduced this section by explaining my intention to use the case of ESN evolution outlined in the chapter 5 to illustrate how the spread of ESN within iSource was a process of internal diffusion, which was shaped by historically constructed organisational complexity on one hand and mutually reinforcing rhetorical justifications on the other. Organisational complexity at iSource is particularly evidenced by its composition of complex hierarchies of highly institutionalized communities of actors, who were brought together through a host of organisational mergers. iSourcers tended to balance the concerns of

competing professional, market and community logics in their everyday work and decision making. These logics are manifested in iSourcers' common organising principles, identities, behavioural assumptions and material and symbolic structures and practices. However, key events along iSource's ESN journey caused distinct logics to become consistently more salient to how specific communities of iSourcers understood and interpreted ESN's usefulness and importance over time. As the salience of these logics shifted, different communities of iSourcers mobilized competing rhetorical arguments or justifications to legitimate distinctly different ideas for appropriating ESN.

However, managers or institutional entrepreneurs in each of these communities constructed and mobilized their legitimating arguments according to a consistent pattern of pragmatic rationale framing", "value advertising", and "motivating engagement" phases. In the "rationale framing" phase, movement entrepreneurs employed justifications with the aim of constructing, framing and promoting widespread understanding for the business case behind their ESN appropriation ideas. This business case basically explained why the audience needed to support and engage with ESN. In the next phase, movement entrepreneurs' aim was to demonstrate and convince the audience of the value of appropriating ESN according to their outlined business case. The "advertised value" essentially highlighted benefits, with the strategic aim of demonstrating what the intended change or appropriation looks like in practice, and thus providing some guidance on how to appropriate ESN. Finally, after priming the audience for the change, managers encouraged them to actually engage with material ESN features, and integrate the resulting practices into their day-to-day activities, in ways that were responsive to the "whys" of the framed business case and the "hows" of the advertised value.

These phases were instrumental to enabling the intra-community meaning- making or theorizing that was instrumental to managers justifications and diffusion outcomes across scientific community, business technologist and consultant orangeESN infusions. These phases were also crucial to the inter-community meaning making that eventually generated widespread internal ESN diffusion. In each

infusion, I observed that while institutional entrepreneurs engaged in meaning making among themselves (particularly during rational framing), they spent the majority of their time fostering meaning making among members of the immediate audience. These meaning-making processes relied on key *strategic grafting* and *co-opting* processes. *Strategically grafting*, or building on the earlier rhetorical justifications and related communications, and *co-opting* like-minded academic researchers, success stories, and other forms of data helped entrepreneurs to effectively and focus their current rhetorical justifications on gaining pragmatic legitimacy, and facilitating meaning making, according to specific interests and objectives.

Over time, these combined processes were instrumental in facilitating meaning-making across the key stakeholder groups, in order to generate wider internal ESN diffusion. In chapter 7, I will continue to explore the nature of internal ESN diffusion in light of these rhetorical legitimation and institutional dynamics, and will focus more on how rhetorical legitimation and institutional complexity shape internal diffusion dynamics and outcomes.

7 DISCUSSION

My key contribution in this research is to develop a conceptual model of how new IT innovations diffuse within organisations (Figure 7.1). I illustrate this phenomenon using the case of ESN diffusion within iSource to highlight the specific mechanisms and processes by which innovations adopted at an organisational level, are justified, legitimated and diffused at the micro-level of everyday work within the organisation, as well as the enabling and precipitating dynamics that condition and trigger these mechanisms.

In this section I will discuss the ways in which this conceptual model advances theory in a number of IS research domains, namely its role in explaining how new IT innovations and their related macro-level organising visions are translated into intra-organisational theorizations and front- line practices. I specifically show how top-down rhetorical legitimation during intra-organisational theorizing drives the process of legitimating new IT ontologies, and de-legitimating competing technologies, by respectively narrowing and widening multi-dimensional technical, cultural and political product-organisation institutional gaps (infusion variance). Further, by conceptualizing legitimation as a process that is embedded in wider, often competing institutional logics, my findings also illuminate how organisational actors proactively navigate institutional complexity and conflict at the micro-level (Pache and Santos, 2010; Greenwood et al., 2011).

7.1 Internal Diffusion Model

The primary goal of my conceptual model of internal IT diffusion is to illuminate the process of how field and organisational level conceptualizations of new IT innovations are transformed into front- line

practice (Figure 7.1). In pursuing this goal, I importantly add to the underserved area of research into

top- down attempts to facilitate this IT translation process by illuminating the role of managers

rhetorical legitimation actions (Nielsen, Mathiassen and Newell, 2014; Reay et al., 2013).

This model extends several areas of organisational and IS research. Following the linguistic turn in the

study of IT evolution phenomena (Nielsen, Mathiassen and Newell, 2014; Scarbrough, Robertson and

Swan, 2015; Hsu, Huang and Galliers, 2014), this model demonstrates that the examination of

rhetorical legitimation accounts around a digital innovation is well suited to understanding how digital

innovations are appropriated and evolve over development, implementation and use in complex

organisational settings. Internal diffusion therefore offers an "extended design" view that is able to

capture how digital innovations like ESN are shaped over time and across multiple contexts (Pollock

and Williams, 2010; Karasti, Baker and Millerand, 2010). This "extended design" view is consistent

with Leonardi's (2009) broader call for "synchronous" IS studies that empirically and theoretically

illustrate how technology co-evolves with organisational structures, or how socio-technical activities

over technology development create the interpretive conditions that shape the activities within

implementation or use. Leonardi (2009) particularly states that,

> *'As the perceptions held by actors, their appropriations, and their interaction patterns change to create*
> *a new sociocultural matrix in which the interaction of new groups now seems appropriate, negotiations*
> *take on new meanings, closure occurs for different reasons, and momentum of a particular technological*
> *design or use strategy is justified.'*

Similar to these propositions, the internal diffusion model conceptualizes technological evolution as a

process where material technological features are shaped by stakeholder negotiations, values and

practices, and vice versa. The model is specifically rooted in the view that multiple, simultaneous

technical, political and cultural misalignments are critical barriers to the standardization and scaling of

IT innovations in complex settings. It further extends these roots by illustrating that discursive micro-

processes such as rhetorical legitimation actions can gradually achieve the alignment and collective

meaning making that is necessary for the successful diffusion of new IT innovations (Vaast and Walsham, 2005; Leonardi, 2007; Orlikowski, 1996).

By exploring how ESN gradually diffused across different communities of actors at iSource, I was able to show how the rhetorical justifications inherent in the communications of managers facilitated meaning making and internal diffusion through a cumulative and iterative process of de-legitimation and legitimation.
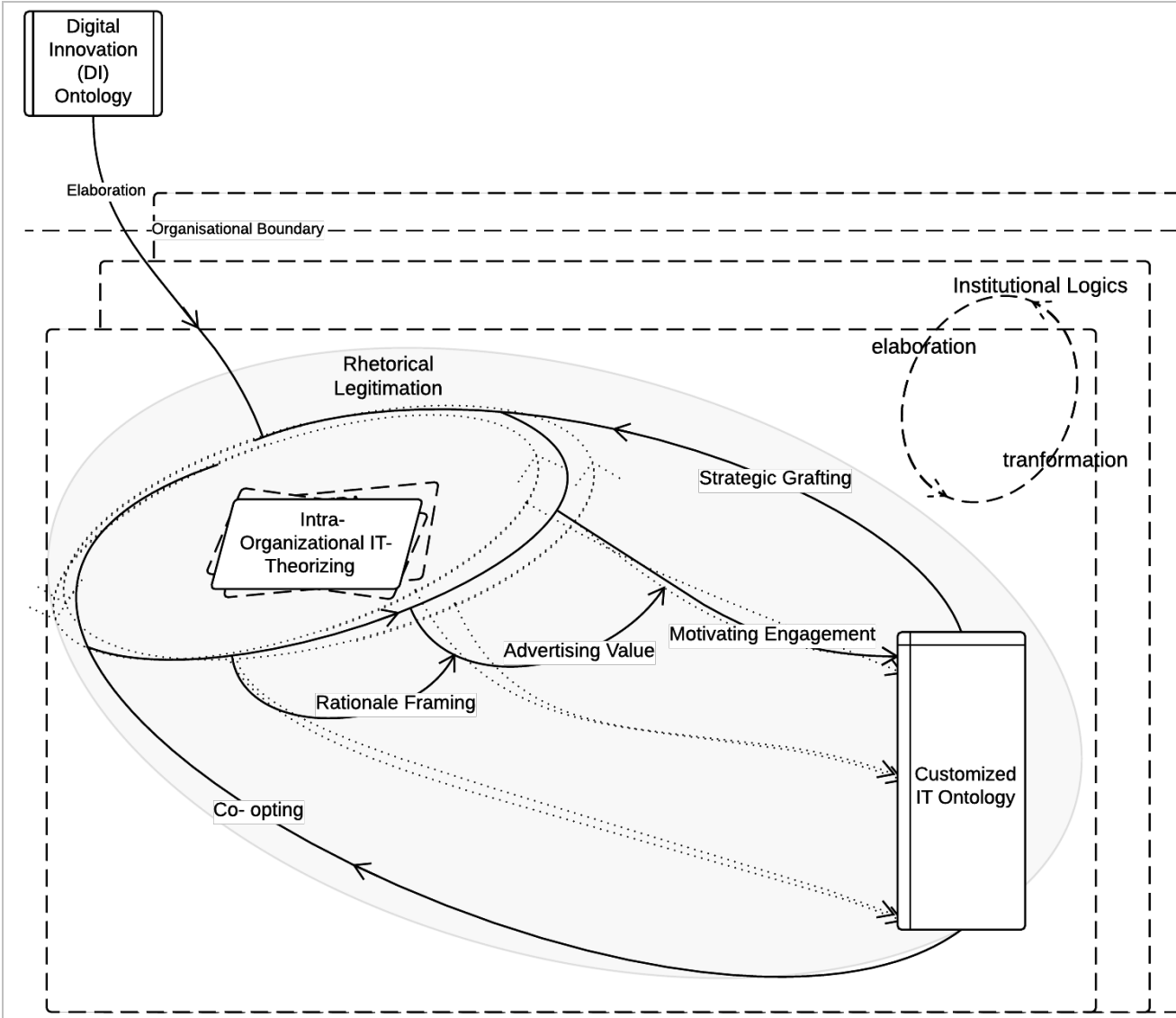
Figure 7. 1 Model of Internal IT Diffusion

The de-legitimation infusion is consistent with Garud and Karnøe (2001) discussion of the need to "disembed", "unlearn" or "discredit" existing ways of working in order to effectively mobilize support for new ways of working and technological innovation. Similar to Garud and Karnøe (2001), I observed that managers firstly engaged in intra-organisational theorizing to de-legitimate the technology and practices that were in competition with ESN, which in iSource's case, was email misuse. The model extends Garud and Karnøe's (2001) propositions by illustrating how and what information is communicated to effectively encourage the process of disembedding. The de-legitimating process unfolded in similar phases to legitimation, and was a key part of the cumulative process to legitimate ESN, as managers strategically grafted and co-opted email de-legitimating theorizations and success stories.

The legitimation process is consistent with Zilber (2006) view that the translation of an object is a process where higher level artefact ontologies (form and meaning) are iteratively modified and refined as they become more local. Over these iterations, managers importantly helped to connect the macro-level theorization of ESN functionality and usefulness to the intra-organisational level of iSourcers day-to-day work. This *intra-organisational theorizing* is similar to Swanson and Ramiller's (1997) theory of an organising vision for IS innovation, which is central to enabling the interpretation, legitimation, and mobilization of resources necessary for the wider diffusion of the IS innovation.

However, intra-organisational theorizing was an ongoing process of modifying and refining the organisational level vision for ESN to suit front- line employees in their immediate contexts. It therefore importantly shaped the standardization and scaling of the diffusing innovation's IT ontology (form (meaning) and function (material features), as the innovation was appropriated by different communities of actors. It is also locally focused and gradually constructed to suit the immediate needs of diverse communities of organisational stakeholders.

Managers interpreted ESNs macro-level vision to micro-level theorizations by employing justifications to legitimate ESNs ontology in relation to salient local concerns. In conceptualizing these shifting local concerns and their related theorizing in relation to distinct institutional logics, my model shows that this process unfolded in the following distinct infusions: (1) Legitimating ESN use to *"work smarter together by eradicating email misuse" (email de-legitimation)* (2) Legitimating ESN use to *"openly share expertise and knowledge",* (3) Legitimating ESN use to *"find the right information at the right time"* and (4) Legitimating ESN use to *"work smarter together by focusing on customer needs".*

The intra-organisational theorizing in each of these infusions additionally unfolded in three cumulative and relatively sequential legitimation phases: *(1) rationale framing (2) value advertising, and (3) motivating engagement.* Over these phases, there was comingling and overlap among prevailing institutional logics and ESN infusions, as managers *strategically grafted* on other intra-organisational theorizations and *co-opted* people, ESN functions, and practices from other infusions, to reinforce their own justifications and interpretations of ESN. Strategically *grafting*, or building on the earlier infusions' business cases, and *co-opting earlier* ESN ontologies and like-minded academic researchers helped managers to effectively focus their arguments' warrants, claims and data on gaining pragmatic legitimacy and facilitating meaning making across heterogeneous communities of iSourcers.

Over time, these legitimation processes helped to consolidate the gains from distinct IT infusions across the organisation, while helping to drive continuing organisational and technological change efforts. In the following sections, I provide more detail on managers' communications in each of these phases and and highlight more specific contributions to IS diffusion and legitimation literature. My "extended design" view also addresses the need for more studies of how IT frames co-evolve with technology and organisational change (Karasti, Baker and Millerand, 2010). By extension, my model importantly confirms and extends translation researchers view that on-going framing practices play a crucial role

in resolving technical, cultural and political misalignments that emerge between diffusing innovations and organisational stakeholders.

7.1.1 Rationale Framing and Strategic Grafting

My analysis revealed that the rationale framing phase was especially crucial for directly promoting political alignment, and indirectly, technical and cultural alignment during internal IT diffusion. Political misalignments emerge when stakeholders use symbolic actions like rhetorical framing to mobilize resources and support for their self-interested ideas for appropriating the diffusing innovation (IT idea) (Jarzabkowski, Matthiesen and Van de Ven, 2009; Yoo, Lyytinen and Berente, 2007; Ansari, Fiss and Zajac, 2010). Stakeholders' rhetorical legitimation actions in the rationale framing phase particularly confirm Ansari, Fiss and Zajac's (2010) hypothesis that actors' on-going and dynamic discursive framing of IT ideas foreground competing values and objectives for appropriating the IT innovation (counter- mobilizing). In turn, political counter-mobilizing helps to secure the resources and support needed for subsequent technical and cultural alignment.

In this phase, managers took the first step to theorizing the new practice in relation to their local circumstances by justifying and explaining their business case for ESN in ways that addressed their targeted audiences most immediate and salient values, objectives and needs. These justifications also helped to create a sense of urgency for the proposed business case and related ESN ontologies. Within distinct infusions, this business case was the root of intra-organisational theorizing, as it was consistently reflected and reinforced in the justifications of subsequent value advertising and motivating engagement phases. Across infusions however, the business case was the center of the counter-mobilizing discursive contestation and negotiation processes, and thus, enabled political alignment (Ansari, Fiss and Zajac, 2010).

Over time, intra-organisational theorizing generated collective meaning and engagement from a smaller subset of employees around distinct business cases. For example, business technologists collectively engaged around an ESN business case that helped them to "openly share expertise and knowledge", consultants engaged around an ESN business case that helped them to "find the right information at the right time", and all key stakeholder groups, including senior management collectively engaged around a business case that helped them to "work smarter together".

As the ESN ontologies related to these earlier business cases became more well- known and taken for granted, institutional entrepreneurs *strategically grafted* on the rhetorical justifications used to justify the business case with another audience, in order to pragmatically legitimate newer business cases and ontologies with different communities of actors. Strategic grafting therefore enabled managers to direct mutual organisational and technological change during internal IT diffusion. Strategic grafting built on earlier infusions with somewhat similar aims and means (institutional logics) but very different business cases to legitimate alternative ESN ontologies with different organisational communities. For instance, middle managers that were recruited to the steering team in subsequent infusions, gained pragmatic legitimacy for their business cases by strategically grafting on the "professional" business cases of working smarter and eradicating email misuse, as well as their interpretation of ESNs wider organising vision.

Strategic grafting primarily had the effect of helping to legitimate business cases that aligned to the objectives and practices of specific communities of actors. After grafting on early business cases, managers locally reframed these professional justifications to advance business cases and ontologies that effectively appealed to the "community" and "market" needs that were salient to different iSourcers at different points in time. As managers continually encouraged iSourcers to view the existing ESN ontology through the lens of these new business cases, iSourcers gradually became more receptive to the idea of appropriating ESN according to professional-community and professional-market logics.

With this, they also gradually came to view co-mingled professional-community and professional-market values and objectives as important and legitimate. For instance, managers grafted on ESNs external organising vision when the referenced the third whitepaper's research on the use of enterprise social networks to advance professional ESN business cases and ontologies within iSource.

Strategic grafting on earlier business cases also had a de-legitimating effect. In grafting on the business case that was used to initially de-legitimate email, managers in each subsequent infusion continued to de-legitimate email by explaining that their business case was sensitive to the professional objective of using email to work smarter *by* eradicating email misuse. Managers also directly eroded legitimacy for the business cases that they strategically grafted on, by explaining how the communications and ESN appropriations related to these earlier business cases did not fit the objectives and needs of the current business case and the immediate audience. For instance, strategic grafting by CSPs during the business technologist infusion helped to de-legitimate solely professional aims and means and promoted a new loosely coupled professional-community business case and ESN ontology.

Both effects of strategic grating are consistent with translation researchers assertion that entrepreneurs may drive cultural and technical alignment by framing change as necessary for reinforcing existing ways of working (Azad and Faraj, 2011; Orlikowski and Gash, 1994; Swan et al., 2010). Although, these researchers were studying IT innovations at a field and organisational level, I similarly observed that strategic grafting and reframing enabled entrepreneurs to tailor the cultural conformity pressures that tended to restrict technical and cultural alignment, to favour their business cases and ESN appropriations. Moreover, re-framing and de-legitimating strategically grafted business cases in new infusions confirm Ansari, Fiss and Zajac's (2010) hypothesis that entrepreneurs can create opportunities for technical and cultural alignment during internal diffusion by directly contesting competing frames and IT ontologies.

In creating these opportunities over time, these rhetorical actions also confirm Ansari, Fiss and Zajac's (2010) hypothesis regarding the role of counter- mobilization in the standardization of internally diffusing innovations. The rhetorical legitimation actions around strategic grafting in this phase gradually created margins of negotiation that enabled heterogeneous stakeholder communities to compromise on an IT ontology that best satisfied each of their needs. Specifically, the cumulative effect of strategic grafting along with the consistent co-mingling of market and community concerns with professional concerns gradually dampened the contestation that was limiting standardization. As a result, although each infusion had very different business cases, ESN was eventually appropriated with some "professional" commonalities in form and function.

This is best illustrated in the final infusion's ("wider diffusion") rhetorical legitimation practices. Here, managers strategically grafted and re-framed professional (email de-legitimation), professional-market and professional- community logics, to nudge heterogeneous communities of iSourcers to collectively agree that the previous infusions' business cases and ontologies were not fit for purpose. In turn, iSourcers within these communities gradually became more receptive to the rationale that using ESN to *"work smarter together to satisfy customer needs"* was in their best interests.

7.1.2 Value Advertising

The value advertising phase was important for reinforcing the constructed business case and supporting technical alignment during internal IT diffusion. Knowledge- based translation perspectives demonstrate that knowledge gained from earlier experiences with the diffusion IT innovation or related technologies, plays a crucial role in how actors adapt internally diffusing IT innovations (technical alignment) to drive meaning making, standardization and scaling (Kohli and Kettinger, 2004; Strang and Macy, 2001; Ansari, Fiss and Zajac, 2010). Stakeholders' rhetorical legitimation actions in this phase importantly add to this literature by illustrating how actors make sense of vicarious knowledge

and experiences, and how this knowledge is filtered and framed during internal diffusion (Volkoff, Strong and Elmes, 2007; Scarbrough, Robertson and Swan, 2015; Hsu, Huang and Galliers, 2014).

In this phase, managers built on the urgency generated from the rationale framing phase and reinforced the business case by justifying the potential benefits or losses that would come with appropriating the innovation according to the business case. Over time, justifying these benefits helped managers to reduce uncertainty and spread knowledge of how ESN should be appropriated to best satisfy the needs of the immediate audience. Co-optation processes were particularly instrumental in focusing these justifications on reducing technical misalignment, and consequently, driving mutual organisational and technological adaptation.

Managers co-opted the help of like-minded and influential external and internal actors to help communicate and reinforce their justifications to pragmatically legitimate business cases with particular audiences. Co-opting external actors at iSource involved the straightforward task of inviting respected industrial and academic researchers to help reinforce how the ESN business case and ontology is responsive to the substantive needs of immediate communities of actors. Co-opting internal actors to produce the same effect was however less straightforward since it involved having to recruit CSPs and champions from the target audience onto the steering team and offering them some amount of decision- making rights.

Co-opting internal actors was also managerially more problematic since offering decision-making rights to CSPs and champions that were closely related to particular audiences resulted in goal displacement. Moreover, the co-mingling of logics that was generated from strategic grafting actions, also created more opportunities for goal displacement (Selznick, 1949; Rao, Morrill and Zald, 2000). For instance, CSPs and champions respectively advanced community and market objectives that had the potential to radically shift ESN appropriation away from the scientific community's intended purpose of "working smarter". However, the continued communication of business cases that grafted

on professional objectives ensured that managers also communicated ESNs professional value alongside more local community and market values. Strategic grafting was therefore crucial for avoiding goal displacement during co-optation.

In concert with continual communication of grafted business cases, managers also co-opted success stories and surveys from earlier infusions to pragmatically legitimate their own business cases and ontologies, and failures and surveys to similarly de-legitimate existing ESN ontologies. This kind of co-opting was crucial for constructing justifications that effectively gained pragmatic legitimacy since it provided the data to support managers rhetorical claims about ESNs value. Managers specifically co-opted data that was related to the business cases that they grafted. As a result, their justifications of ESNs value promoted the replication of earlier successes that were responsive to the immediate needs of the receiving audience. Justifications also opposed the replication of ESN features that were more or less universally considered to be less successful. This enabled them to not only frame these features as inappropriate for iSource as an organisation, but also enabled them to communicate that less successful features and their related business cases and ontologies were counter to the needs of the immediate local audiences.

Along with strategic grafting, co-optation was also a vehicle for standardizing the ESN ontology across heterogeneous communities of actors, since it enabled the cumulative generation of meaning around the the diffusing ESN. As the ESN scaled, the business case and ontology that eventually gained wider audience acceptance was rooted in the rationale, practices and material features of common successes and failures. For instance, in the last stage of wider diffusion, managers promoted and successfully gained support for the professional objective of "working smarter to satisfy customer needs" by co-opting success stories and survey data from business technologist's SAP community, consultant's customer- focused communities, and the scientific community's yammer mash-up. In highlighting

ESNs value in relation to these successes, managers also explained the rationale behind these earlier business cases and spread knowledge of how to appropriate ESN to gain similar benefits.

The value advertising phase accordingly illustrates a similar process to that observed by Francalanci and Morabito's (2008) field level findings, and hypothesized as relevant to internal diffusion by Ansari, Fiss and Zajac (2010), where cumulative knowledge transfers from earlier to later adopters drives standardization in pluralistic settings. The pragmatic and co-mingled rhetorical justifications around co-optation specifically adds to calls for more research into how vicarious knowledge around internally diffusion IT innovations is filtered and framed over time (Scarbrough, Robertson and Swan, 2015; Hsu, Huang and Galliers, 2014).

Over time, co-optation effected a form of managed coercion towards remaking new IT innovations in the image of "working smarter" despite the push back to conform to local audiences' community and market needs. This is similar to coercion strategies advanced by legitimacy researchers as a way to enhance cognitive legitimacy for new field level innovations in pluralistic settings (Tolbert and Zucker, 1983; Barley and Tolbert, 1997). However, coercion in this internal context was more inclusive, as the coercive justifications accommodated and built on competing business cases and ESN ontologies.

7.1.3 Motivating Engagement

The motivating engagement phase was crucial for ensuring that ESN appropriation was in line with the advertised value, and supporting cultural alignment. The translation literature highlights that cultural misalignments during internal diffusion are inevitable since pre-existing cultural security mechanisms or values, objectives and practices color organisational actors' interpretations of what IT appropriations are important and acceptable (Wang and Swanson, 2007; Henfridsson and Yoo, 2013; Garud, Hardy and Maguire, 2007). The rhetorical legitimation actions in this phase importantly add to this literature by illustrating how institutional entrepreneurs helped to resolve cultural misalignments by effecting a

context-dependent balance of organisational and technological adaptation (Nielsen, Mathiassen and Newell, 2014; Smets, T. Morris and Greenwood, 2012; Ansari, Fiss and Zajac, 2010).

In each infusion, managers looked to stabilize the organisational and technological changes that strategic grafting and co-opting had planted in the minds of the receiving audience, by encouraging iSourcers to use ESN features that were specially adapted to fit particular business cases and deliver advertised value. Accordingly, these rhetorical justifications gradually promoted mutual organisational and technological adaptation and collective meaning making, as they did not solely adapt ESN to the culture of the receiving audience, but rather adapted ESN to grafted business cases, and co-opted interpretations of ESNs value. In this way, these rhetorical justifications directly helped to construct an ESN ontology that was culturally responsive to the needs of all groups by gradually transforming the logics associated with the technology, and the logics guiding the activities of key communities of actors, to be more "professionally" focused on innovation and customer satisfaction.

Unlike the other phases of intra-organisational theorizing that were in some way focused on de-legitimating competing ESN ontologies, this phase was solely focused on de-legitimating competing ESN technologies, specifically email, and legitimating new ESN ontologies. This focus seemed to be a critical step to facilitating bottom-up collective meaning making and scaling of ESN. My analysis identifies two main ways that managers encouraged iSourcers to engage with ESN: by justifying the co-location of members of the target audience in common ESN communities, and communicating how ESN delivers context-centric benefits in training sessions.

By consistently justifying new ESN behaviours in each infusion, I saw that managers were cognizant of the role that continually articulating a technology's rationale and reality plays in enhancing its embeddedness and comprehensibility within a local context (Nielsen, Mathiassen and Newell, 2014). As a result, managers also attempted to disembed the email-centric behaviors that were inhibiting the receiving audience's ability to make sense of ESN. As managers pro-actively encouraged iSourcers to

use ESN, they were nudging them to actualize their mindfully constructed business case and value propositions by performing new ESN- centric behaviours.

This focus on encouraging iSourcers to perform new behaviours around material ESN features helped to achieve three key purposes. Firstly, it facilitated the unlearning and disembedding of competing technological practices in a way that simply explaining the business case and benefits of moving away from these practices could not. By justifying new ESN behaviours in each infusion with respect to the professional aim of improving the quality of products and services, and supporting this with new organisational structures and processes such as the email free certification programme and email reduction targets, managers consistently communicated that email was not fit for purpose.

Second, individual iSourcers comprehensibility of ESNs business case, value and overall ontology increased as they appropriated ESN in their everyday work. Established sensemaking theory suggests that in this case, individuals, and communities of actors with different cultures are likely to enact new behaviours in different ways (Weick, 1995). This was a problem for the project leaders since they knew their aim was to encourage standardized and distributed ESN use as a permanent alternative to email. This was crucial to both their strategic employee satisfaction engagement objective, and to the viability of their ESN service and product offering. It was therefore very important for managers to foster collective meaning making around ESN features and behaviours in order to construct a standardized and scalable ESN ontology.

Managers facilitated this process in each infusion by encouraging iSourcers to appropriate ESN according to the business cases and value propositions that they developed in the previous phases. In doing so, managers directly helped to foster collective meaning making within distinct communities of actors and across different communities by respectively, using justifications to re- connect these front-line ESN features, behaviours and supporting structures back to larger, strategic departmental (community and market) objectives, and larger organisational objectives (professional). This enabled

emergent micro-level ESN behaviours to become somewhat established with senior management, and in turn, also re-established at a more macro-organisational level through the creation of formal organisational structures and procedures.

For instance, managers encouraged business technologists to have open discussions with each other and CSPs in open and un-moderated ESN communities like the social ideation space and departmental spaces. They supported these features with appropriate organisational structures like ESN management communities for middle managers, and business processes like community approval processes. These features and structures reflected professional-community logics since they were simultaneously responsive to technologists "community" need for open knowledge sharing, and the change team's "professional" need to ensure that communities had clear objectives and management.   Managers employed similar justifications with consultants whose activities were guided by a "market" logic, but advocated for more "professional- market" client-centric spaces, and supported them with more "market" focused organisational structures and practices such as ESN and email usage KPIs and targets, and incentive schemes. In this way, the front- line behavioural transformation resulting from gradual diffusion possibly disturbed and shifted broader organisational and group values and objectives towards being more "professional" (Thornton and Ocasio, 2008).

Accordingly, in the final stage of diffusion (H4), managers consolidated the ESN successes, failures, and organisational structures and procedures from previous infusions to construct and generate wider diffusion around "professional" customer satisfaction and innovation aims.. Managers were able to successfully standardize ESN with a wider audience around this consolidated focus since it was constructed from the cumulative micro-level activities of different groups, and was thus more aligned to the immediate requirements and needs to the key communities of actors. This finding is somewhat consistent with Ansari, Fiss and Zajac's (2010) hypothesis that wider standardization requires early

cultural alignment (H1,H2, H3), but suggests that successful standardization requires gradual and cumulative cultural alignment across key stakeholder groups.

Finally, consolidating technological and organisational features over infusions may have helped to position the no-email change initiative as one that was designed by operational employees themselves, thus, enabling a degree of bottom-up institutional change (Nielsen, Mathiassen and Newell, 2014; Reay et al., 2013). As consolidations were made across these infusions, strategic grafting and co-opting helped to facilitate compromises, and ensured that these compromises were aligned to wider objectives and local contexts. As demonstrated in the final diffusion stage successful internal diffusion, may be achieved by re-framing consolidated technological and organisational features as bottom-up, and supporting these justifications with context- centric material features, such as user driven community-centric features and local leadership teams.

This usefully suggests that top- down, contextual organisational and technological adaptation (Nielsen, Mathiassen and Newell, 2014; Reay et al., 2013) is likely to be successful when managers employ rhetorical justifications to re-frame adaptations as bottom-up change, and support these justifications with organisational and technological features that reflect this bottom-up focus.

7.1.4 De-legitimation and Legitimation of Technological Ontologies

The phases discussed so far in this chapter were vital to the internal diffusion of ESN, as they played a crucial role in driving cumulative processes of de-legitimating competing, established technologies and legitimating or aligning new innovations with the receiving audience. Whereas legitimation is inextricably linked to institutionalization or the generation of comprehensibility, de-legitimation is a core part of de-institutionalization (Suddaby and Greenwood, 2005; Lawrence and Suddaby, 2006).

The institutional diffusion literature has established that de-institutionalizing (Lawrence and Suddaby, 2006), disembedding (Garud, Hardy and Maguire, 2007), or unlearning (Becker, 2010) established

technologies that are similar to the new innovation is a crucial step for institutionalizing or generating comprehensibility for a new technology. Importantly, established technologies inhibit actors willingness and ability to create new meanings around new technologies by directly competing for audiences' cognitive attention. Despite this, the IS literature has yet to explicitly examine the process of technology de-legitimation, and particularly, whether and how this process can be managed from the top- down (Lawrence and Suddaby, 2006; Garud and Karnøe, 2001).

My internal IT diffusion findings address these gaps by illuminating the process and content of managers efforts to de-institutionalize email at iSource. At iSource, managers' efforts to legitimate ESN were initiated and actively shaped by an explicit focus on de-legitimating email and its misuse. Consistent with institutional diffusion research (C. Oliver, 1992; Garud and Karnøe, 2001), managers did this by claiming that email use was ineffective and inefficient, incompatible with local values and objectives, and that shifting to ESN-driven practices could deliver significant potential value. Managers successfully directed this process from the top, and encouraged iSourcers to develop particular meanings around these claims by employing rhetorical justifications to pragmatic legitimacy in similar rationale framing, value advertising and motivating engagement phases. They specifically initiated their intra-organisational theorizing around the business case of using ESN to "work smarter by eradicating email misuse", strategically grafting on practitioner and academic rhetorical justifications on the negative effects of email overload, co-opting academic researchers and surveys to highlight the value of reducing email overload and misuse, and consolidating managers' experiences with the smart inbox and yammer mashups to motivate iSourcers to try alternative, ESN-driven practices.

The process of email de-legitimation also unfolded in parallel with ESN legitimation, and importantly helped to construct and reinforce ESN legitimation processes as managers in each subsequent infusion used strategically grafted and co-opted data from the email de-legitimation infusion to frame their locally focused justifications as a wider professional imperative of "working smarter". A consistent

focus on professional objectives was crucial to eventually generating collective meanings across different communities of iSourcers. Whereas IT legitimation is aimed at increasing IT-organisation alignment (Suddaby and Greenwood, 2005), IT de-institutionalization is a process of rhetorical legitimation, aimed at increasing the degree of political, cultural and technical misalignments between established technologies and the target audience. Over time these justifications gradually promoted meaning making that not only transformed the receiving audiences view of what were important means and aims to pursue (logic), but also prompted them to view email and its inscribed institutional logic as inappropriate and dissonant from their prevailing logic.

Another interesting observation with regard to the process and content of email de-institutionalization justifications was the consistent use of primarily logos appeals and secondary pathos appeals to pragmatic legitimacy across each of the legitimation phases. Accordingly, along with appeals to the the audiences local circumstance, managers were able to successfully increase email's misalignment by focusing their justifications on highlighting how elements of email's ontology were not in the audience's efficiency and effectiveness interests. They primarily gained pragmatic legitimacy by detailing email's track record of generating unfavourable local outcomes such as email overload and employee dissatisfaction (exchange legitimacy) (Suchman, 1995). These findings are consistent with Green's (2004) legitimation sequence where *'pathos appeals help direct behavior away from the status quo [then] logos appeals link new actions and behaviors to effective outcomes'* (p.661). However, my findings illustrate that in the case of de-legitimation, actors simultaneously employed logos and pathos appeals, and foregrounded logos appeals.

On the other hand, although email de-legitimation was intimately linked and helped to shape subsequent ESN legitimation efforts, the rhetorical justifications used to legitimate ESN followed a different pattern. Managers gradually employed primarily pathos appeals and secondary logos appeals to pragmatic legitimacy across each of the legitimation phases following email de-legitimation. With

this, managers generated alignment for ESN by locally focusing their justifications on showing how ESN was in the immediate audience's interests. They primarily gained pragmatic legitimacy through direct exchanges as with de-legitimation but also consistently highlighted and advocated for the involvement of local, front-line iSourcers in the ESN steering structure (influence legitimacy) (Suchman, 1995). These findings indicate that ESN legitimation unfolds with simultaneous logos and pathos appeals to email de-legitimation. Unlike de-legitimation processes however, ESN legitimation justifications foreground pathos appeals. This is especially evident in the wider diffusion stage where managers' rhetorical justifications solely employed pathos appeals. The sole use of pathos appeals was also indicative of the simplification of rhetorical arguments, which suggested that ESN was becoming more comprehensible towards the end of my research period (Czarniawska, 2009).

Another inconsistency between the IS legitimation literature and these findings was the absence of ethos appeals to moral legitimacy. For instance, Green (2004) proposed that following the use of pathos and logos appeals, *'Ethos appeals lock in new behaviors and hinder movement from the new equilibrium'* (p. 661). Similarly, studies suggest that field level theorizations of change such as organising visions help to simultaneously gain pragmatic legitimacy by positioning the new innovation as a solution to salient organisational failings, and moral legitimacy by aligning abstract system features with prevailing normative prescriptions (Strang and Meyer, 1993; Swanson and Ramiller, 1997). As discussed in chapter 4, my data analysis revealed that although managers did not make explicit appeals to moral legitimacy in their surface communications, some managers believed that their overall justification efforts over time, had the effect of indirectly gaining moral legitimacy. This suggests that moral legitimacy grew slowly and indirectly as a consequence of continuous attempts to construct pragmatic justifications that were aligned to the immediate audiences' values and objectives. Accordingly, although the core process of intra-organisational IT theorizing departs from the established theory of field- level "theorizations of change" in numerous ways, both theories embrace

the view that simultaneous appeals to pragmatic and moral legitimacy help to enhance the micro-organisational comprehensibility of internally diffusing innovations.

However, since moral legitimation helps to stabilize and embed new innovations, the lack of explicit attention to moral legitimacy during internal diffusion was beneficial to the generation of collective meaning making across competing communities of actors. By not attempting to fully embed and stabilize the ESN ontologies that emerged from distinct infusions, managers left ample margins of negotiation for strategically grafting, co-opting and consolidating ESN ontologies across infusions.

7.2 Summary of Discussion

My discussion of the internal diffusion model shows that managers can use rhetorical legitimation practices to influence how ESN's related practices and organising visions are integrated into the front-line activities and behaviors of organisational actors. Similar to Greenwood, Suddaby and Hinings' (2002) and Swanson and Ramiller's (1997) findings that linguistic theorizations such as organising visions are important for the successful diffusion of technological practices on an organisational level, I found that intra-organisational theorizing was the core driver of ESN's internal diffusion process. Unlike organisation level theorizations, intra-organisational theorizing was an ongoing process of rhetorically elaborating and refining the organisational level theorization associated with ESN, with the interests and front- line practices of key communities of actors. In this way, managers used this theorizing process to standardize and scale the diffusing innovation's ontology (form and function) in particular ways, as they rhetorically justified different ESN appropriations with different communities of actors (infusions). Intra-organisational theorizing unfolded in three relatively sequential and cumulative phases of legitimation within each infusion: *(1) rationale framing (2) value advertising, and (3) motivating engagement.*

In *rationale framing*, managers initiated political alignment by strategically grafting on the intra-organisational theorizations of competing infusions in order to construct and rhetorically justify the business case for ESN with their immediate audience. In *value advertising*, managers co-opted powerful internal and external individuals, and success stories, failures, and survey data from other infusions in order to justify ESNs value and facilitate the transfer of knowledge on how to use ESN to reap these benefits. This phase was therefore primarily focused on technical alignment.

Along with strategically grafting theorizations and co-opting resources across infusions, managers gradually encouraged collective meaning making across different communities of actors by *motivating engagement* for consolidated ESN ontologies, and supporting organisational structures and procedures. In motivating engagement, manager reinforced and encouraged cultural alignment by encouraging the target audience to use features according to co-mingled logics that embraced both their local interests and wider organisational interests. As different audiences used the features according to these co-mingled logics their interests shifted to be more uniform, and managers were able to employ a uniform set of justifications to encourage wider participation and diffusion. Managers employed specific types of rhetoric in each of these phases to widen (de-legitimate) or narrow (legitimate) the political, technical and cultural institutional misalignments between specific technological features and the logics guiding the interests and activities of distinct communities of actors.

Although de-legitimation and legitimation processes unfolded in parallel, managers initiated their ESN legitimation efforts by employing rhetoric to de-legitimate email. In de-legitimating email, managers primarily employed logos appeals to pragmatic legitimacy to disembed actors from their existing email driven activities and behaviours. These appeals prioritized highlighting and explaining how reducing email misuse would help iSourcers to be more efficient and effective at the work activities. In directly legitimating ESN, managers employed primarily pathos (emotional) appeals to pragmatic legitimacy to highlight and explain how using ESN would help actors to achieve their personal and professional

ambitions. Over time, concurrent de-legitimation and legitimation efforts had the effect of motivating actors not to replicate activities and behaviors associated with email in their ESN usage behaviours, and enabling them to better rationalize and make sense of ESN.

Overall, these findings have substantive implications for both academic and practitioner fields. The effect of the justifications across intra-organisational theorizing phases particularly confirm Ansari, Fiss and Zajac's (2010) hypothesis regarding the role of technical, cultural and political alignment on enabling collective making around IT ontologies within and across infusions. The way in which different communications were employed across different infusions answer calls by Scarbrough and Swan (2015) and Hsu, Huang and Galliers (2014) to clarify how the vicarious knowledge necessary for effective institutional alignment is filtered and framed over time. The variations in rhetorical types between de-legitimation and legitimation infusions has implications for institutional diffusion research that has so far not focused on the dynamics of IT de-legitimation (Mignerat and Rivard, 2009; Nielsen, Mathiassen and Newell, 2014; Becker, 2010), and has only addressed field and organisational examinations of IT legitimation (Nielsen, Mathiassen and Newell, 2014; Mignerat and Rivard, 2009). These findings also have important implications for the study and practice of developing, implementing and using digital innovations, such as ESN (Leonardi, 2009; Orlikowski, 1996; Monteiro et al., 2012; Brynjolfsson and A. Saunders, 2010). In the next and final chapter, I will these implications of my conceptual model in more detail.

Chapter 8 Implications and Contributions

In this thesis I have developed a theoretical model of internal diffusion for understanding how newly-introduced digital innovations adopted at an organisational level are translated and integrated into organisational actors' front- line activities and behavior, how this process unfolds in a pluralistic setting, and how it may be managed from the top of the organisation. My model importantly does this by tracing the processes of de-legitimation and legitimation that respectively widen and narrow the institutional misalignments that inevitably emerge when new innovations enter pluralistic settings. In this chapter I discuss the implications of the model developed through my investigation of ESN adoption at a technology services firm, iSource. I will consider the implication of this model for managers interested in shaping the appropriation of new digital innovations to achieve desirable outcomes. Finally, I will explain the contributions of my research to information systems and organisational research, and discuss possible directions for future enquiry.

8.1 Managerial Implications- Looking Back at Practice and iSource

I first learned of iSource's ESN adoption efforts at a forum on the digital work, where participants from fortune 500 companies as well as a number of established SMEs around the world and in various industries, would meet regularly to exchange knowledge on digital work. Over a 4 year period, the key point of discussion at this forum was adoption strategies for enterprise social network systems. What was most striking about early discussions at this workshop, was the disproportional amount of technical focus on adapting different features, and the uniformity of views on ESN benefits, the adoption strategies, and the challenges faced, across large, established firms as well as less established SMEs. Consistent with my review of ESN in chapter 1, participants consistently spoke about using organic

ESN growth strategies to enhance collaboration, knowledge sharing and employee satisfaction, and complained about a lack of resources, and support from senior management and key stakeholder groups because of uncertainty about ESNs value.

Consistent with my review of the institutional diffusion literature where I highlighted that innovations may be simultaneously aligned with the culture of some groups and misaligned with others, participants reported that with the organic adoption approach, ESN participation was clearly more intense in certain departments than others. It was reported that support groups like human resources, and internal communications that had a more *"collaborative"* culture identified with ESNs "open" ways of working and readily appropriated ESN to support their work. While other operational groups like sales, risk management, and finance that were more profit and efficiency focused, resisted ESN ideology of openness by completely rejecting or loosely coupling ESN in their activities.

The few exceptions to this rule were smaller firms and SMEs who reported widespread participation from organic growth strategies. Larger firms recognized the value of these tactics for driving more durable, intrinsic ESN use, but often expressed concerns about the negative consequences of technological drift. Those larger firms that tried organic growth strategies reported that they needed to have more control over the trajectory of ESNs use in order to accurately measure ESNs value and gain buy in from senior staff and key stakeholders. Often times these profit- focused groups exhibited more political power to shift wider support and resources away from ESN, which would ultimately lead to ESN failure. With this, later discussions at the forum were much less technology focused, and instead focused on the success of agile adoption approaches, and communication strategies to strategically frame ESN in more convincing ways.

Similar to my discussion of rhetorically legitimating ESN in chapter 3, participants prioritized discussions on how to justify ESN to key stakeholders and senior management and communicate ESN's value throughout the organisation, in order to manage employees' perception of ESN's desirability and

appropriateness. Even the few technical discussions that still occurred were about how to measure and track various aspects of ESN use to support the latter aims. Along with this, participants also discussed using ESN to pursue more sophisticated objectives such as transforming stagnant corporate cultures, and enhancing employee engagement and productivity. In accordance with these new insights, participants recognized and tried to model their ESN growth strategies around the few top- down, agile successes that they encountered. However, these discussions revealed a key disconnect where it was not clear how communication campaigns support or keep up with the iterative and agile adoption approaches that were proving to be more effective for ESN adoption.

iSource was often one of the most discussed examples of successful synergy between communication campaign and agile approach. However, the company would rarely go into detail on specific tactics since their intention was to sell ESN implementation services. In Chapter 5, I examined iSource's adoption journey over 3-4 years and detailed specific ESN features and tactics employed over adoption in three main stakeholder groups- business technologists responsible for supporting back end applications and designing new systems, consultants who were directly responsible for engaging with clients to assess their needs, and delivering profitable and efficient services, and senior staff responsible for managing profitability, employee turnover and exploring new avenues for improving the quality and breath of iSource's service. As illustrated in chapter 6, these competing objectives posed different challenges, required different communications, and manifested distinctly different ESN configurations over time. However, in chapter 7, I outlined the cumulative, iterative and inter-related process of rhetorical legitimation and intra-organisational theorizing that eventually generated wide participation around ESN.

My model of top-down internal diffusion offers a useful guide for those managers that are increasingly grappling with how to generate durable and intrinsic motivation around ESN or similar digital innovations without falling victim to the negative consequences of technology drift. The internal

diffusion model is ideally suited for supporting rapid cycle agile development, implementation and use approaches since it fittingly outlines a mindful, iterative and phased approach for communicating and justifying technological outcomes. At iSource, managers' ESN communications campaigns with the main stakeholder groups covered three main elements: framing the business case (rationale framing) for the new IT innovation, advertising the potential value for the new IT innovation, and motivating engagement around specific features.

Early justifications at iSource were importantly focused on de-legitimating email since it was clearly competing with ESN as a communication and collaboration tool, while later efforts were focused on legitimating ESN. De-legitimating these technologies is especially important for ensuring that organisational actors do not replicate unwanted practices associated with email to the newly-incoming innovation, and enabling them to dedicate more cognitive effort to rationalizing and making sense of the newly- incoming innovation. This is consistent with my discussion of the legitimating (ESN) effect of de-legitimating email in chapter 6, as managers intention was never to completely phase out email, but they instead theorized about "working smarter by reducing email misuse" as a way to create a lasting sense of urgency for ESN driven change.

Managers' at iSource primarily used logos (rational) appeals to pragmatic legitimacy to successfully justify the business case against email misuse, and pathos (emotional) appeals to justify ESN. Combining de-legitimation efforts with parallel efforts to directly legitimate ESN enabled iSourcers to gradually dedicate more and more cognitive resources to making sense of the new innovation. This communication approach is consistent with agile approaches of producing quick, phased, practical outcomes to test and show value, since it is focused on explaining and highlighting the immediate economic, efficiency and social exchanges that the innovation offers. Proponents of agile credit this approach with facilitating tight alignment between the technology and the needs of the target audience (Sarker and Sarker, 2009; Conboy, 2009). However, critics counter that its iterative and phased cycles

are not appropriate for enterprise systems and digital innovations since these cycles do not allow for collective-meaning making across functions or departments, and may even cause technological drift in top-down projects (Highsmith, 2009; Fitzgerald, Hartnett and Conboy, 2006).

Similarly, communications at iSource were also primarily focused on facilitating close alignment between technology features and the needs of distinct subsets of iSourcers (infusions). However, in each subsequent infusion, managers enabled collective meaning making across these different groups by integrating the business cases of previous infusions to help justify new business cases. They also co-opted respected internal and external individuals, stories of positive outcomes, negative outcomes, and survey data from previous infusions to help advertise the possible value of ESN, and show target audiences how they should use ESN features to reap advertised benefits.

Managers at iSource particularly made a concerted effort to co-opt respected middle managers and front- line staff from the target audience to be members of the steering team and help drive justifications. This was an especially effective way of generating intrinsic motivation without technological drift, since it ensured that the ESN was responsive to overall organisational objectives, and, at the least, also gave iSourcers the impression that ESN was responsive to their needs, and at the most, was indeed responsive to their needs. Over time, these communications also helped to drive more inclusive agile cycles, as the development and implementation of new features was informed by consolidating, adapting and reframing features and related organisational structures, which were successfully deployed in other infusions. In this way, they also enabled a delicate balance of top-down control and bottom-up motivation.

Overall, since the discussed intra-organisational theorization strategies are likely to generate different responses in different contexts, I am not proposing that the model of internal diffusion offers a definitive way to ensure that newly- introduced digital innovations will be effective. What I am proposing however, is that managers who reflect on the detailed contextual information and dynamics

discussed in this thesis, may be able to find contextual similarities to their own situations, and make mindful choices about the content of their technology-organisation alignment and communication strategies. My thesis provides a structure for thinking about this content, and deciding what is the best way to frame, advertise and motivate engagement, and integrate isolated, emergent implementations.

8.2 Contributions to IS Research

This research contributes to our understanding of technology evolution by focusing on the mutually reinforcing processes of technological and organisational change involved in technology appropriation within organisations (Leonardi, 2009; Orlikowski, 1996; Arnold, 2003). My study examined the spread of an enterprise social network system across business technologists, consultants, and senior managers, working in a global technology services provider. Research in the IS and CSCW community have primarily analyzed technology appropriation as discontinuous processes of development, implementation and use, and processes of IS diffusion and institutionalization at a field and organisational level. This research has also typically conducted this analysis on established, transactional information systems that have evolved over the years to become more aligned with the needs of contemporary organisations. My research here adds to our understanding of how newly-introduced, non-transactional digital innovations adopted at an organisational level are initially misaligned with front- line organisational activities and behaviours, and provides insights into how managers can gradually align these innovations through internal diffusion processes.

By applying the rhetorical legitimation analytical device, I shed light on the role of rhetorical legitimation in the communicative practices of IS steering team members. This analysis contributes to the recent work by Nielsen, Mathiassen and Newell (2014) and Hsu, Huang and Galliers (2014) who explored the role of communicative practices in the diffusion of novel IT ideas within pluralistic field and organisational settings. Understanding how especially novel technologies are aligned as they

evolve at an intra-organisational level has substantial implications for the development, implementation and use of especially uncertain and flexible digital innovations that are extending across organisational departments and practices. For example, extant institutional diffusion studies still hold that managers help to institutionalize newly- introduced technologies by employing organising visions early to generate meaning making, legitimation and the mobilization of resources around the new innovation (Swanson and Ramiller, 1997; Wang and Swanson, 2007; Mark, 2007b; Currie, 2004). In this regard, Ansari, Fiss and Zajac (2010) also hypothesize that the standardization and scaling of new innovations within organisations may be hindered by technical, cultural and political technology- organisation misalignments that emerge as a result of organisational complexity.

My observations add to this by showing that in pluralistic contexts, the overarching organisational-level organising vision is elaborated and eventually refined through an iterative process of intra-organisational theorizing across competing stakeholder groups or what I refer to as infusions. Managers can influence this process to standardize and scale technology in particular ways by employing justifications in three relatively cumulative and sequential legitimation phases- rationale framing, value advertising and motivating engagement. These strategies respectively help managers to influence the political, technical and cultural misalignments that emerge among the competing logics that guide front- line practices and the institutional logic associated with the newly incoming innovation. During these alignment processes, managers can enable collective meaning making to effectively standardize the technology across competing groups by strategically grafting on other intra-organisational theorizations, and co-opting key people, ESN functions, and practices from other infusions.

Previous field and organisational level studies also suggested that early pragmatic pathos and logos justifications help to dis-embed actors from their existing ways of working and legitimate new technology, while later moral ethos appeals help to reinforce the changes that are triggered by the new technology (Nielsen, Mathiassen and Newell, 2014; Barrett, Heracleous and Walsham, 2013; Hsu,

Huang and Galliers, 2014). My observations resonate with these findings for the most part, but my findings show that logos appeals were primarily used to disembed actors from their existing ways of working, while primarily pathos appeals were used to legitimate the newly incoming innovation. In contrast to existing studies however, my observations indicate that managers employed a disproportional amount of pragmatic appeals to justify the new innovation.

My findings also make a significant contribution to existing research that has so far not explored processes of de-legitimation in detail, other than to suggest that pathos and logos appeals are used to dis-embed actors from their existing ways of working (Mignerat and Rivard, 2009; Nielsen, Mathiassen and Newell, 2014; Becker, 2010). In this regard, I observed that managers followed a similar intra-organisational theorization process of using logos pragmatic justifications to widen the technical, political and cultural misalignments between the existing, competing technologies (email) and front-line employee activities and behaviours. Since intra-organisational theorizing was a cumulative and iterative process, these de-legitimating justifications were consistently and uniformly employed in parallel with justifications to legitimate the new innovation with distinct target audiences.

Finally, my findings generally shed light on how especially novel and misaligned digital innovations and infrastructures can be effectively managed within organisations. IS and CSCW studies have made significant strides in understanding that unlike traditional enterprise systems, new digital innovations like ESN present significantly different challenges and effect significantly deeper changes in the way organisations develop, implement and use technology (Yoo et al., 2010; Tilson, Lyytinen and Sørensen, 2010). In particular, since ESN's "ideology of openness" runs against the grain of organisational rationality, its evolution is significantly influenced internal visibility- invisibility, sharing- control and engagement-disengagement tensions (Gibbs, Rozaidi and Eisenberg, 2013). Accordingly, these studies have so far focused on how digital innovations change and grow in size and scope within organisations over time. Research in this area shows that because of the interpretively flexible and generative nature

of these systems (Zittrain, 2008), their appropriation needs to be managed in a way that simultaneously allows for bottom-up and top-down evolution (Monteiro et al., 2012; Brynjolfsson and A. Saunders, 2010).

In my observations of the internal diffusion of ESN, managers did this by co-opting middle-managers and front-line employees from key communities of actors onto the steering team, and giving them the autonomy to develop and justify ESN in ways that were aligned to the immediate needs of the audience. They managed to reduce the technological drift that comes with this autonomy by continually refining justifications to reflect how wider organisational structures and procedures around ESN were connected and emerged from local, front- line needs.

8.3 Limitations and Future Directions

There are a number of avenues for future research based on the findings of this study. iSource offers a fruitful avenue for generalizing findings since its operations in professional technology services and institutional makeup of professional, community and market logics, are typical of contemporary organisations. However, since the locally emergent nature of these institutions make them unique in many ways to iSource, it would still be fruitful to continue building on the theory developed here by examining ESN evolution in similar professional services settings. A crucial but necessary limitation of my research approach has been its intensive focus on the details of a single site of success, at the expense of equally unique dynamics in broader settings. This limitation could be overcome by looking at equally unique cases of top-down ESN success. It would also be fruitful to build on this model through comparisons with contrasting cases of top-down failure, bottom-up success, and cases where success was possible without de-legitimating competing technologies. For instance, my pilot study of ESN adoption at a financial services firm could itself be considered an extreme case of bottom-up success because of the likely possibility of deeper institutional misalignments and steeper cultural

challenges. Similarly, more focused, bottom-up examinations may reveal whether and how the pragmatic appeals illustrated here, generate moral legitimacy over time. In attempting to build a theory of top-down internal diffusion I tied ESN success solely to managerial intervention. However, even in this case, bottom-up dynamics were important to ESN success, and thus, warrant closer examination.

The data that I collected also represents a broad overview of managerial action at different locations across the world. It would be interesting to examine and compare the data from each country in detail to see the effect of societal institutional pressures on ESN's trajectory. This is especially salient to collaborative technologies like ESN, since many countries have strict legislations that shape the degree of managerial intervention that is possible around ESN adoption. For example, the German legislation prevented managers at these iSource sites from tracking ESN activity. I also observed that the level of ESN engagement at iSource's main European HQ was consistently tracked as the lowest among its geographical locations.

My dissertation has only scratched the surface of the implications of my analysis and findings for the development, implementation and use of novel digital innovations. It would be useful to add to the internal diffusion model by further exploring how specific affordances of ESN facilitated its interpretation, enactment and change within receiving organisations. Similarly, I have not explicitly connected the concepts developed here to similar socio-materiality work on mutual technological and organisational change, although this work provided the motivation for my approach. There could be substantive connections between the institutional origins of my work and socio-material research, particularly in relation to the identification of regularities across time and different contexts.

Finally, my intention is that my work will be used as a platform for exploring rhetorical legitimation as new approach to technology and specifically digital innovation adoption strategy development (Monteiro et al., 2012; Tilson, Lyytinen and Sørensen, 2010). The notion of internal diffusion developed here focuses primarily on the iterative and strategic communication and justification of

various technological features with different groups over time, and as I pointed out in section 7.1, this approach is well suited to supporting and enhancing agile development, implementation and use approaches.

8.4 Closing Thoughts

My thesis has focused shedding light on how newly- introduced digital innovations adopted at an organisational level are translated and integrated into organisational actors' front- line activities and behavior, how this unfolds in the face of multiple, simultaneous institutional misalignments, and how it may be managed through managers' rhetorical practices. These findings are in line with IS and organisational studies that are increasingly recognizing the important role that linguistic practices play in shaping organisational and technological change.

Understanding actors rhetorical practices in technological evolution necessarily means understanding the salient interests that influence how they make sense of technological change, and judge whether it is desirable, appropriate, or legitimate. In this thesis I have illustrated how different communities of actors' perceptions of legitimacy influenced how they negotiated specific system features, and supporting organisational structures and procedures, and in turn, eventually came to a compromise on system and organisational features that were based on new, refined, salient interests. Looking back on my experiences as part of a forum on digital work forum described in section 7.1, I see how this rhetorical approach to legitimating technology change can be useful to the huge number of non-technical managers that are grappling with how to develop a communication campaign that is coherent, convincing and importantly facilitates negotiation and compromise within ESNs increasingly diverse audience.

It is my hope that my research will help these practitioners to develop more mindful technology communication campaigns that will benefit them and their colleagues in the long run, and help to

relieve the uncertainty of how to prove and communicate the value of these unconventional technologies in increasingly complex settings. I also hope that practitioners and researchers will come to recognize that technology diffusion does not just occur within organisational fields, but continues beyond the boundaries of the organisational, as different communities of organisational actors communicate, negotiate and compromise their technological and organisational change interests into reality.

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Appendix A

and Email Overload

Do the overload figures also apply to ▢ To provide a substantiated answer to this question a survey was conducted within several communities within the organization based on the work of Hogan and Fisher[1]. Their paper introduced a scale for measuring email overload, based on research done by Neustaedter, Brush and Smith[2]. The scale can be used not only to judge the degree of overload within a population, but also to examine how overload in email and organizational behavior are correlated. Hogan and Fisher's email overload scale contains eight questions and respondents answer using a five-point scale, from 'strongly disagree' to 'strongly agree'. Several questions were added, including email received/sent and how much time was spend on email on a normal business day.

The results show that about 68 percent of respondents receive more than 50 emails a day and 39 percent send more than 25 emails a day.

Email overload is more or less a result of people's habits.

How many emails do you receive on an average business day?

- 32% Between 1 and 50
- 47% Between 50 and 100
- 21% More than 100
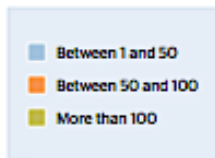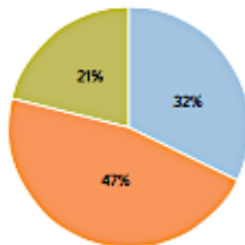
How many emails do you send on an average business day?

- 7% Between 1 and 10
- 54% Between 10 and 25
- 32% Between 25 and 50
- 7% More than 50
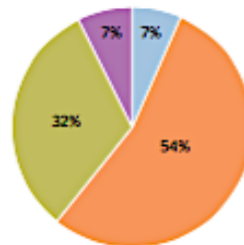
On the topic of the time needed to process email, 32 percent of respondents need more than three hours a day to handle email and another 41 percent spends between two and three hours doing the same task.

How much time do you spend on email on an average business day (including filing, searching and deleting)?

- 4% Less than an hour
- 23% Between 1 and 1,5 hours
- 41% Between 2 and 3 hours
- 32% More than 3 hours
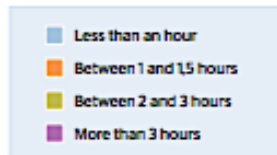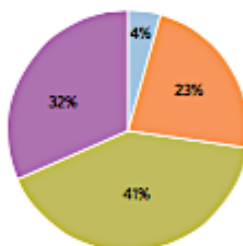
Table A1: Excerpt from First No-Email Whitepaper

All about Requirements: The Architecture

A New Way of Working to Create the [   ] Requirement Document

Within a [   ] program, the architecture project team faces the challenge of defining user requirements for a new platform to support a new way of working without email that would also improve productivity and efficiency.

Normally a project team would start with a brainstorming session with a few stakeholders to identify key requirements, prepare a document, send an email with meeting request, and attach a key requirements document. During a meeting, the document would be approved and interviews with key players planned. After all interviews had been carried out, the requirements document would be updated and progress reported to the project members involved. They would receive the different versions of the document by email and progress meetings would be held until the requirements document had reached its desired state.

The [   ] requirements document could be created using the single-order process as described above, but the project team can also take a different approach and apply a second-order process to create the document. In this case, the team should select a set of informal and formal tools which were already in existence. These tools could do the job of creating a requirements document for a new solution, which would

Box II: Creating a requirement document without email.

Open communication at the water cooler

The first step is to gather and involve people in the process of creating a requirements document. What is the right tool to reach as many people as possible who would be interested in participating in the project? Normally, the water cooler would be the ideal spot to drop the question and get input. So at Atos the requirement question was dropped at a virtual water cooler, Yammer, an enterprise micro blogging service just like Twitter, asking people to participate and indicate which functionalities they thought should be part of the solution. Within a couple of days, more than thirty people were involved and adding requirements. There was clearly buy-in from Yammer members who were interested in the topic (the future end users of the new [   ] solution) and the process was taken to the next level by organizing an asynchronous online brainstorm.

From conversation to structured brainstorming

All input received via Yammer was organized into principal groups and subgroups, and visualized in

Community writing in practice

The mindmap was exported as a Rich Text Format (RTF) document and imported into the enterprise wiki (Confluence). With little effort, the mindmap was transformed into a wiki structure with a parent page, several subpages, and sub paragraphs. One of the main strengths of a wiki is version control. There is only ever one version of the document, which is visible as a website. When the edit button is hit, the website is transformed into a document. Hit save and the document becomes a website again, adding a new version number to the wiki page in the background to enable roll-back functionality.

A message was posted on Yammer inviting people to participate in writing the document together in the created wiki space. After less than a week, more than 60 people had contributed and commented on the requirements wiki and the created document was ready for rating. The wiki space was exported, resulting in a requirements document in pdf format.

Define quality of the work done

To define the quality of the work done, Atos Scientific Community's whitepaper approval process can be

Table A2: Excerpt from Second No-Email Whitepaper

Start with the End in Mind; Envisioning a Future Without Email

Suppose that all basic functions are present in one solution and that that solution is compliant with the meta requirements, how does that help in the realization of the ambition? To understand how these technologies will support the ambition, two major differences between the old way of working with email and the new way of working with Enterprise 2.0 technologies have to be made clear. Email is closed communication; it only reveals its content to the receiver(s) and is one-dimensional. In an Enterprise 2.0 world, open communication is considered the norm and content can have multiple dimensions. Another key difference is the fact email is push technology, other people push content in your inbox, whereas the new technology relies more on a pull mechanism, i.e. relevant information will find you. An explanation of how the new solution would act within the three metaphors given; email as a filing cabinet, production line, and communication genre is given below.

Email as a Filing Cabinet Revisited

In the email situation, everyone has their own filing cabinet in which received information is archived in separate folders. These folders are usually separated into areas of work at hand, clients, and specific topics of interest. Because email is one-dimensional, conflicts can arise when emails are archived in more than one folder. In an Enterprise 2.0 environment of open communication, group communities will replace private email folders. Communities are the central information and communication hub for all sorts of topics. Within a community, all basic functions presented in the previous chapter are available. There will be work-related communities, for example projects, client-related communities, and communities for specific topics. In the case of Atos, all technologies will have to be supported. One of the main differences is that, unlike with email, messages will be posted in a central community and not sent to individuals to create separate personal silos. In a community, everyone has access to the same information, but probably not all information is equally important to all community members. Using collaborative filtering will highlight what is important to whom, because the sender will summarize the content of the message with a few keywords. These keywords are called tags and every community member is able to subscribe (RSS) to a certain tag or combination of tags. All information present within the community can be

Another differentiator is the way information is retrieved. When email is seen as a filing cabinet, the natural way to find specific information is a folder drill down until the specific email is found, but in the new system there are no physical folder structures, they will be dynamically created by searching for specific tags, content items and/or owners, which can be the user, all community members, or all members on the system. When a search is performed on a regular basis, the query can be bookmarked or saved in the personal environment.

Email as a Production Line Revisited

Looking at the production line metaphor in the light of an enterprise social network, a distinction has to be made between structured and unstructured business processes. Structured processes always follow a predefined workflow and in every step it is clear who has to do what. The 'who' can be a certain person or a role associated with more than one person. The 'what' is a specific work task or a decision. These structured processes are most often guided by separate workflows and/or enterprise resource planning (ERP) systems. Because people are not logged into these systems all day, emails are sent to alert people that a certain action is required on their behalf. These system emails clutter up the inbox of the recipient; if smart, the user would create an email rule that automatically moves

Table A3: Excerpt from Third No-Email Whitepaper

Table A4: Presentation of "Elephant- Rider" Communication Strategy

Overview

Key Challenges

Changing corporate collaborative culture first is novel and risky, requiring special attention to justification.

Sense-of-urgency issues, such as "no email," can stimulate social collaboration change.

Big social collaboration change demands big commitment and big investment.

Collecting a portfolio of success stories isn't optional and isn't trivial.

Recommendations

IT and business leader change agents pursuing a big change effort like collaborative culture transformation need to:

Explicitly prepare managers, and make them responsible for translating the high-level social collaboration objectives into terms that resonate with individual employees.

When moving to a culture of social collaboration, build and execute a clear plan on where to move different forms of communication and collaboration. Invest in tracking activity results to direct program and management attention to lagging engagement.

Examine and document the leadership commitment required for success, and pursue a social collaboration initiative only after leadership understands and willingly embraces that responsibility. The bigger the change, the bigger the commitment.

Use a strong portfolio of success stories as the core of a communications campaign to gain attention, reward key participants, educate on what success means, create a vision for how things could be and gain cultural momentum.

Table A5: Excerpt from Gartner Study on No-Email

Appendix B

The Space name is	
Recommended tags are	
Community Leader is	

You will work in Client dedicated space, and maybe in a dedicated space for your scope.

Activity	Post type
Invite my network	There is probably no reason to make your space a closed one! Invite and make sure all your stakeholders are members of the space. This includes the contract manager, the colleagues dedicated to this "project", the Tower Service Managers if any and their teams who work on the contract. Add proper finance, quality, security contacts persons. That is the power of weak links …search bK for more ☺
Identify resources	Search in bK for the expertize you need, thanks to rich profile. Of course profile completion is each employee's choice! Then resource allocation remains a dedicated Resource Management process, led by Resource Manager!
Share "project" reference documents for awareness and comments	Include all reference documents or *link to them* if they are already published in **SharePoint**. This includes the "who does what" on the Contract / Project, with links to their bK profiles.
Prepare deliverable	Use *collaborative note* (collaborate directly on file as soon as Office Add-In in available). Do not forget tagging! Validated deliverables are then published into SharePoint.
Prepare and announce team	Create as *event*. Ask collaborators to use full view to import event into

Activity	Post type
Find proper date for document reviews	If all project team members are not in same Exchange agenda, use *Question / Survey* to find best slot.
I will create / find in blueKiwi project area (space or "tag")…	Calendar of the milestones Milestones and key actions as tasks with their allocation to actors. Risk register Contract and PID Project history (based on notes from project members) capturing the life and decisions for the project Actions
Overview on actual tasks	During meetings, I create and allocate *tasks* to team members as tasks when they do not need to be part of audit trails, they should be recorded in SDM 12 (or local tool).
My work at a glance	I create a *dashboard* with *widgets* : current *tasks*, next *events* , and *search* by main components of the scope. I create a *hashtag* (and consistent search) for each tower working in the contract, and for each main area of contract from a customer standpoint. Create smartlists to automatically filter main tags / stakeholders.
Issues Management	SDM12 is the ticket and traceability tool. bK will be used to inform whole space of issue and as reaction come in, share workarounds. This has proven very valuable and cheered by client in pilot communities. RCA is created collaboratively. All related posts are tagged : #parent ticket , #project area, #lead tower.
Change Management	SDM12 is the ticket and traceability tool. Major changes are published as *events* in bK with *tags* : #major change, #lead tower and #ticket number. Impact analysis is created in space as a *collaborative note* (use same tags).

Activity	Post type
Shift Information & team planning	1 – Create *Event* for On-Call Duties in the Service Space. The service team members will click YES (going) to take the Duty 2 – (alternately) Make a *note* announcing the planning (append xls). When a change is needed, service team members will comment on this note and a new xls version will be uploaded and announced.
Publish documents	All validated documents and conformance related docs are published in ShP. This includes contract, Quality Assurance Plan, dashboards.

Managing a Meeting – making the best of our tools

Activity	Post type
Create a meeting	If all project team members are not in same Exchange agenda, use *Question / Survey* to find best slot (create a survey in which you ask to vote on time slots – hint : start with your own available slots)
Prepare a meeting	If it is an online meeting, create it first in Outlook. Then create it as an *Event* in bK space. Paste in the post description the SIP for the meeting, informing attendance that this link should be pasted manually in MS IE to connect. Share in advance agenda and prep material.
Run a meeting	Use Lync. Do not forget to go for round-tables to ensure attendance got the messages and standpoints have been understood, then decision made and captured.
Create minutes	Use *collaborative note* to create minutes.
Allocate and follow tasks	During meeting, create *tasks* online in bK.

Table B1: orangeESM Community One-Page Manual

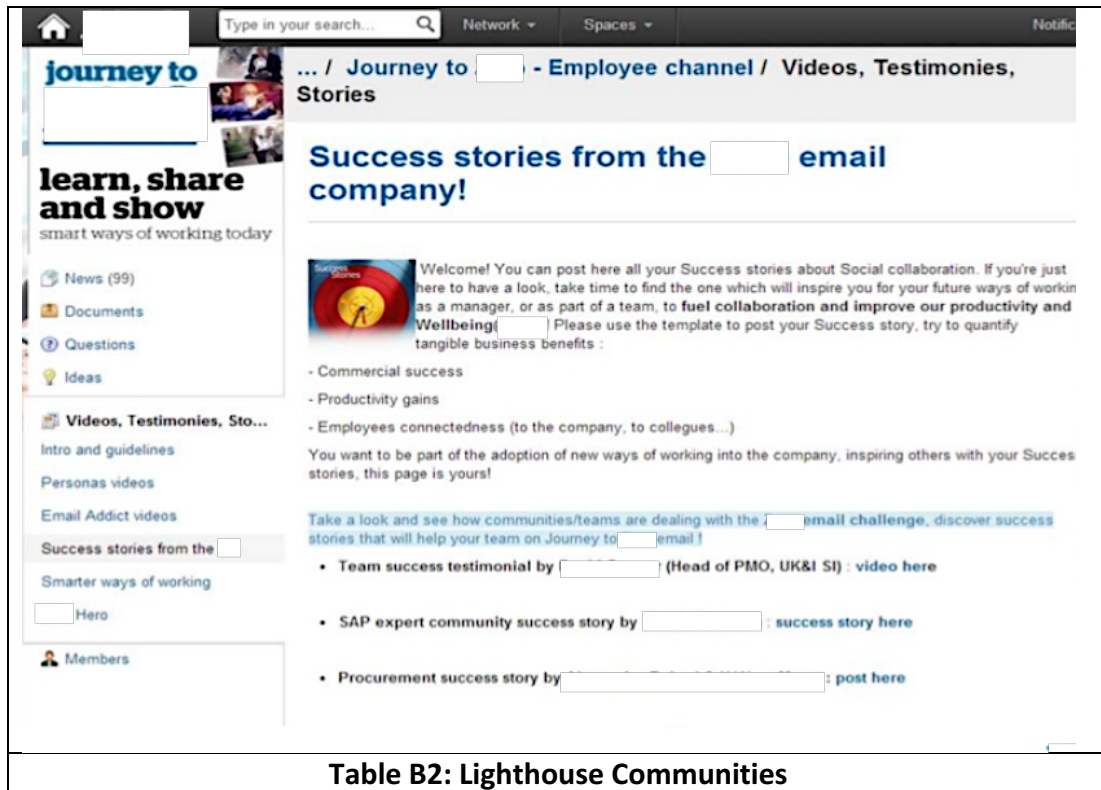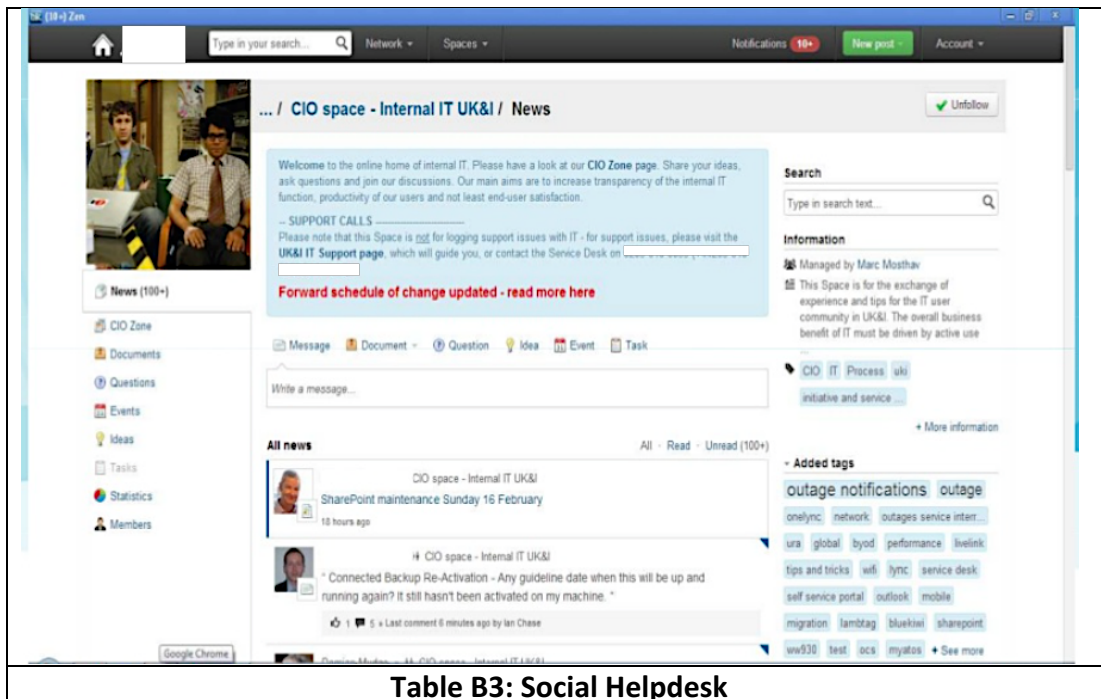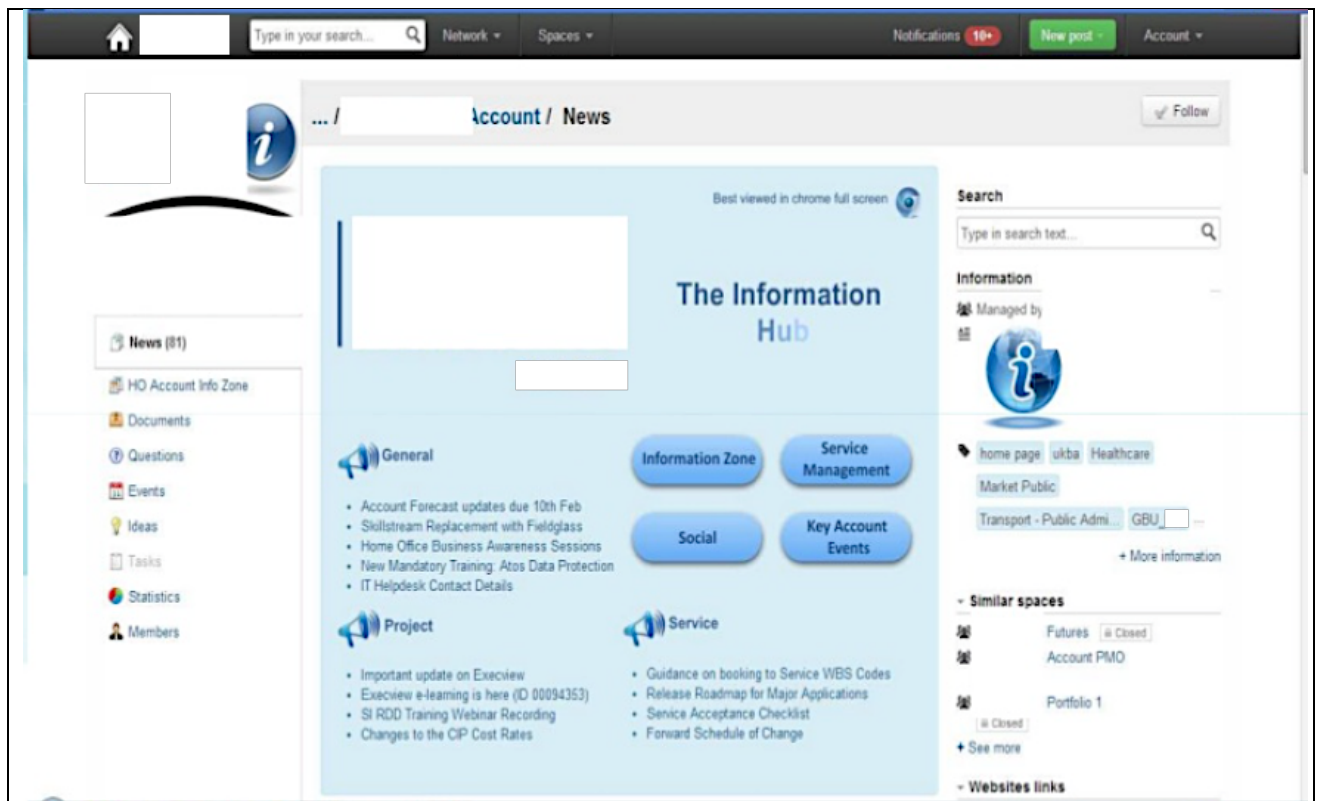**Table B2: Lighthouse Communities**

Table B3: Social Helpdesk

Table B4: Social Project Management

Table B5: Use Case Training Videos

Table B6: Orange Travelers Community