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Understanding Individual User Resistance and Workarounds of Enterprise Social Networks:

The Case of Service Ltd

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Biographies

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Dr. Efraxia Zamani holds a Bachelor Degree in Architecture from the Faculty of Engineering, AUTH. She has been awarded with an MA in Museum Studies from the University of Leicester and an MSc in Finance & Management Engineering from the Aegean University. She has received a scholarship from the Department of Financial & Management Engineering, Aegean University where Efraxia successfully completed her Doctoral studies (PhD) in Pervasive Information Systems in the Department of Management Science and Technology of Athens University of Economics and Business, Greece. Her main research interests lie in the area of Pervasive Information Systems and Adoption Theories.

Suggested Short Title: Enterprise Social Networks, User Resistance & Workarounds

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ABSTRACT

The purpose of this study is to explore the use of Enterprise Social Networks (ESN); namely, Yammer and Chatter, using the lens of resistance and deployment of workarounds among individuals employed in a large, service sector organisation. By doing so, we can illustrate the motivation behind individual use of ESN within a large organisation, the reasons for not using it and the outcomes of their choices on the organisation's performance and day-to-day activities. The research approach of our study involves employing a qualitative approach and adopting the interpretive research perspective. Our findings illustrate that there are several bottom-up and top-down pressures, which effectively hinder the adequate or successful use of ESN and drive user resistance and workarounds. The contributions of our study are manifold. First, since ESN are actively considered by organizations, our findings can inform policymakers on the issues that might arise beyond implementation, more so, during the actual use of the system. In other words, the results of this research can shed light on the areas where their efforts are best placed. At a theoretical level, our study enriches the extant literature associated with adoption issues, by explaining that ESN involve multi-level organizational characteristics found within a specific context of use, that of ESN.

Keywords: Enterprise Social Networks; Resistance; Workarounds; Case study; Yammer; Chatter.

INTRODUCTION

The successful implementation of Information Systems (IS) is viewed as essential towards achieving competitive advantage and productivity in organisations (Ferneley & Sobreperéz, 2006). Specifically, when a new IS is implemented, a multitude of unexpected and expected consequences may occur within a post-implementation user environment (Griffith, 1999). Acknowledging this issue, IS researchers have largely focused on understanding and investigating the acceptance or adoption of technologies by individuals within organisational settings, by proposing and improving adoption models such as the Technology Acceptance model (Davis, 1989), and the Unified Theory of Acceptance and Use of Technology (Venkatesh, et al., 2003), among others.

However, since the 1980s, IS researchers have identified user resistance and the factors leading to resistance as equally important variables for IS success (Keen, 1981; Markus, 1983). This led to the conclusion that resistance is an important issue that can undermine IS success (Marakas & Hornik, 1996). Yet, on the one hand, IS researchers have paid little attention to the study of resistance phenomena and despite the increasing interest on post-adoption behaviour, studies exploring the role of resistance in organizations are relatively few (Laumer & Eckhardt, 2012). One reason for the scant resistance studies can be attributed to resistance being considered a more complex phenomenon than previously thought of and need not always to be viewed negatively (Lapointe & Rivard, 2005). Instead, as research has suggested: “[r]esistance is not a problem to be solved so that a system can be installed as intended: It is a useful clue to what went wrong and how the situation can be righted” (Markus, 1983, p. 441). This has been supported throughout the years with suggestions that resistance can be a manifestation of users’ unease with a flawed system (Hirschheim & Klein, 1994; Marakas & Hornik, 1996), or may even be regarded as functionally useful (Markus, 1983).

Due to the proliferation and advances of the internet in organizational and daily life, Enterprise Social Networks (ESN) are increasing in numbers, yet researchers from relevant disciplines (e.g., Human-Computer Interaction, Computer Supported Cooperative Work) have been paying little attention to, in particular their implementation and adoption (Leonardi, et al., 2013). ESN are viewed as important for competitive advantage, because they offer information seeking capabilities in the form of successful information-seeking, i.e, a mix of recognizing what an individual knows, valuing that knowledge, being able to gain timely access to that person, and seeking the information in cost-effective ways (Borgatti and Cross 2003). They are also leading to a new form of organizations - the *hypermedia organizations*, where organizations “have adapted themselves in significant ways by using new communication technology to conduct the business of social organization over large areas and disparate time zones, and at all hours of the day. The internet, cell phones, personal digital assistants, private networks, and databases all help to extend traditional organizations into hypermedia organizations” (Howard, 2002: p.552). Along with the emergence of new forms of organizations, issues such as, knowledge transfer complexity arise. That is, ESN proffer knowledge transfer that ordinarily is a complex phenomenon and, in practice, successful transfer is often not easy to achieve.

Even for the relatively simple case of transferring knowledge from one unit to another within the same firm, there are a number of factors that may affect the effectiveness and the outcome of transfer (Szulanski, 1996). Transferring knowledge between organizations brings more complexity due to the multifaceted nature of the boundaries, cultures, and processes involved; hence the study of organizational, individual, dynamics in the context of ESN is an interesting domain for further theoretical investigation.

In the individual and organizational context, ESN can “help improve important organizational processes” (Treem & Leonardi, 2012). Indeed, recent studies have shown that Online Social Networking (OSN) sites can have an emotional impact (e.g., frustration, improved morale, resentment, increased engagement) on employees, especially when boundaries between work and social life become blur, which in turn can lead to organisational impacts (Koch, et al., 2012), both positive and negative. ESN offer increased access to information, which has been shown to provide “information diversity and social communication”, both of which “affect work outcomes” (Wu, 2013). Simultaneously, ESN are burgeoning in society and permeating our daily work and personal life; therefore, a deeper understanding of resistance-related behaviours towards an ESN can prove to be particularly valuable for both researchers and practitioners alike, as it can shed light and guide the successful implementation of such an IS, supporting in turn an individual, employed within an organisation, to increase her/his productivity.

In the IS discipline, Oinas-Kukkonen et al. (2010) note that OSN such as, ESN are still evolving; thereby implying the need for additional research into ESN. More precisely, Leonardi et al. (2013) argue that studies on ESN in organizations and their relation to issues such as, organizational performance, resistance and implementation, are still in their infancy; hence warranting researchers’ attention. Yet, studies on the use of ESN are less pronounced, and studies on resistance-related behaviour within the context of ESN in organisations are even fewer, which indicates that a research gap for understanding the use of ESN still exists. Researchers examining the adoption and acceptance issues are also recommending alternative approaches to examine individual decision-making and the impact deriving from user acceptance (Schwarz, et al., 2014), which aligns with the earlier calls made by Benbasat and Barki (2007).

In light of this reasoning, we posit that more qualitative research at the crossroad of resistance and ESN is warranted. By doing so, we can identify individual resistance-related behaviours within an organizational setting, and understand the possible reasons causing this type of behaviour; thereby, aiming to facilitate the smooth implementation and use of such a system. Against this backdrop, the principal author gained access to a large service sector organization, Service Ltd, which allowed the acquisition of knowledge and information regarding the application of an ESN within a large organization.

The present paper presents a case study of a large, private service sector organization in the United Kingdom (UK) that has implemented and is currently using the ESN of Yammer and Chatter. Using conversations with different individuals, it became evident that the organisation did not possess a deep appreciation of the ESN nor a deep understanding regarding the use and level of adoption. This provided the necessary impetus to conduct the particular research, with the permission of the executive committee.

Recent studies on ESN have provided some background on the use of Yammer in organisations (Riemer, et al, 2011; 2012), but studies on Chatter, or comparisons on the basis of their use (or non-use) are rare. Such comparative studies can be particularly useful as they can emphasise the reasons users may choose to adopt, reject or opt for alternative solutions while using an ESN, which basically summarises the main objectives of our study. *In more detail, the purpose of our study is to explore the use of ESN; namely, Yammer and Chatter, using the lens of resistance and deployment of workarounds, among employees of a large organisation of the service sector.* Our aim is to illustrate, first, the motivation for individuals using ESN within a large organisation; second, the reasons that drive users to use or not to use such a system, and third, the various forms of resistance-related behaviours, and how and why these may be perceived as necessary by the various stakeholders. The contributions of our study are manifold. First, since ESN are actively being considered by organizations, our findings can inform policymakers on the issues that might arise beyond implementation. In other words, the results of this research can shed light on the areas where their efforts are best placed. At a theoretical level, and because to date there is still little research

undertaken on resistance, our study enriches the extant literature associated with these issues, within a specific context of use, that of ESN.

The paper is organised into six sections. In what follows, we first provide a discussion on Enterprise Social Networking and then review extant post-adoption studies dealing with resistance behaviour and the use of workarounds. Next, we describe in detail the design of our study, and our findings. This is followed by a discussion and a presentation of its implications to research and practice. The paper concludes with the study's conclusions, its limitations and a future directions perspective.

THEORETICAL BACKGROUND

Enterprise Social Networking

Presently, organizations are facing a new phenomenon at the enterprise and communication levels. Ever since the potentials of a high-speed internet infrastructure, broadband, and OSN became apparent, transformational and evolutionary changes have occurred. Of these changes, in the last few years, almost no technology has evolved as rapidly as social software (Kaplan & Haenlein, 2010). In recent years, Web 2.0 applications, and Enterprise Social Media (ESM) have proliferated. For organisations specifically, they are used in two ways. The first way involves ESM being used as a communication tool with external parties, such as customers, vendors and the public. Examples include maintaining pages on popular, public social networking sites such as, Facebook and MySpace, and broadcasting updates on microblogging sites, such as Twitter (Piskorski, 2011). The second way is where organizations use ESM for internal communication purposes and social interaction within the enterprise.

As a result, studies on ESN have recently emerged in the IS literature, with researchers exploring the use of ESN, such as Yammer. Findings reveal that Yammer is being used for interaction and discussions rather than to inform others, which is the case of Twitter (Riemer et al., 2011). Riemer et al. (2012) also used appropriation practices and sense making to understand this issue. Others have shown that social media within an organisation does have work outcomes and may lead to various benefits for both the individuals and the organisation. They also improve information diversity and social communication, both of which relate to work performance (Wu, 2013).

However, ESN are still a novel phenomenon, and there are those who have underlined that “[h]ow these new technologies will impact organizations [...] is not entirely clear” (Kane, et al., 2014). Further, while it can be argued that ESN are no different from the traditional IS used within an organisation, this is not the case. It has been shown that this form of IS that builds upon social media technologies is quite important for the “organizational communication processes because they afford [visibility, persistence, edit ability, and association, all of which] that were difficult or impossible to achieve in combination” before the introduction of these technologies (Treem & Leonardi, 2012). They are also important for the new digital economy, where inter-organizational collaboration and innovation are becoming more important for organizational effectiveness, where attention must be paid to the relationships that people weave and draw upon whilst accomplishing their work. Successful information-seeking is a mix of recognizing what another person knows, valuing that knowledge, being able to gain timely access to that person, and seeking the information in cost-effective ways (Jarvenpaa and Majchrzak 2008; Ren et al. 2006). Many of these elements are shaped by new IT capabilities and tools. Therefore, the role of IT in shaping social networks is receiving increased attention. This also implies that issues regarding their use are still matters of interest to researchers.

Resistance-related behaviour and workarounds

Within the field of IS studies of user adoption and IT diffusion within organisations have always attracted the interest of academics and practitioners alike. Typically, researchers emphasise the contributing factors towards adopting a given IT, grounding their study on theories like the Technology Acceptance Model (Davis, 1980) and the Theory of Reasoned Action (e.g., Moore & Benbasat, 1996), among others, and often approach adoption deterministically and “as a decision situation” (Riemer et al., 2012). Relatively recently, research has shown that the acceptance of information technology and IS can be approached using a process-based view, where the individual user goes through an instinctual response, formulates a cognitive attitude and then an evaluative process, and finally arrives at a belief regarding the introduced technology, which “can be altered if the IT fails the user” in some way (Schwarz et al., 2014). Schwarz et al. posit that the previously

discussed approach can be used to illustrate the process that individuals undergo when the use of IT occurs within an enterprise context, where its use is mandatory and where it is hypothesized that the individual will eventually submit, partially or entirely, to it in order “to achieve higher levels of productivity” (Schwarz et al., 2014).

However, there are several occasions of IT events, during which users exhibit a resistance-related behaviour even within mandatory contexts. Specifically, there is a growing body of literature around the concept of resistance to technology and the resulting behaviour, possibly because it “does not resonate well with the virtue of environments in which employees identify themselves with organisational norms and values” (Selander & Henfridsson, 2012). In line with this, the various behavioural expressions of resistance can be conceptually linked to the notion of ‘interpretive flexibility’, which is an attribute of the relationship between human and technology (Orlikowski, 1992). For this reason, ‘interpretive flexibility is influenced by the characteristics of the material artefacts (hardware/software), the characteristics of the human agents using it (e.g., motivation, experience) and the characteristics of the context where the technology is used (e.g., social relations, resource allocations, task assignments). This implies that, when using an IS, users assign their own meanings and interpretations to the functions of an IS, that may differ from those envisaged by the designer of the system (Suchman, 1987).

In this regard, to date, several studies have illustrated that users can resist the use of a given system, by making minimal use or sabotaging it entirely (e.g., Lapointe & Rivard, 2005). Moreover, Alvarez (2008) has examined the adaption and the reshaping of technology in users utilising the lens of resistance against newly emergent constraints. On the other hand, Boudreau and Robey (2005) have explored user interference in the implementation of IT, by investigating user reinvention practices. In a recent study, Lapointe and Beaudry have showcased that there is another type of user behaviour, related to resistance, that of compliant resistance that describes a resigned acceptance or compliance. This type of resistance is in line with Schwarz et al.’s findings regarding user submission to IT, which had formulated a negative affective state (Schwarz et al., 2014). Lapointe and Beaudry discuss that resigned behaviour is associated with a resistance mind set, and can be the result of a “marked antipathy to an innovation, but nevertheless there is a feeling of being compelled to adopt the

innovation for a variety of reasons”, e.g., because it appears to be beneficial in some way for the organisation. In this case, a resigned behaviour is still compliant with organisational standards, and users may manifest it by letting others know that they are annoyed or unhappy with the implementation, by gossiping, complaining, criticising the innovation, use humour and do as little as possible, among others (Lapointe & Beaudry, 2014).

However, it is important to note that pure resistance has a relational nature, since it requires conflicting objectives and intentions from the involved parties (Markus, 1983). To emphasise this point, there are equally numerous studies that have showcased some acts, previously classified as expressions of resistance, e.g., workarounds, can “be more than acts of resistance” and in fact necessary for supporting day-to-day activities (Azad & King, 2011). Specifically, workarounds are often considered to be a way of users engaging with the system, but failing to conform to the prescribed ‘rules of engagement, which researchers define as a notion of ‘workarounds’ (Kobayashami, et al., 2005; Petrides, et al., 2004) or as a means of counteracting the perceived loss of power and identity with the introduction of a new IS (Alvarez, 2008). Others do not explicitly use the term ‘workaround’ but refer to it in terms of behaviour ‘following system rejection or resistance’ that can be either positive or negative (Ferneley & Sobreperéz, 2006). Therefore, as research shows, it is not uncommon for users to use workarounds as ‘shadow systems’, and attempt to bypass designed-in behaviour through small cheats, in order to gain “a better grip on information and save time” (Huuskonen & Vakkari, 2013). In addition, it has been shown that workarounds, which are stable over time, may be necessary for users towards supporting their day-to-day activities (Azad & King, 2011), and facilitate user interaction in the case of a poorly designed IS (Ferneley & Sobreperéz, 2006).

More recently, the concept of workarounds has been used to explain how and why agents and/or principals with some degree of behavioural discretion decide whether to follow established practices and what to do when anomalies, exceptions and mishaps occur (Alter, 2014). According to Alter’s theory for workarounds, “the perceived need for a workaround is based on a combination of situational constraints, obstacles, and anomalies, and participant goals”, where the feasibility of such workarounds is indeed related to this perceived need, combined with other factors (e.g., ethical considerations, ability to develop workarounds) (Alter, 2014). Alter (2014) classified workarounds as

necessary activities, creative arts, and viewed workarounds in terms of behaviour- resistance, source of future improvements, quick fixes, add-ons and shadow systems. Earlier studies constructed a more general classification of workarounds as shown in Table 1. That is, in terms of hindrances, harmless and essential by identifying the relationship between the workarounds, resistance and compliance, rather than directly identifying the positives or negatives of resistance (Ferneley & Sobrepez, 2006). What both the former approaches have in common is that they view workarounds *per se*, rather than resistance as being beneficial in some instances, views also supported by Ciborra (2002) and Pentland and Feldman (2008) or as harmful and temporary in others, as suggested by Boudreau and Robey (2005). Concluding, one can argue that, workarounds, whose purpose is to ameliorate the use of a given technology, cannot be considered as pure resistance-resultant behaviour, but as evidence of one's effort to adopt or adapt to an information system.

Table 1: Explaining Workarounds, Resistance and Compliance. Source: Ferneley and Sobrepez (2006)

Category	Explanation/Definition
Compliance	The user interacts with the system in the prescribed manner (Ferneley & Metcalf, 1998; Sewell & Wilkinson, 1992)
Resistance	Opposition, Challenge or disruption to processes or initiatives (Folger & Skarlicki, 1999; Jermier, et al., 1994)
	<i>Negative resistance</i> The rationale is to oppose or deceive (Bain & Taylor, 2000; Callaghan & Thompson, 2001; Ferneley & Metcalf, 1998; Lapointe & Rivard, 2005; Marakas & Hornik, 1996; Rosenthal, 2004; Webb & Palmer, 1998)
	<i>Positive resistance</i> The rationale is to support or improve (Button, Mason, & Sharrock, 2003; Joshi, 1991)
Workaround	The action ensuing from resistance (Kobayashami et al., 2005; Petrides et al., 2004)
	<i>Hindrance Workaround</i> The workaround is undertaken to circumvent system procedures or process perceived to be too time consuming, onerous or difficult (Lankshear, et al., 2001; Prasad & Prasad, 2000)
	<i>Harmless workaround</i> The workaround does not significantly affect workflow or the accuracy of the captured data (Button et al., 2003; Lapointe & Rivard, 2005)
	<i>Essential workaround</i> The workaround is essential in order to complete the task at hand (Kobayashami et al., 2005; Lankshear et al., 2001)

Like Ferneley & Sobrepez (2006) the relational nature of resistance is also acknowledged, where in order to examine resistance behaviour, the pre-existing organisational conditions have to be

investigated in detail, user perceptions with regards to the technology, the expected outcomes of use and non-use and how users make sense of the overall interaction with the ESN within their organisational context also need to be considered. Any behavioural reaction toward technology depends upon the interaction between external influences (e.g., management support, other users), internal influences (e.g., prior experience), and several intrapersonal factors (e.g., individual beliefs, perceived lack of need) (Laumer & Eckhardt, 2012). Briefly, the appropriation of a technology is bound to the social context where users operate and interact with it and with others (Leonardi & Barley, 2010). In this sense, the adequate comprehension of organisational routines, the desired outcomes and the social context of IT use are fundamental for the successful use of IT artefacts (Pentland & Feldman, 2008).

When considering workarounds within organizations, it has been shown that the role of the institutional theory is vital as it provides a natural source of inspiration. With this theory it is shown that certain collective actors become captives of their external or extra-organizational institutionalised environment (Selznick, 1957). Additional details on the theory and its relevance to workarounds are provided in the next section.

ESN, Resistance and Workarounds

Focusing specifically on ESN, there are only few studies examining resistance-behaviour, the implementation and subsequent appropriation of such IS (Reimer et al., 2011; 2012). Reimer et al. (2011; 2012) have examined user behaviour towards an enterprise-based short message communication system, Yammer, within an international service consultancy. Their findings revealed that there are four different, interconnected phases of appropriation: during the phase of encounter, users compare the new technology to their prior experiences with similar solutions and appraise features; during the phase of sleeping, some users may adopt the new technology while others may still seem hesitant, considering the technology as rather useless; the third phase is termed as 'make-or-break' and is deemed as crucial, since it entails an increase in the between-users communication and the promotion of the technology across other groups, both of which result in achieving the critical mass of users; finally, the phase of uptake includes more informative communications, as for example

coping strategies for the information overload and suggestions regarding new features (Riemer et al., 2012). Perhaps, the most important finding of this study is that the overall process of appropriation does not deal with “accepting a pre-given, stable technology” but it is rather focused on jointly creating and shaping an IT artefact for communication purposes within the work context (Riemer et al., 2012).

The research study presented in this paper focuses on the use of the two ESN within a large organisation of the service sector in order to examine the reasons for which users may choose to use or not use the particular IS and to shed light into the possible outcomes of their choices on their day-to-day activities and performance. In doing so, we build upon Azad’s and King’s (2011) study, as it provides a strong background for the investigation of institutionalised workaround practices. Similar to Azad and King, the interaction between day-to-day activities within the organisation and the extra-organisational environment are focused upon in order to investigate how this interaction either facilitates or prohibits the deviation from official rules and processes, and which workarounds are deployed.

As ESN are also IS, we approached the analysis and understanding of the ESN by applying perspectives taken from the institutional and IS development theories arenas. The institutional aspect is derived by considering organizations as being institutionalised, i.e., that they have a special character where monitoring is an important process, involving the emergence of distinctive forms, processes, strategies, outlooks and competences as they emerge from patterns of organizational interaction and adaption, a view similar to Selznick (1957). Further, institutional theorists emphasise that certain collective actors become captives of their external or extra-organizational institutionalised environment (Selznick, 1957). These top-down pressures often appear as ‘legitimacy obligations’ that ‘organizations-in-sectors’ consider as ‘social facts’ received via the extra-organizational institutionalised environment (Greenwood & Hinings, 1996). The IS Development (ISD) perspective is applied where it is acknowledged that ISD is not only a technical process but includes a variety of interrelated mechanisms of alignment that cause tension between the top down control versus bottom up autonomy (Benbya & McKelvey, 2006).

Having presented the theoretical background of our study, in the next section, the study's research method, along with the issues pertaining to data collection and analysis are presented in detail. This is followed by the presentation of our case study's findings and their subsequent discussion.

RESEARCH METHOD

Our study does not follow a top-down research approach where a conceptual scheme is first developed and then fieldwork is conducted to confirm its value. Instead, it follows a bottom-up approach and presents the findings of a project, during which the first author was the principal investigator and was based in, and had access to some departments in a large global service-based organization; namely, Service Ltd. In this sense, the first author served as the insider to the organization and was deeply immersed within its environment. This provided valuable information on the organisational cultures and operations of the organisation. For instance, when the interviewing began, the questions were focused on the post-implementation and use of innovative technological change, because the ESN had already been implemented and the organization had some departments; namely, Marketing and the Strategic bids team using the ESN. This led the principal researcher to identify potential participants and begin interviewing them to identify how they were using the already implemented and in use ESN. However, as research findings began surfacing, and concepts of grounded theory (coding) were applied, it became clear that issues regarding use and user resistance were emerging, which then led the team to consider the user resistance aspects. For instance, a question asked a participant about how the person manages and organizes his/her tasks with the ESN in operation, particularly when dealing with a bid that has to be submitted in a very tight timescale deadline. The participant explained the process and showed the researcher the actions. Following discussions with the second researcher and applying the coding scheme, it became evident that user resistance behaviours were being demonstrated. This was why it was essential for the second author to proffer an outsider's role, as the person was away from the main contextual environment and could not influence the findings or understanding, had more knowledge of user resistance and behavioural theoretical aspects, and played the 'devil's advocate' role; thereby, requesting theoretical justification of the practices under investigation (Eisenhardt, 1989).

To inform the reader the project of this paper began in January 2014 and is currently on going. Earlier, in this on-going research project, the post-implementation of ESN in Service Ltd revealed excellent results regarding user resistance to IT events and was diverse to the original research topic that was not focused on the use of, or user resistance to ESN. As the research project continued, an excellent opportunity for studying technology in use aligned with an understanding presented by the literature was presented, and assisted in overcoming “the main problem with all the literature” (Ferney & Sobrepez, 2006); i.e., that research “is not well grounded in analysis of work practice, so its presumptions and prescriptions of what is to be done are not based on what is done and what needs to be done, on the reality of the job, the tasks to be accomplished” (Orr, 1996).

The research approach of our study encompassed applying a qualitative approach that adopted the interpretive research approach and involved embracing Walsham’s view that “our theories concerning reality are making sense of the world and shared meanings are a form of intersubjectivity rather than objectivity” (Walsham, 2006). In other words, our underlying epistemological beliefs are that knowledge can be best achieved by getting inside the world of those generating it (Orlikowski & Baroudi, 1991). A key advantage of interpretivism is that equivocal outcomes of IT adoption are potentially accounted for by understanding how the social meanings attached to the technology originate and evolve. Therefore, this approach allows us to consider both the influence of the implemented technology and the broader context. As a result, our study builds on an interpretive case study (Orlikowski & Baroudi, 1991; Walsham, 1995), aiming to examine the actions and perceptions of the human stakeholders concerned with the use of the ESN and the changing contexts within which the implementation of the ESN took place.

Finally, it should be noted that the examination of the ESN was approached following Orlikowski’s conceptualisation of the IT artefact. As Orlikowski (2000) suggests, a technological artefact is a “bundle of material and symbol properties packaged in some socially recognizable form, e.g., hardware, software”. In the same way, we suggest that ESN are not only application platforms that are provided using hardware and applications, and provide content to organizations; but ESN offer organizational characteristics such as, task variety, executive support, and user participation that shape

the outcomes of their use and warrant attention as found in previous Information Technology/IS research studies such as Franz and Robey (1984) and Ginzberg, (1981).

Data Collection

The collection of data was based on the view that “[w]hat we call our data are really our own constructions of other people’s constructions of what they and their compatriots are up to” (Geertz, 1973). For this purpose, primary data, drawn from semi-structured interviews, informal interviews, and field notes of the environment where the researcher was located, as well as secondary data (e.g., archival blogs, intranet documents, and websites of the organization) were used for this research. The collection of various data ensured triangulation, which is beneficial for theory generation. That is, this approach provides multiple perspectives on an issue, and supplies more information on emerging concepts, while allowing cross-checking (Orlikowski, 1993).

Overall, 40 interviews took place virtually at all levels of the organization, with diverse departments, individuals (policymakers, decision makers and end-users) and in the various locations of the organization, in order to provide an unbiased view to this research. The interviews ranged in duration from 45 minutes to 2 hours. They were recorded and transcribed on the day of the interview. Data analysis occurred as the data collection progressed. Additionally, the first author attended an event, organised by Service Ltd, on service excellence where the role of social media was emphasised. Notes of the event were produced and added to the research database. Table 2 provides more details regarding the primary data collected from the interviews.

Table 2. Data Collection (Primary data)

Position (Organizational level)	No of interviews	No of Respondents
Directors (Top layer)	4	3
General Managers (Top layer)	10	3
Managers (Middle layer)	20	10
Business Consultants (Lower layer)	6	4

The interview questions were open ended with the respondents being allowed to express their thoughts and opinions. The questions largely sought to understand the implementation of innovative

technological change and, as manifestations of resistance-related behaviour became apparent, they were then focused more on the actual use of the system and the user's reasoning. The format of the interviews began with the researcher specifying the purpose of the interview, informing the participants of the research being ethically approved, seeking the consent of the respondent for recording the interview and providing the respondents with anonymity. The researcher sought clarification at the end of the interview by summarising the interview and allowing the respondents to interject and provide clarification when necessary. Finally, the researchers also had to determine whether additional interviewees would enrich the findings and add value to the research. However, the addition of more interviewees did not provide new or substantial findings to the study; thereby, suggesting that theoretical saturation had been achieved and additional participants were not required for the data collection.

Data Analysis

The analysis was conducted using a deductive approach, based on the Grounded Theory coding methodology, proposed by Glaser and Strauss (1967). Specifically, the coding scheme derived from the work of Azad and King (2011) was loosely followed, as they have examined resistance and workarounds within an organisational context. As a result, we did follow a grounded theory approach, but solely for the purpose of coding our material (rather than for developing our entire research design that is based on interpretivism). This allowed newly identified concepts to emerge and to be coded in terms of the extant (present in the literature) codes. This approach was chosen to allow for the possible identification and analysis of newly emergent codes, and to facilitate the close examination of participants' opinions, perceptions and behaviours, without imposing our own preconceptions onto our coding scheme. Therefore, during the first stage of coding (i.e., open coding), while considering work practices and organizational pressures, our analysis and ensuing interpretation were loosely based on the extant literature on workarounds and resistance behaviour; namely the work of Azad and King (2011).

The work by Azad and King (2011) emerged after the team researched for previous studies that emphasised user resistance and workarounds and one of the research team members being familiar

with their work. Through our analysis, brainstorming and understanding of the collated data and interpretation, the five final codes, set forth by Azad and King (2011), quickly emerged. The first set of codes referred to the day-to-day work activities, which consisted of (a) work ethos; (b) material constraints; and (c) discretion to decouple/loosely couple. Since the principal researcher was based in the organization and had been noting the activities, the day-to-day activities concept emerged, as well as the work ethos, which further validated our approach to build upon and verified the suitability of the particular coding scheme. This was followed by an examination of the bottom-up work pressure pressures of work practices and the top-down pressures, which allowed us to determine the issues faced by ESN users. However, these bottom-up pressures were not enough for resorting to workarounds. Drawing from the organizational change literature that the principal researcher was familiar with, it was known that a top down pressure is also pertinent for bottom up pressures to be effective and implemented. In this case, a top-down pressure that was required for the bottom up pressures to be diffused, was derived from the extra-organizational environment, in the form of standards (imposed by the Federal Trade Commission), which led to organizational directives (social media guidelines) and policy-based systems, such as, the logging in systems for the ESN (Table 3), which combined formulated the second set of codes.

It should be noted that, the focal theories of decoupling (Meyer & Rowan, 1977; Orton & Weick, 1990) provided powerful representations to describe the tug of war between top-down and bottom-up pressures; however, they were less useful for coding at a detailed level, the various working practices. According to Orton and Weick, 'loose coupling' refers to interdependent elements that vary in the strength and numbers of their dependencies, and which are contained within any location in any organization (top, middle or bottom) (1990). Following this explanation, on those occasions where there was no response or distinction, and the system was considered not to be a system, then that was known as a non-coupled system. If there was a response without distinction, the system was viewed to be a tightly coupled system. If there is distinction without response then the system was identified as decoupled. Finally, when there is both distinction and a response, the system is loosely coupled. Based on the aforementioned concepts, within our research, the term of 'coupling' was understood

better through its association with the working practices at any level of the organization (top, middle, lower) that led to the categorization in terms of official rules and the computer systems.

Table 3. Sources of Antecedent Pressures

Source of Pressure				
Top Down (Extra-Organizational)		Bottom up (Day-to-Day Work)		
Policy Directives (Rules)	Policy-Based Systems	Work Ethos	Discretion to Decouple	Material Constraints
<i>Chatter</i>				
Users are expected to abide to the following: Social Media Guidelines Business Conduct Guidelines Federal Trade Commission. However, nothing formal, specifically for Chatter has been developed. Rather the policy is implicit and informal practices exist to raise awareness of these directives.	An embedded system that has rules to identify Chatter users. These rules include first identifying whether someone is authorized to have a Safesforce.com account and whether the individual is of the managerial, general manager or director level.	“Quality and time are of the essence”. In light of these two aspects, individuals who have a Salesforce.com account may not pay attention to Chatter at the time a bid is being prepared. However, sometimes, it proves to be useful for the qualification and submission stages of a bid.	The Commercial Bids and Business Consultants team members don’t have Salesforce accounts, so they have no opinion about Chatter. The Pre-Sales, Strategic Bids, Technology Offerings do have Salesforce accounts. However, due to the pressures of deadlines and of ensuring the highest quality to their clients, they choose not to interact with Chatter on certain occasions. These individuals do have the power to ignore Chatter.	There is low interest in Chatter at times of pressure. The data is viewed to be suitable and of interest to those who have access to it. However, the limitation of having a Salesforce.com account poses to be a major constraint to Chatter’s application.
<i>Yammer</i>				
Since 2008, when Yammer was introduced, there is an official, formal awareness and guidance to the following directives: Social Media Guidelines Business Conduct Guidelines Federal Trade Commission. A policy specifically	There is an official policy-based system regarding the e-mail address of an individual. Thereafter, access is provided to anyone who belongs to Service Ltd’s workforce.	Yammer does not add any value to the bidding process or activities associated with the bid. Yammer is beneficial for generic information on interests, hobbies and identifying individuals; in essence, for networking.	As Yammer is viewed to be more of a social, networking, interaction tool, and one that requires logging out of the system, there is no interest in seeking to ignore the ESN.	The functionality of Yammer is inconvenient. Logging out of the system and then accessing Yammer from outside the system is viewed as cumbersome. Lack of suitable business content also seems problematic.

for Yammer was formed.				
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To summarise, our coding scheme emphasises the key concepts surrounding the terms ‘coupling with policies/procedures, computer systems’, ‘day-to-day work’, where emphasis is on the material constraints and work ethos-bottom up pressures, discretion to decouple/loosely couple, ‘extra-organizational environment’, where the focus is on policy directives and policy-based system-top down pressures. Thereafter, the analysis was conducted to allow unique patterns to emerge and for the researchers to gain a richer understanding of each of the ESN. The researchers’ then cross validated the terms to ensure that the meaning was maintained.

FINDINGS AND ANALYSIS

Research Site Selection: Service Ltd

The site of this research belongs to the service sector. Service Ltd (name substituted for anonymity purposes) was selected on the basis that it is a large organisation and a global leader known for its technology products and services, with an estimated 255 subsidiaries spread around the globe, and because it has implemented ESN. The organisation’s related services operations encompass consulting, imaging, content management, and outsourcing services. It is very focused upon the principles of quality and emphasises and practices the performance improving methodology of Lean 6 Sigma, which is evident in the organization’s processes. Also, the organisation is quite innovative and its business efforts have led to pioneering work in business processes, mobile devices and data analytics, among others. As far as an online presence is concerned, the organization maintains a Facebook page, a Twitter account, and a LinkedIn account, while it also maintains blogs, detailing and highlighting success stories or important matters regarding the organization and has in-house social media experts. In essence, it is very advanced in the online environment.

The culture of the organization promotes loyalty, ethics, business conduct, dedication, trust, quality and networking very strongly and attempts to emphasise them as core concepts of the organization. The organization also emphasises training and development where it is believed that the skills and knowledge of its workforce should reflect the signs of the times, or should be ahead, but not behind.

As an example, when a visitor enters the reception building, illustrations of the Lean Six Sigma Programme and Quality issues are emphasised. In terms of its location, the organisation's offices are located in the outskirts of a major shopping centre, close to major highways, thus providing convenient access to clients. All in all, Service Ltd staff members are situated in four buildings, one of which is a dedicated research centre. It was in one of the four buildings that the researcher was based at.

The domains under study in this research are the organisation's operational departments, i.e., Strategic Bids, Commercial Bids, Pre-Sales, Sales, Legal, Transitions and Marketing. The researchers interviewed front and back end individuals to proffer a holistic view of the organization rather than to emphasise only a part of it. The front-end team, which is the strategic bid team, offered insights to the bid process (Figure 1). As shown, in order to achieve the completion of each process, there are certain practices required, and they are supported by the back office team individuals from various departments, i.e., pre-sales, commercial bids, legal, marketing and transitions. The enacted practices are shown in Figure 2. Details of implementing the ESN are provided in Appendix 1.

In what follows, we offer a description of the bottom-up and extra-organisational pressures, which the employees at Service Ltd experienced and resulted in workaround practices of the two used ESN. We first present our findings with regards to the day-to-day pressures, which constitute the bottom-up daily constraints; namely work ethos, material constraints and discretion to decouple/loosely couple. Next, we move on to the extra-organisational pressures, which are seen as top-down pressures as they refer to organisational policy directives and policy-based systems. Finally, this section concludes with a presentation of the antecedent conditions that facilitate the introduction of workarounds, and which take the form of decoupling or loose coupling, and the bypassing of the system and of the official rules. However, before presenting our findings on the aforementioned areas, we initially offer a description of the coupling approach to procedures and policies and the coupling evidenced by the various computer systems, in order to lay the groundwork for the remainder of the section.

Coupling with Procedures/Policies

The individual championing Yammer, i.e., the Corporate Communications Manager, mentioned that there are social media guidelines that specify the procedures to be followed for utilizing Yammer, and other online social networks, such as LinkedIn or Twitter.

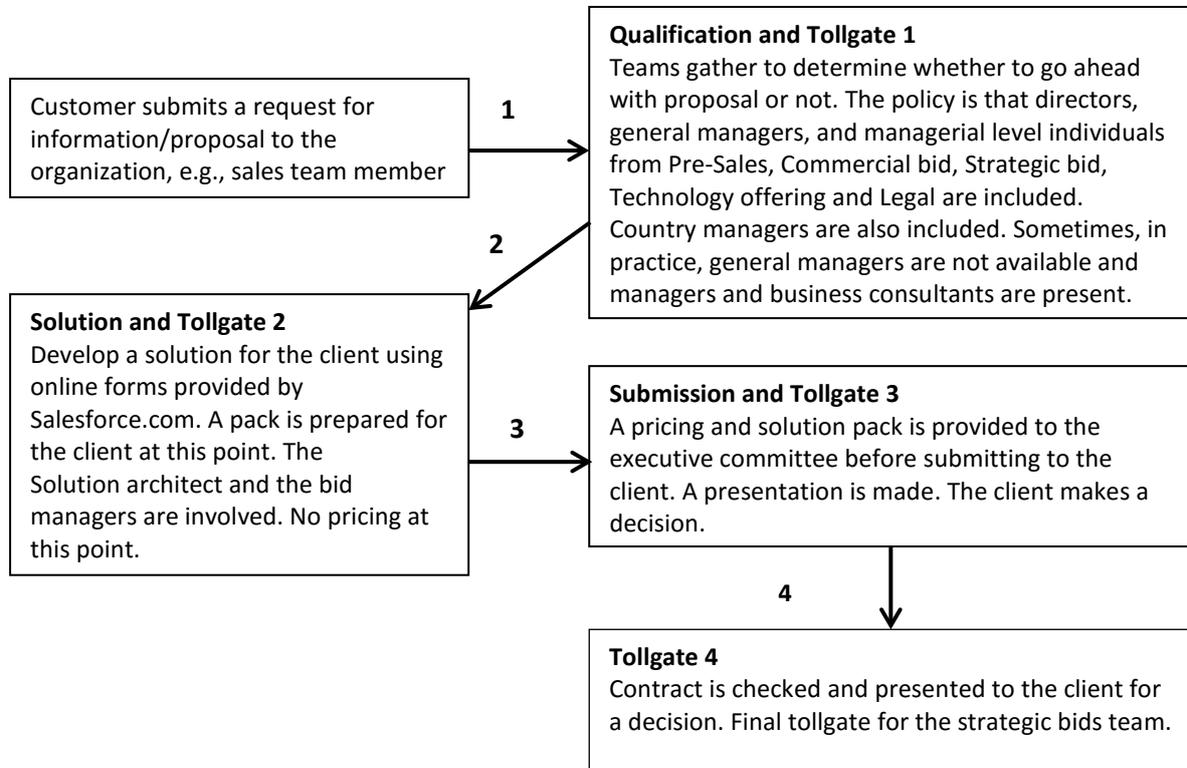


Figure 1. The formal policy a Strategic Bid Manager needs to follow during a bid process

As the Yammer champion mentioned, the official policy of the organization is that Yammer “*is an official collaborative tool that we are providing to our employees. However, its use is determined by the user and his/her manager. That is, how much time can be spent on, what it will be used for and such instances.*” When the Chatter champion (the Marketing Manager for Service Ltd) was asked whether Chatter had some official procedures or policies, it was learnt that officially Chatter is provided for the use of the Large Enterprise Organization Sales and Global Marketing teams. It is mainly used for knowledge sharing, work collaboration (mostly content, e.g., bids, marketing or collaterals), and peer engagement (communications facilitator for multi-geography teams). Regarding policies, it was learnt that there is no official, specific policy for Chatter’s use or content. However, there are conventions and behaviour guidelines. If further information about policies and procedures on Chatter is required, then the users are referred to the social media guidelines provided for Yammer,

which are viewed to be applicable to Chatter as well. The Chatter Champion stated: *“We believe that people are aware of the guidelines for Yammer, Facebook, LinkedIn and Twitter, so we do not have to inform them some more. This will cause an information overload. We anticipate that people will use Chatter the ‘right’ way”*.

We classify the organization’s approach to ESN use as loose coupling since staff members are allowed immense flexibility when interpreting the rules for using ESN. For workarounds, this implies that users are allowed to enact workarounds, which suggests that even though the intention for using ESN is clearly provided, it does not necessarily involve faithfully following the established laws to the letter.

As Figure 2 illustrates, particularly for Chatter, initially, a Salesforce account is required, which if an individual has, then (s) he is provided with access to the portal. Once in the portal, the individual user has the option to access and view news and information from Chatter, but there is also the option of completing an online form, which is usually the norm. However, there are days when users from the strategic bids team and others that have access to Chatter do have the time to read the news and information from Chatter that they find useful in some cases. However, these are days when the stress is low and there is time to pursue other interests. Therefore, the organization has allowed flexibility to Chatter users with regards to viewing and using times.

Coupling with Computer Systems

In Service Ltd, practice is very tightly coupled with policy. For example, from the point that a client initiates a contact with Service in the form of a Request for Information (RFI) or Request for Proposal (RFP), online forms are completed by the appropriate individuals. If the designated individuals are not available, either the project is not completed due to very tight deadlines, or the client is contacted and steps are taken to seek extra time. These activities are documented in online forms, which record the entire process, and are archived in the cloud for those with the authority to view these documents.

When interviewing various individuals within the department and referring to the intranet, each user was very aware of the official policies and forms. They also did not deviate from them due to the associated high costs. Therefore, there is no overriding of the system as the individuals felt that this

was a very important phase of the project and such an action would lead to dire consequences. As a Strategic Bids manager stated that *“When I had very tight deadlines to abide to, in my previous role, I would utilize alternative steps and get the work done. However, I would always e-mail my General Manager or Director about my action. But in this new role, which involves large sums of money, I do not. It is too large a risk to take, which I am not prepared to take”*.

Due to such views, it was felt that there is little, to no place for an ESN, particularly Yammer that involved logging out of the system and using it. As the Yammer champion mentioned, the intranet explained the directions for using Yammer and illustrations of Yammer use were provided in SharePoint: *“Yammer is connected to the SharePoint, but this is only a window. There is no real integration to our systems. In fact if you go to our intranet, you cannot find Yammer. You need to log into Yammer and then find Yammer.”* Chatter on the other hand is located in the same area where the online forms for bids are found and it can be used for the preparation of qualification or submission activities, where additional information regarding the entire sector may be required. These findings suggest that since Yammer is a distinct system, separate from the working system, it is decoupled from the bidding system. In contrast, as Chatter is located within the software application area provided by Salesforce (Figure 2, step 3, text box 4), it can be accessed whilst working on the online forms. However, a limitation exists in that not all the stakeholders of the bidding process have access to Salesforce; hence they are not aware of its existence or use. To those who have access to Chatter, some choose to ignore it due to work commitments, whilst others access it solely on a weekly basis when online forms require updating. Due to these circumstances, we classify Chatter as an independent application, yet part of the system, and as a result it may be seen as a loosely coupled system.

Day-to-Day Work

From the interviews and observations of the work environment, three bottom-up daily constraints, which influence work practices, and could be possible reasons for Service Ltd staff bypassing the implemented ESN and enact workarounds, were identified. We posit that, if the ESN takes such factors into account, then it is likely that the ESN will be readily accepted and used.

Material Constraints

Ensuring that projects (in this case, bids) are prepared on time with the required information is of utmost importance for Service Ltd. As a result, end users and managers identified very clearly that logging into, viewing and posting posts to the ESN were inconveniences and interruptions that they could not afford to endure during their daily work activities. In essence, the opportunity cost to log into, post and view postings on the ESN implied missing important deadlines, conversations with clients, which in turn could cost an individual much more in the long term than to interact with the ESN. As a Business Consultant remarked *“Using Yammer is not of any value to me. It has no relevant information for my work.”* This is somewhat relevant to the concept of visibility, which is “tied to the amount of effort people must expend to locate information” (Treem & Leonardi, 2012); while one could find relevant information or indirectly useful facts (e.g., whether a colleague has arrived), the effort and time spent to locate this information did not justify the risk of missing deadlines or wasting valuable time. Therefore, the information remained for them invisible (Treem & Leonardi, 2012), as they did not attempt to seek it out through the ESN.

From the interviews, observations and access to Yammer’s website for Service Ltd it was discovered that Yammer is viewed to be more of an entertainment ESN for which individuals had no time. Instead there was an expressed preference towards interacting with colleagues on a face-to-face basis, which is something viewed to be more as a tendency for a harmless workaround since the task that was meant to be completed is not affected. However, in terms of social structures inherent in the organization, this is not necessarily regarded as harmless, which is a result similar to Fernley & Sobreperez (2006). As an Internal Communications Manager commented, *“The content in Yammer is very general. Very little is applicable to Service Ltd.”* Further, Yammer is considered to be a detached ESN, which means that no one has time to spare for it. As the Yammer champion noted, *“Yammer is an extra activity to a daily task and in such a pressurized, meeting deadlines environment, one cannot afford to increase one’s new activities”*. However, what is also observed is that Yammer users are constrained by the business conduct, social media and Federal Trade Commission (FTC) guidelines provided by the organization. This ensures that users display suitable attitudes and behaviour in an

online environment and post professional content, which was limited to the guidelines. Users mentioned that the personal, face-to-face aspect allowed them to freely express their views and have no worries about side stepping any rules or guidelines.

A Marketing Manager mentioned the value of Chatter's information to her work, but also commented on the tight deadlines and long hours preventing her from using Chatter: *"I use Chatter as it contains sales directed information, which is of use to me. However, the logging into the salesforce.com account prevents me from accessing Chatter. If I was asked what I would want differently of Chatter, I would say it is the logging in part"*. What was also learnt is that although directly enforced rules are not applicable to Chatter, it is expected and anticipated that the rules of Yammer will remain in and apply to the attitudes and behaviour of Chatter users.

Work Ethos

From the intranet, archival documentation and interviews, we found that when Yammer was first implemented in Service Ltd in 2008, the organization had some individuals posting information on the ESN. This information was picked up by senior staff members (General Manager or Director), who invited other senior colleagues (General Manager) to read Yammer postings. This led to daily updates sent by e-mail to the user. However, the ethos or work practices of the various organizational members whether at a senior management position or at an end user level are guided by the issue of quality. All staff members go to immense lengths to ensure that the utmost quality is provided to their clients and peers. By doing so, members of the staff commented that clients returned to them, which led to more business for the organization. As mentioned, it is extremely more difficult to get new customers than to retain existing ones. Specifically, a Pre-Sales Manager remarked: *"We will ensure that we do things well, done to a high standard, making sure that they are delivered on time. We, more importantly, I, have an attitude of delivering quality and satisfying customer requirements for that. I take immense pride in my work. We like to win and for that we satisfy customer requirements with the high quality service that we provide"*. By ensuring the best service and quality offerings are provided, the pre-sales manager very clearly explained the importance of having retained existing customers.

With regards to Yammer, participants viewed logging in to and the updates provided by it as being of no 'business and work' value to them. As one Director commented, "*Yammer is of zero value to me and in my work*". Chatter on the other hand is viewed to make a contribution to the organization and one marketing manager mentioned, "*I get to learn of our competitors' business performance*". A Strategic Bids Manager commented that from the Chatter's updates, it is possible to make predictions about a competing organization, which assists the preparation of bids. The same manager also explained how at the end of every week he always summarized the week's completed work and noted the remaining tasks. However, on that day, an additional task was to view Chatter for the latest business sector news.

An additional factor associated with work ethos was the issue of time. When speaking with the Yammer champion, the issue of time was mentioned: "*People also don't post on Yammer because they feel like my manager might be watching and this might not count as work and seen as a waste of time.*" Two more individuals made the same comment: the Commercial Bids Manager and the Strategic Bids Manager.

Discretion to Decouple/Loosely Couple

In Service Ltd, sponsorship pertains to getting tasks and priorities completed. Sponsorship usually comes from the General Managers and Directors of the organization. The sponsorship is essential to get projects completed within the organization, as well as ensuring that the policy directives issued are adequately met. The following example, a comment made by a Change Manager, e-mails sent to the organization and postings on the intranet illustrate the relevance of differentials and disparities in professional ranks, the role of sponsors in the organization and their importance in implementing an innovation, in this case an ESN: "*To increase user numbers in Yammer, a Yamjam is going to be held with the Chief Technology Officer (CTO) speaking about Service Ltd's future in 75 years. We believe that due to her status, her discussion will create an interest within members of the organization*". "A Yamjam is a collaborative brainstorming session focused around a specific topic and held over a specific timeframe. The purpose of a Yamjam is to build momentum and generate new ideas around a topic" (Yammer, 2014). This was further confirmed by the Yammer Champion, who said that having

a newly appointed Chief Marketing Officer would lead to changes in Yammer usage. In the week after the Yamjam, during the interviews with the staff, a ‘watcher’ of Yammer updates informed the author that he had taken an interest in the discussion and had widened his views about the organization. However, he also spoke of being disinterested by the CTO’s remarks about her own activities, for instance, “*I am about to fly now*”, and would have much preferred an emphasis on the discussion. Other members in the organization expressed the same opinion.

When bids have very short-term deadlines and require authorization through the tollgates, prior approval is necessary. For this, the support of a Country or a Global General Manager is necessary. If the person is not available, the team knows that the manager’s support and data entry is essential to pass a gate, which is vital for completion of the project. In that case, an alternative Country Manager authorizes the bid, an online record is made and an e-mail is sent out to the involved parties. At that point, everything is critical and there is no time to view Chatter or any other system or ESN that distracts from the completion of the activity. However, since the trait of visibility allows users to know the whereabouts of their colleagues, when or if they will arrive at the premises. through the option of status updates (Treem & Leonardi, 2012), one can argue that the ESN could facilitate the process by communicating information, such as the availability of the Country and of the Global General Manager, which is mandatory for authorisation purposes. Yet, as our findings show, users were rather dissatisfied with the “status update” feature and generally refrained from consulting the ESN under pressure. Therefore, particularly when the submission point occurs, it is expected that there will be no other application or activity attended to. It was also learnt that the Strategic Bids Team Manager has greater discretion than the Marketing Manager regarding straying away from the rules of Chatter due to the importance of their role. As shown in Figure 2 when a bid is to be submitted, there is no time to view or log into Chatter. In Yammer’s case, there is no discretion policy needed as Yammer is not viewed to be of importance and there are no abiding rules.

Log in to system - Data for system ID entered

Level 0 (Activity process)	<i>Log in to system - Data for system ID entered</i>	
<i>Level 0a</i> (Visible item to a user)	 <i>Flagged item for a user</i> An e-mail containing a request or an attachment requesting a Customer Request for Information (RFI) and/or Request for Proposal (RFP) has been sent to the strategic bid manager.	
Level 0b (Activity process)	The e-mail or attachment is opened by the strategic bids manager, who logs into the <i>Salesforce</i> portal.	
Level 1 (Activity process)	Strategic bids manager logs into the <i>Salesforce</i> web portal through the shortcut.	
Level 2 (Activity process)	Strategic bids manager enters Company ID in the <i>Salesforce</i> portal.	
<i>No visible action by a user</i>	Chatter tab	Online form for the bids manager's use
<i>Decisions to be made</i>	 Decision making stage 	
	<i>Deadline, urgent matters, stress</i>	<i>No deadline, no urgent matters, no stress</i>
		
	If a deadline exists, then Strategic bid manager selects the tab for online forms in <i>Salesforce</i> portal.	There is no deadline, so the strategic bid manager views Chatter updates.
<i>Implications for workarounds</i>	<i>With a deadline looming, the strategic bids manager ignores Chatter and continues with the online form</i>	 
Level 3 (Activity Process)	Strategic bid manager begins to complete online form for qualification stage	
	Tollgate 1: Are we going ahead with the project or not?	
Level 4 (Activity Process)	Qualification online form is completed and submitted to an executive committee for a decision	
External action	Yes	No
	Outcome: The executive committee and strategic bid manager proceed with the RFI/RFP. Resources are allocated to the manager. A resource allocation plan and new teams are formed. Team includes members from Human Resources, Commercial bids, Pre-sales, legal, business consultants, transitions and strategic bid.	Outcome: A face-to-face meeting between the executive committee and strategic bid manager rejects the RFP/RFI. A possible reason to decline is that requirements do not allow a profit to be made.
Level 5 (Activity Process)	A Solution online form is completed by the strategic bid manager. The details of the solution are provided. Team is off site and works at an external site during this time. Tollgate 2: Country and if necessary, global manager check the solutions online form for clarity.	Strategic bid manager completes an online form and archives. This is the end of this process.
<i>Decisions to be made</i>	<i>Deadline and urgent matters, stress</i>	<i>No deadline, no urgent matters, no stress</i>
	When a deadline exists, the strategic bid manager proceeds to the online submission form.	There is no deadline, so the strategic manager views Chatter updates and there is no workaround.
		
<i>Implications for workarounds</i>	With a deadline looming, the strategic bids manager ignores Chatter and continues with the online form	 
Level 6 (Activity process)	A submission online form is completed by the strategic bid manager (includes details on pricing, resources etc.)	
Level 7 (Activity Process)	Tollgate 3: details are checked by managers, country and (optionally) global general managers Oral Presentation to the client. Strategic bid manager, Director, General Manager and (optional) another manager attend meeting with client Client's decision is made. Outcome of bid.	
Implication for Chatter and or workaround	<i>There is no more stress for preparing forms, so until the outcome, there are no more workarounds. Therefore, Chatter is consulted.</i>	
Level 8 (Activity process)	The bid is successful and a contract is awarded. A closure meeting is held with the client. Feedback sought for improving services and products. Online forms completed and archived. End of bid process.	The bid is unsuccessful. A closure meeting is held with the client. Feedback sought for improving services and products. Online forms completed and archived. End of bid process.

Notes: *Dotted line:* Intangible action. *Continuous line:* Observable activities. Process denotes the conversion of an input to output

Figure 2. Enacted Practice of a Strategic Bid Manager when using Chatter

Extra-Organizational Environment

In Service Ltd, top down pressures from extra organizational institutions existed in the form of regulating bodies that enforce pressure on the rules designed for the use of ESN in the organization. They provide legitimacy to the rules and policies enforced by the organization and ensure that the work force of Service Ltd have some legitimate, rather than general rules and guidelines to abide and refer to. In what follows, we identify the top-down pressures.

Policy Directives

When the policy for using ESN was prepared in 2008, there was global confusion about the appropriate content and language to be used within the ESN. These concerns were reduced by forming the social media guidelines that are regulated by the FTC and enforced by a global compliance policy and Code of Business Conduct. To date, these policy directives are applicable to Yammer, which has been implemented and used for several years now. The implementation team of Chatter, on the other hand, believes that since individuals within Service Ltd are aware of Yammer's policies, which are meant to be mirrored in Chatter, they will abide to the same etiquette and roles when using Chatter. This means that the team has not formed a separate, specific policy directive for Chatter, but believes that the Yammer guidelines are also applicable to Chatter. If further specific reference to a policy directive for only Chatter is sought, the Chatter champion mentioned that "*there is a legal covenant on the usage agreement of Chatter that users must accept when they first use Chatter*". However, this was not viewed as an essential policy directive to abide to. Instead, Chatter users could override this policy directive, glance at it and shorten the length of time spent on familiarising themselves with Chatter.

Policy-Based Systems

To access Chatter and Yammer, there is a formal approval policy, which is embodied within the organization's IT systems. For Yammer specifically, from Service Ltd's intranet and the interview, it was shown that the rule is that a user must have a Service Ltd e-mail address, i.e., once an official Service Ltd e-mail address is provided, an individual can access Yammer. To get this address, the

individual needs to get cleared by the security, IT and Human Resources Department. This process for logging into Yammer was made possible in 2012 after the double accounting issue was discovered. As the Yammer champion mentioned, *“We poked around Yammer and found that double accounts were formed as individuals who had left Service Ltd, but due to an individual e-mail account could still access Yammer. Therefore, for the organization they had left, but we were counting them as a Yammer user.”* It appears that this system is much preferred and seems to be more effective as it allows security and a realistic record keeping system.

In the case of Chatter, there are more policies to abide by. Initially, an individual requires the official organization e-mail. Thereafter, only if someone is provided with a Salesforce.com (SFDC) accounts will (s) he has access. These are usually the Pre-Sales, Technology offerings, Strategic Bids, Sales and Marketing individuals. Individuals at all levels of the organization in these departments have a salesforce.com account. As the Chatter Champion stated, *“SFDC Chatter is available to anyone with a Service Ltd SFDC user license. We do have the possibility (flexibility) (not explored yet to give Chatter access to whomever we choose (Ex: Clients, Biz Partners, and other Service Ltd Communities without SFDC access).”* Therefore, in both instances there are policy-based systems that are not easily overridden or worked around. There are stringent policies that very few individuals have the power to override and the organization appears to be satisfied with this.

Relating this to the concept of association, i.e., the established connections between people, content and organizations, in this case provided by the e-mails and accounts issued by the organization, (Treem & Leonardi, 2012), we see that these features function as security gates so that no unauthorized person accesses online content.

Antecedent Conditions and Patterns

When an essential workaround to enter Chatter and Yammer is undertaken, the conditions that contribute to them are both top-down and bottom-up pressures (Table 3). As argued by the institutional theory, there are policymakers, political actors and the public. Further, from Azad and King (Azad & King, 2011) it was found that the top-down pressures emerge from the extra-organizational environment and in this case, external organizations such as, the FTC that establishes standards and directives guidelines, policies and rules are entered into the business conduct and global

compliance policies of the organization. The bottom-up pressures emerge from the day-to-day constraints, in the form of work ethos, discretion to decouple and material constraints.

Figure 3 further identifies the diverse patterns of workarounds that bypass the system and/or rules. The vertical axis illustrates the workarounds of the main object, i.e., either a rule or system. The horizontal axis shows the main object's degree of coupling (increasing) with the official rule or system. As in Azad and King (2011), there are four types of workarounds that emerged in this research. When considering the vertical axis the official system or rule is bypassed (or used anomalously). In the instance of the horizontal axis, the bypassing takes place in the form of coupling (decoupled or loosely coupled).

In Figure 3, cell 1 (Decoupled Actual Rule Compliance from official rule) illustrates that Chatter users are not provided with any strict guidelines of use. Instead, there is trust and reliance that individuals will have a moral or ethical responsibility, arising from the work ethos, material constraints and the discretion to decouple, to use Chatter in the way suggested by the organization's social media guidelines, or those prescribed for Yammer. Yammer users, on the other hand, display a compatible behaviour with the official social media guidelines or those provided by Yammer's guidelines. Hence, the content provided by Yammer is not impolite or offensive, and it is used in a professional manner. Therefore, official rules are being followed, but not to the letter, as our findings revealed that Yammer has become more of a social, networking and generic interests, or hobbies platform that does not provide much, or any business value. Cell 4 (loosely coupled actual system use with designed use) shows the irregular system used to bend the rules. In this case, the Strategic Bid Manager has to prioritise the aspects of quality and time, as these are of utmost importance. Therefore, even though some useful information or knowledge could be posted in Chatter, it is overlooked to meet the demands of the client and provide the utmost quality service. Once the bid is submitted, then the manager will view the Chatter postings. Cell 2 (decoupled actual systems use from designed use) illustrates that the aforementioned antecedent conditions of work ethos, discretion to decouple and material constraints cause a conflict with the rules for Yammer. Thus, although the guidelines specify the protocols (e.g., using good language, ensuring that everyone can view the postings, and the content being of value to the organization), this is not the case in practice. This led

to the use of Yammer increasingly as a social, networking, generic hobbies and interests platform, which deviates from the intended ‘organizational purpose’ use, and suggests a decoupling of the system from the designed use. Finally, as shown in cell 3 (Loosely Coupled Actual Rule compliance with Official Rule), the work ethos of ensuring quality and timeliness results in Yammer users providing good information, written in a professional manner. The discretion of higher-level individuals to continue with their activities, despite Yammer postings arriving in their e-mail boxes and leaving them as unread items, does not suggest a breaking of the rules when using Yammer. However, it does suggest that these individuals have more power in ignoring such postings whilst working and not suffering any negative consequences. The material constraints facing individuals ESN is that the content should display professionalism and abiding to a professional online, etiquette behaviour.

What is Worked Around

System (from/with Designed Use)	Decoupled Actual System Use	Loosely Coupled Actual System Use
	<p>It appears that not all users need to or pay to attention to Yammer as a communication tool. It has no value for their work and is viewed to be a ‘waste of time’ while working. Therefore, it is not used in any prescribed manner and no workaround is undertaken. (Yammer)</p> <p style="text-align: right;">Cell 2</p>	<p>The Strategic Bids Manager can workaround Chatter more than the Marketing Manager. Chatter is of value, but not when facing tight deadlines and important work. In this case, Chatter is viewed to be a hindrance to usual work activities and a workaround is pursued to avoid it. (Chatter)</p> <p style="text-align: right;">Cell 4</p>
Rule (from/with Official Rule)	Decoupled Actual Rule Compliance	Loosely Coupled Actual Rule Compliance
	<p>The rules that are applicable to social media, including Yammer is applicable to the Chatter users. Currently it is felt that there will be an information overload if more rules are provided and enforced specific to Chatter. What is also apparent is that the Strategic Bid Managers can overlook the rules more than the Marketing Managers. (Chatter)</p> <p style="text-align: right;">Cell 1</p>	<p>Yammer’s rules are stated within the social media guidelines. However, the rules are not strictly enforced by the policymakers or abided by Yammer users. Yammer users can use Yammer as they see fit. (Yammer)</p> <p style="text-align: right;">Cell 3</p>

➔

Higher Degree of Coupling

Figure 3. Describing the Workarounds in terms of stakeholders and patterns of institutionalised workarounds (adapted from Azad and King (2011))

DISCUSSION AND IMPLICATIONS

This present study provided a deeper understanding of the ESN workarounds and uncharacteristic behaviours of several individuals within an organisational context. In addition, the findings of our study have offered rich descriptions regarding resistance-related behaviours toward an ESN using bottom-up and top-down pressures according to institutional theory and ISD theory. We have also illustrated how and why several workarounds may be deemed as necessary by an organisation's employees in order to respond to day-to-day work-related demands. This was possible using a multi-level aspect that is shown in Figure 2 and suggests as Benbasat and Barki (2007) and Schwarz et al (2014) that when understanding the adoption of new technologies a multi-level aspect is useful.

Discussing first the reasons that urge users to use or not to use the specific systems, our research showcases that there are two different categories of reasons for working around the two ESN or ignoring them altogether, i.e., resisting their designed-in use and application. As the discursive institutionalism theory shows, there are two forms of discourse, which involve the coordinative and communicative discourse between three main stakeholders; namely policy actors, political actors and the public. In this case, there are bottom-up pressures emerging from the daily constraints and the various pressures from the extra-organisational environment, which in this case are the policy actors. This demonstrates that coordinative discourse occurs where the ideas about the work practices are shared with the political actors; hence in Service Ltd, ideas about the way the ESN would function in the working environment are shared with the managers and senior management (political actors). In turn, the political actors then use communicative discourse to communicate these ideas among themselves and the external organizations in order to form policies.

In terms of bottom-up pressures, the first category refers to material constraints, work ethos, and the discretion some staff members enjoy to decouple or to loosely couple the use of ESN. Material constraints, in particular, transform users' interaction with the ESN with users viewing the ESN as an inconvenience or interruption. Employees feel that this activity, on the one hand, hinders completion of the projects in time, while on the other hand, it does not necessarily lead to valuable input in their primary task. In terms of workaround types, as identified by Ferneley & Sobreperéz (2006), it can be argued that material constraints are a harmless workaround since they do not significantly affect

workflows or the accuracy of data. Lankshear & Mason (2001) and Timmons (2003) identified how users failed to enter data or to comply with procedures, as this was a low priority in comparison to their 'real' daily jobs. In the same way, employees felt that when the 'real' task is at hand, then interactions with ESN posed to be inconvenient rather than an essential task to complete. This also suggests that there was negative resistance in the form of time overheads as users during times of tight deadlines did not have the inclination, or the urge to utilise ESN, instead they focus their attention towards completing the task at hand, without wasting any time.

Next, regarding the work ethos, this reflects the organisation's intention to pursue excellence in the provided services, as far as quality and timeliness are concerned. As a result, in these cases interaction with the ESN is, or could be considered to be a potential waste of time or as an activity that does not add value to the fulfilment of tasks, where users choose to bypass the use of either Chatter or Yammer. In the first instance, i.e., the waste of time, one could argue that bypassing the ESN (specifically Chatter) there is a *hindrance workaround*, as it occurs at a point that "the use of the system is [...] too time consuming" (Ferneley & Sobreperez, 2006). Regarding work ethos, the ESN (Yammer) is also considered to be a harmless workaround. Ferneley & Sobreperez (2006) found in the antecedent condition of 'discipline' that users thought that the ESN was hindering their work ethos because it prevented them from speaking and interacting with colleagues at a stressful time, thereby choosing to ignore the ESN (as shown in Figure 2).

Finally, our findings show that some staff members, especially those who are at higher levels, have the discretion to stray away from the rules and policies set forth for the use of the two ESN. This behaviour can be seen as a form of workaround. However, it is an *essential workaround*, particularly if one considers the strict time constraints that are required when preparing bids. In that instance, there appears to be no time to consult or even access the ESN, which accounts for the reasons of excellent results for the organization. This aligns with Ferneley & Sobreperez's (2006) antecedent condition of 'non engagement with the system'. As Suchman (1987) found, there may be a feature of an IS that suffers from the imposition of procedural plans and may not allow for, anticipate or support situated actions such as, altering, sharing, executing and correcting activities in a cooperative manner. This also suggests that negative resistance at top-level management level emerges by them deceiving the

system, which turns out to have a positive impact, as the avoidance of working with the system leads to better quality outputs.

With regards to the second type of reasons for working around the ESN or rejecting them altogether, i.e., the top-down pressures from the extra-organisational environment, these take the form of rules and policies enforced by the organisation in line with the recommendations of the regulating bodies. In other words, these are the policy directives and the policy-based systems. Our investigation of the intranet, the internet and archival documents in the form of brochures and then the interviews revealed that, while there are specific, formal guidelines of conduct for Yammer, similar ones, specifically developed solely for the requirements of Chatter, do not exist. Nevertheless, it is expected that the same rules of Yammer will apply to Chatter. However, to ensure the utmost security and privacy for users, in Chatter’s case, there is a legal usage agreement. Users get informed of the agreement during their first visit to the system; nevertheless, users often disregard this when working towards their tight deadlines. Next, as far as the policy-based systems are concerned, our analysis revealed that there are tight, formal procedures for gaining access to both Yammer and Chatter, which is restricted to specific departments. In this latter case, it follows that working around these systems is not possible. In Table 4, a presentation of the types of workarounds evident within the bottom-up pressures is proffered.

Table 4: The Workarounds evident in the Bottom-up and Top-down pressures

	<i>Type of Workaround</i>
Bottom-up Pressures	
Material	Harmless workaround. Users see the ESN as an interruption or inconvenience
Work ethos	ESN (Yammer or Chatter) is considered to be a waste of time - hindrance workaround ESN use does not add any value, or is irrelevant - harmless workaround
Staff members at higher levels	Discretion to stray away from rules and policies. Essential workaround. When time constraints exist, there is no time to consult or access ESN.
Top-down pressures	
For policy-based systems	Tight, formal procedures exist, which means that workarounds are not possible.
Specific, formal guidelines	There are no specific guidelines for Chatter, but there are for Yammer. For Chatter users, there are legal agreements

To summarise, there are different types of workarounds, some of which entail the bypassing of the ESN, while others take the form of decoupling or loosely coupling with the formal or informal prescribed use of the system. In all cases, these workarounds are not the result of a formal type of resistance, but rather, they emerge from users completing the assigned tasks to the highest quality, within the imposed timeframe and in a professional manner all within their day-to-day activities, especially during stressful days. Furthermore, it should be noted that individuals within the organisation have the discretion to use both ESN as they see fit, i.e., can use ESN minimally or bypass them altogether, as long as day-to-day activities are completed according to the organisation's policies. As a result, they are in all cases harmless workarounds, that can then be classified as essential or hindrance workarounds.

With regards to the concept of resistance, the participants stated in the interviews, and confirmed from the intranet, archival documents, internet and Xerox website that staff members exhibit a form of positive resistance due to the aforementioned workarounds. It appears that there are indeed "good organisational reasons for resisting [these] poorly designed or implemented systems" (Ferneley & Sobreperez, 2006). To begin with, there is no explicit rule for using either Chatter or Yammer for work-related tasks within the organisation. These two systems are provided for diverse users, but are utilised when their need arises. This behaviour is similar to the one unveiled by Ferneley & Sobreperez (2006) where users had no choice but to use the system, while in practice, they co-opted other users to input data on their behalf. In our study, users were provided with two ESN and in the case of Yammer in particular, users were entering data that was of no relevance, only to demonstrate that the ESN was being used. Next, the use of Yammer prohibits users from having an easy access to the system, while Chatter is available to only some of the organisation's departments. Therefore, Yammer itself poses challenges to users while not all users are aware of Chatter and its functionalities; hence it is quite difficult for it to be part of the organisation's everyday culture. This description is similar to Ferneley's & Sobreperez's (2006) antecedent condition of non-engagement with the system where negative resistance emerges due to a lack of understanding (in the case of Yammer) and avoiding time overheads since seeking an account for Chatter involves more bureaucratic procedures and rules and completion of forms for an account (Chatter). Thirdly, the

nature of business within Service Ltd is quite hectic and its objectives for delivering projects and bids on time and to the highest quality leave little room for accessing information and systems that may seem as not integral to the organisation's 'essential activities'. All of the above, combined with the fact that when the policy guidelines and system details stored within the intranet and internet were referred to, show that the organisation has not actually offered specific guidelines on how to utilise the two ESNs in their work lives and activities (except for the code of conduct when online), allows users to remain flexible and use them at their own discretion. As a result, in those cases where their use appears as time consuming, cumbersome or as not adding value to the primary task, users choose to ignore them. Thus, it follows that this is a form of positive resistance, aimed at supporting staff members in the performance of their duties as prescribed by the organisation and to successfully attend to the workflow.

Next, as far as coupling with policy-based systems and directives is concerned, i.e., the sources of extra-organisational pressures, and drawing from archival documents, the intranet, and interviews, our findings show that despite the official or implied policies and rules for using both Chatter and Yammer, there is loose coupling, since employees are allowed some flexibility while interacting with these ESNs. This results in occasionally rejecting the use of these systems or enacting several workarounds. Next, when examining the relation between the two ESN and the other IS used within the organisation, our findings show that while the first ESN (i.e., Chatter) is integrated within the IS provided by Salesforce, the latter (i.e., Yammer) is not. As a result, access to Yammer is more cumbersome and is viewed to be a singular system, which is detached from the rest of the IS. With regards to Chatter, participants' actions and opinions suggested that despite its integration, staff members still choose to ignore it, depending on the particularities of the specific workday, which accounts for it being regarded as a loosely coupled system. In both instances, the implementation of the two ESNs, especially that of Yammer, seems to allow an explicit resistance to surface, and to facilitate the deployment of workarounds. This is somewhat surprising, particularly if one considers that there are relatively specific policies and procedures in place for the organisation's operations and day-to-day activities that do not allow staff members to deviate from them. Further, despite the implementation of the two ESN having the support of senior management, their actual use has not

been explicitly specified. As a result, as shown in Figure 2, and during the process of strategic bids, the two ESNs are not well implemented, leading to their non-use. However, for the same reasons, staff members' resistance to the use of the ESN cannot be seen as a negative type of resistance, since there are not any negative consequences to the organisation's activities and intentions. Instead, it may be said that this is a case of positive resistance, as it allows employees to successfully attend to their primary tasks to the highest quality and within the given timeframe.

There are several implications emerging from our study. Overall, our study reveals that despite organizations investing in ESN, awareness of their existence and their application in a 'work or business sense' is still unknown, as in the case of Chatter. If the application and use is known, as in the instance of Yammer, they remain incongruous for the users, and lead to workarounds that are viewed to be forms of organizational, positive resistance. Based on our findings, it appears that the resistance exhibited by the users derives from their unwillingness to spend valuable time for accessing or posting information online. We believe that this is due to an overall assumption that, first, the use of the two ESN are not really necessary for the completion of work activities and tasks as the nature of work at this point is such that the ESN is not essential, and, second, several of the ESN's other features, e.g., status updates, transformed the two systems into regular OSN, which are generally viewed to be socialising mediums rather than work-related platforms that can increase users' performance; thereby leading users to opt out of using the systems, more in the case of Yammer and less in that of Chatter's. When addressing this issue, we have explored the bottom-up and top-down pressures, following the rationale of Azad and King (2011) and showcased that they need to be considered as well. However, our findings illustrate that there is also a need for considering the organizational goals, activities and aims. This is something that previous research studies on workarounds and resistance-related behaviour in ESN studies have not touched upon (e.g., Azad & King, 2011; Ferneley & Sobreperéz, 2006). As shown, the organisational goals for completing projects to the upmost quality and within a quite restricted time frame, prohibited users from actually using ESNs according to their design and explicitly stated aim; thus giving rise to several forms of resistance-related behaviour. Therefore, an important implication of our study is that when

considering bottom-up and top-down pressures, there is an additional form of pressure, i.e., the organizational goals, activities and purposes, which needs to be addressed when considering the implementation and use of an information system. However, to understand this pressure, we propose that it can be better understood as an extra-organizational form due to the information and knowledge of the organizational goals, activities and purposes being in the realm of senior management teams rather than that of users; hence, we classify it as a novel top-down pressure and consider it to be within the contributions of this study.

We also address the call that academics, such as Benbasat and Barki (2009) and, more recently, Schwarz et al. (2014) have made for a move in adoption research beyond and outside a static view of IT acceptance to a more multi-stage approach, which we have attempted to illustrate in Figure 2 of our paper. By doing so, it can be learnt that there are times when ESN can be used, but there are also instances when they are not and this paper provided an example of such a case. We also show that by discussing the activities and routines that diverse users in Service Ltd pursue, ESN are not only technology platforms *per se*; ESN have a role in organizations where the social and cultural traditions have yet to change for the accommodation of the new, social networking technology. At a more practical level, the implications of our findings for the interested organisations emphasise that there need to be certain and clear reasons for the implementation and use of an ESN. Once this is achieved, the next step is to ensure that the ESN is aligned with the top-down and bottom-up pressures that can lead to its better development and allow the emergence of 'discursive institutionalism'. In addition, the organization's main 'work and business' motive and purposes need to be clearly and transparently presented to the developers, implementers and diverse users of the system. In essence, the stakeholders of an ESN need to be clearly acknowledged and their roles defined and identified within the ESN. Therefore, issues such as, access, limits to the viewings viewing times, and the 'work or business' purpose of the ESN need to be confirmed and obtained for the entire organization's workers, rather than a select few. By doing so, the ESN can be employed in the most suitable manner and utilised in a 'state-of-the-art', 'fit-for-purpose' 'work and business' manner rather than to be an ESN that is more a state-of-the-art networking tool and does not offer immense 'work and business knowledge sharing'.

For policymakers, our research highlights that when developing strategies and policies, it is also necessary to consider the purpose of and the need for the ESN. Therefore, if an organisation's strategy entails the acquisition, application and sharing of 'work and business' knowledge, systems, policies and actions to achieve them should be implemented and emphasised. This does not suggest that they need to be enforced in a strict, 'disciplinarian' manner, but rather in a fashion that will be accepted by all the employees of the organization. However, for this to occur, diffusion actions to promote awareness, insights and use of the ESN are essentially required. Finally, when considering the accessibility of ESN, the associated infrastructure, which includes issues of the licenses and numbers of users need to be considered as access needs to be widely and freely available to all users, otherwise the use of the ESN will be reduced, or minimal, which will defeat the purpose of the application.

CONCLUSION, LIMITATIONS AND FUTURE DIRECTIONS

In this study, using the lens of resistance and the deployment of workarounds and institutional theory we have explored the use of ESN within a large organisation of the service sector. In line with previous research (e.g., Azad & King, 2011; Ferneley & Sobreperéz, 2006), our findings illustrate that there are several bottom-up and top-down pressures, which effectively hinder the adequate or successful use of ESN and drive users' resistance and workarounds. However, what has explicitly surfaced from our findings of workarounds is that, when implementing ESN, one also needs to consider the organizational goals, main 'work and business' activities and aims, matters that prior studies have not previously examined within the context of a large organization of the service sector. In light of this, our study shows that primary tasks and activities within an organisation need to be acknowledged and reflected in the design of the system when considering the use of ESN within an organisation. Similarly, in order for an ESN to be actively and successfully used by all the staff members for the conduct of day-to-day work, the official rules and policies need to be clear and take into account the use and purpose of the system. However, what also surfaced is that three types of workarounds can emerge and promote negative and positive resistance. In particular, our study emphasises users' avoidance of the ESN when time is restricted and when there is a need to submit bids or perform other activities that are time-sensitive. This was more at the end-users level. Higher

position individuals were afforded discretions when using ESN due to the types of commitments and pursued work. Therefore, when using ESN, the organizational level also requires attention. Finally, our study also suggests as Benbasat and Barki (2007) and Schwarz et al (2014) that when understanding the adoption of new technologies a multi-level aspect is useful.

The limitation of this research is that it was contextualised within one department of the organization; therefore, an overall presentation of the entire organization could not be provided. However, as the two ESNs are provided to several departments in the organization, we believe that our study did indeed capture the critical points of use of the ESNs and provided a deeper insight into the various particularities, which would not be evident, had we followed a more holistic examination. For instance, it was possible to investigate into the various position levels that enjoy the discretion to decouple from official rules or system.

As a result, future directions of this research lie in determining whether an overall investigation into the organizational adoption and use of ESN would offer different findings to those offered by this study. Second, one of the two ESNs, namely Yammer, has been implemented for some time now, whilst the other one, i.e., Chatter, is just taking off. It would thus be useful to examine whether Chatter will have the same fate as Yammer, or it will transform into an integral system to the work activities and processes of the organization.

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Appendix 1. Background to Yammer and Chatter

Background to Yammer

Yammer is a private and secure online environment that supports real-time communication, collaboration and sharing within enterprises. Simply stated, it is a social network for businesses and companies and is provided by Microsoft. Service Ltd has almost 24,000 users from within its 140,000 global workforce. Access to a Yammer network is determined by a user's Internet domain so that only individuals with appropriate email addresses may join their respective networks. From the interviews it was learnt that updates are sent on a daily basis to the users, and in the late mornings. Users then decide what is of interest to them and what is not. Some appreciated this practice but others did not like it. A business consultant mentioned that updates are about individuals leaving and arriving, and disliked this particular feature: *“I find information on people leaving and coming in to the company as a waste of time”*. In Yammer, some individuals also posted their personal hobbies and interests, as for example recipes, or the latest gadgets and had discussions on them. One commercial bids manager mentioned that *“It is really nice that we can ask someone at work about a recipe, or the latest i-phone rather than asking someone else”*, while an IT manager found it interesting: *“I like the quote of the day, or small information on Yammer”*.

Figure 4 informs readers on Yammer's structure and its interface.



Figure 4. Yammer Screen shot (Yammer, 2014)

Implementing Yammer

Service Ltd's Yammer network was launched in 2008 shortly after the inauguration of Yammer in the USA. It emerged after some individuals attended an Information Technology (IT) conference where a freeware known as Yammer was mentioned. This encouraged three engineers to begin posting on Yammer and encouraging growth. The network was very quiet for two years. As the Yammer champion said, "1000 people joined, but the three folks posted consistently - maybe once or twice a week each". Then, in March 2010 there was a push towards growth where word-of-mouth and a single e-mail were used to encourage users. This led to the network peaking to hit critical mass. In January 2011, Service Ltd signed a contract and prior to the agreement it was found that there were around 3,000 users. In 2011 February, Service Ltd merged with another American organization that had 5,000 users, which led to a growth in the number of users in Service Ltd to approximately 8,000. The network grew rapidly over the next year or two thanks to a better understanding of the usage process, and then growth levelled. It has been just under 25,000 for some time now (at least 1.5 years). When reasons for the flat line were explored, several theories had been suggested. The first one was that there were limited resources invested into further development of Yammer. Second, despite all the promotions and initiatives that were undertaken, it appeared that the saturation or mature point had been reached. Therefore, further efforts appeared not to be achieving any outcomes. Third, the organisation formed better processes to remove duplicate users. This better understanding of the processes led to the removal of multiple accounts, or of accounts of users who had left the organization, i.e., whose employment contracts ceased to exist. If this had been pursued from the start of the implementation period, then there might be even less registered Yammer users. As the Corporate Communications Manager, who is also the Yammer champion said: "*It was us poking into Yammer's process for validating and getting rid of users who had left the company or who had more than one e-mail account. So Yammer keeps your user ID off your e-mail account. So if you have multiple accounts, you could accidentally or purposely set up a multiple Yammer profile. But we have, through our I.D. system, identified only one e-mail that would then get into the system. Therefore, you would be signing in with your Service Ltd ID rather than your e-mail account.*"

As far as the champion of Yammer knew, there was no top level (senior management) support, but approval for implementing Yammer did exist. Hence, there were no barriers that prevented the development and implementation of Yammer. In addition, as the champion commented, there was no strong campaign pursued, or senior management saying “*Everybody needs to use Yammer*”.

In Service Ltd (UK) the Corporate Communications Manager recalled, “*When Yammer first came out, there was a pretty decent promotion about it. So there was some information about the processes to follow for using Yammer*”. Further, there was no synchronous plan that the organization was pursuing to diffuse and develop Yammer any further. In other words, there was no concerted effort or campaign being pursued. Nevertheless, there is a corporate policy about using Yammer. As the champion of Yammer stated, “*So we do have a corporate policy governing about what you can say, or cannot say on Yammer. Here’s what you do if something goes wrong and all of that.*”

Background to Chatter

Chatter is provided by Salesforce as a secure enterprise collaboration application and social development platform. The unique selling point that Salesforce emphasises is that Chatter allows organizations to collaborate in real time within a secure, private social network for their business. Further, it provides developers with the opportunity to use the Salesforce Chatter platform (<http://www.salesforce.com/chatter/platform>) to build social enterprise applications, with all 135,000 native Salesforce applications instantly becoming social. Having achieved immense success in the cloud computing arena, Chatter is the next major innovative initiative for Salesforce.com. To access Chatter, a salesfigure.com account is needed, which is provided only to the employees of the organization and is not available to every member of the public. An example of a Chatter webpage is provided in Figure 5.

As shown in Figure 4 and Figure 5, the appearance of both ESN is quite similar to that of Facebook. As the Marketing Manager for Europe, who is also the Chatter champion, commented: “*Chatter is a Facebook for the organization.*”

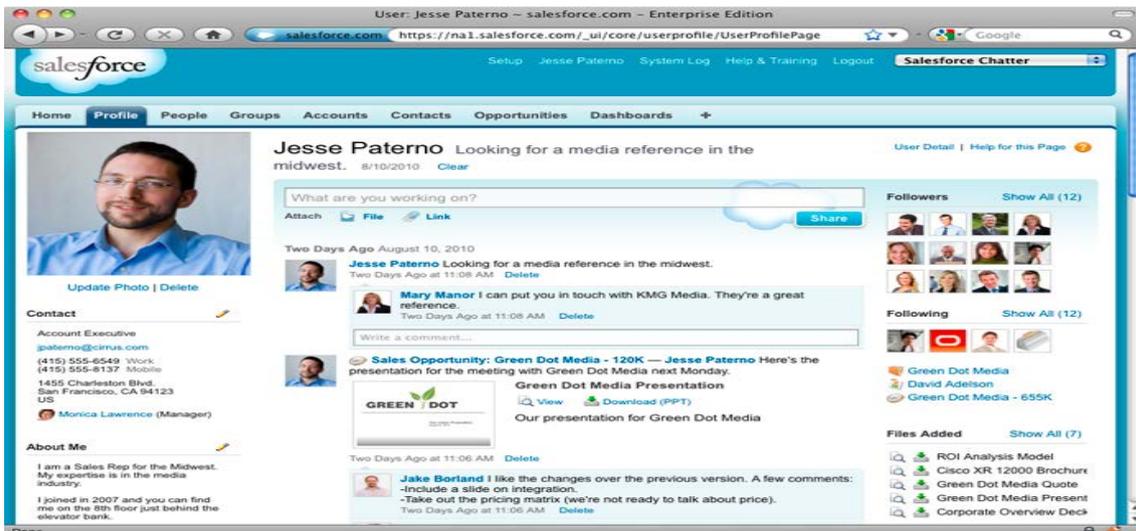


Figure 5. A Screen shot of Chatter's page (Source: Salesforce.com)

Implementing Chatter

Comparatively, Service Ltd's Chatter system is in its early stages as implementation took place in May 2014. To date, there are less than 1,100 users in Europe and approximately 2,000 globally. This shows that presently, compared to Yammer, there appears to be a larger social system user database. In what follows, we describe the background to Chatter's implementation.

Salesforce was using Salesforce.com as a tool for their communication and their sales process, i.e., as a Customer Relationship Management system (CRM) for reporting the organization's sales activity. In simple terms, as described by the Marketing Manager for Service Ltd (Europe), who is the Chatter, champion, *"In lay man's terms, Chatter is a social media Facebook of Salesforce that has the capability to have conversations with the other users of Service Ltd. It also discusses updates, opportunities and account contacts amongst the many other features of Salesforce"*.

In Service Ltd, many of the sales people felt there was support for the ESN use as they were already using Salesforce.com every day. In the mean time, there was a huge drive within Salesforce to tear communication down to one tool, as there was a lot of frustration due to the many available tools. For example, one individual exclaimed his frustration by wondering *"What tool do I use, how do I log in?"* To ensure some streamlining and to reduce, or eliminate the frustration, Chatter was enabled to an existing Salesforce.com group, i.e., largely the Sales and Marketing departments. To implement

Chatter, it was decided that all user groups would have the same capabilities. Therefore, some groups that did not enjoy the same features as the other Chatter users were provided with similar ones. This ensured uniformity. As a developer team member (also an Internal Communications Manager for USA) said: *“There were different business groups - some who were more excited about Chatter and wanted Chatter to be enabled right away, but there were others with a wait and see attitude. So, it was decided that all the user groups would have the features and then, Chatter would be enabled”*.

The European champion spoke of how Chatter was implemented globally with champions around the globe: *“Initially there were project managers who were co-ordinating the efforts”*. Europe’s deployment strategies have been successful and their efforts were used as the benchmark. Some quick guides or one minute tutorials were also used in Europe. These were drawn primarily from YouTube videos developed by Salesforce or from homemade videos with screen captures in them. These videos provided information on functionality, how to post an image, or how to interact with groups.

Another pursued strategy was to inform the senior management on Chatter’s capabilities as a social media channel for the organization. This involved the provision of a 15 minutes presentation to Country Managers and General Managers in Western Europe. As the Chatter champion said, *“In the presentation, the importance of Chatter was also emphasized. This included: Chatter will allow communication. It will allow direct engagement. So you can have central management engaging directly with the field agents. There will be no need to use e-mail or other such channels. It is short and to the point as there is a limit the text to 140 characters. Finally, it is a hub to the organization’s business activity. Second. Chatter allows recognition: “If someone has signed off a contract, then senior management can take an instant action using Chatter. You know, to say congratulations, great job, and great win”. The Account Manager gets acknowledged as well. Therefore, the peers will see the recognition and acknowledgement and gives them encouragement. This helps with sales competitiveness. Finally, Chatter helps with collaboration. It enables virtual teams to work together, creates groups and allows content to be uploaded to those groups.”*

The USA strategies were more conservative. Some Salesforce information on Chatter usage, some quick guides and thorough tutorials, configured education courses and planned out education courses for their staff members were employed. Information for Senior Managers was not diffused, as it was

believed that the inertia, or demand from individuals would drive the provision of Chatter.