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Structuration Concepts as a Framework for Revealing a 'Socially Rich' Concept of the User

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Abstract

Current constructs of the user limits our understanding of service channel selection, improvisation, communication, and exchange within multi-channel social contexts. Based on a recent longitudinal case study of an electronic service use in a healthcare insurance context, the paper uses key concepts from structuration theory to examine how users interact with a technology in their ongoing practices, and enact structures which shape their emergent and situated use of the technology among alternative channels. The paper portrays the complex and multiple roles that external users fulfil while reflexively adopting, adapting and using an electronic service. In doing so, the paper responds to the call by Lamb and Kling (2003) to shift from the "thin" user concept to a "rich" concept of a social actor. The ways in which firms employ technology to interact with their customers have changed noticeably and will continue to evolve. To empower users, this study advocates that practitioners balance their internally-biased perspectives with perspectives that are attentive to the current social practices of their targeted user community.

Keywords: electronic services, IS users, social actor model, structuration theory, practice lens

1   INTRODUCTION

Despite the rapid growth of information technology applications that managers are targeting to both internal as well as external users of organizations, current conceptualisations of the user are rather limited. Most research on Information Systems (IS) use has focused on determinants of individual use of IS in the workplace (Davis, Bargozzi, and Warshaw, 1989). One critical area that deserves further attention and possibly a broader re-conceptualisation is e-services. Unlike traditional services that depend on the direct involvement of service personnel, e-services rely largely on the Web interface to enable customers to produce a product or service (Loiacono et al., 2000; Van Riel et al., 2001). It is reasonable to assume that users in the Internet-based self-service technology (SST) context are more complex to understand than users in the workplace context. Current constructs of the user limits our understanding of service channel selection, improvisation, communication, and exchange within these broader social contexts. This lack of understanding of institutional features by both practitioners and academics may be able to partly account for our failure to make better predictions of ICT adoption and use, and the protracted uptake of these services in some markets (Levenburg and Klein, 2006; Schaper and Pervan, 2006; Pandya and Dholakia, 2005). With strategic investments in IS increasingly under scrutiny, it is imperative that the economic benefits of high user loyalty and achieving a critical mass are achieved by e-services (Gefen, 2002; Reichheld and Schefter, 2000). Furthermore, it is imperative that we enrich the user concept - the active agent in IS use, so that we may inform more effective design, development and use processes, in multi-channel environments (Lamb, and Kling (2003).

The literature review discloses that user-centred information studies are being dominated by individualistic cognitive models to examine the criteria that influence the adoption and use of contemporary forms of IS. A number of these models which decontextualise the user (Liljander, Gillberg, Gummerus and van Riel, 2006; Dabholkar and Bagozzi, 2002) are based on rational decision theory models of customer choice and attribution theory. The central assumption of these approaches is that the user is an atomic individual with well-articulated preferences who can exercise rational discretion in choosing and using ICT, independent of the social context. It appears that firms are ignoring important contextual dynamics which may provide a deeper understanding of self-service technology use. Therefore the main premise underlying this paper is to emphasise that the subjective insights of users and their practices within a social context are crucial if we are to understand their conduct in the use of contemporary forms of IS (Blechar, Knutsen, and Damsgaard, 2005). Although the user is the focal actor in information use, theoretical advances on the user has been negligible.

Lamb and Kling (2003) have recently argued that research approaches based on an individualistic concept of the user limits our understanding of contemporary IS within complex social contexts. They propose approaches that portray the complex and multiple roles that users fulfil while adopting, adapting, and using information systems. While still in its formative stages, it is anticipated that their social actor concept can play a valuable role in understanding broader organisational contexts relevant to IS use research. This study seeks to use structuration concepts to develop a model that will understand organization-client interactions and use in the context of multiple channels. The rest of the paper is guided by the following research question: How can we better understand user practices in the context of multiple channels?

2   STRUCTURATION CONCEPTS AND THE SOCIAL ACTOR

2.1   Structure and Agency

Giddens (1984) main emphasis in Structuration theory is on understanding how social practices are ordered across time and space.

- One of Giddens' main tenets is that human social activities are recursive. According to Giddens (1984), recursive ordering is only possible because of the continuity of practices that

make them distinctly similar across space and time. Individuals, in particular, acquire ontological security through their engagement in predictable routines and encounters. Although Giddens (ibid) claims that routine is the predominant form of social activity, this does not imply that action is programmed.

- On the contrary, Giddens' (1984) argues that routinisation in most social conduct has to be continually "worked out" by those who sustain it in their day to day conduct. Thus local practice is always indeterminate. In other words, social actors can monitor and reflect on their own practice and that of others. They can also reflect on the effect of planned and unplanned effects of their intentional actions. Consequently, their subsequent actions are based on reflexivity, suggesting that these actions are not mere repetitions of what was done before (Walsham, 2001).

2.2   Users in Practice

The latest notable advancement in applying Structurational theory in IS is presented by Orlikwoski (2000). What sets this model apart is its proclivity to examine emergence, improvisation, and changes over time as users alter their habits of use, and thereby enact different technologies-in-practice. Recently, Schultze and Orlikowski (2004) applied this model to understand the use of Internet-based self-service technologies in a business to business (B2B) setting. However, this model has not been applied in a business to consumer (B2C) setting and in the context of competing service channels. Furthermore some researchers have criticised the limitations of their use of technological frames (Gal and Berente, 2008). Orlikwoski's (2000) technological frames does not explicitly acknowledge the wider social context of external users from which technological frames could possibly emerge, how these change over time, and the shared processes by which they are shaped and reshaped. To understand processes of meaning construction that take place within broader social groups, that offer a more fundamental understanding of user practices, we draw on social representations theory to interpret how these broad user groups cope with the unfamiliar phenomena of contemporary IS use and more specifically, to understand how different groups of social actors may develop different representations of the SST depending on their socio-historical contexts (Gal and Berente, 2008). Social representations is conceptually compatable with Gidden's concepts of knowledgeability and reflexivity and may be able to provide a richer account of the emergent practices among social actors.
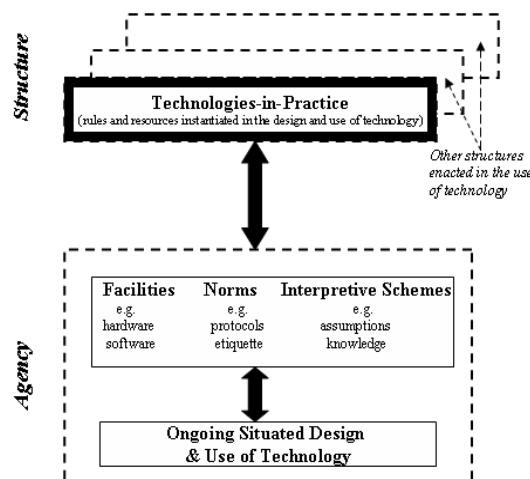
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Figure 1: Extended enactment of technology-usage-in-practice Orlikowski (2000: 410)

Following this theory, two important concepts in the process of assimilating a new service channel are anchoring and objectification (Gal and Berente, 2008). Anchoring refers to a basic understanding of

the unfamiliar channel being couched in existing representational structures and categorisations that users deem to be relevant. Objectification is the process whereby socially represented knowledge about a new channel eventually takes on a more tangible and unique form, or representation. To accommodate social representations theory's more holistic stance we also include other structures such as competing service channels and also augment the structurational conceptual model with key concepts from Giddens (1990) later works on the consequences of modernity (see table 1) . Jointly, these concepts will serve to uncover important aspects related to user practices.

Conceptual Components	Associated Conceptual Elements
Structurational lens	- Facilities, norms and interpretive schemes - Reflexivity - Rules and resources - Interactions - Routinisation - Enabling and constraining features - Intended and unintended consequences - Design Faults - Operator Failure

Table 1: An initial synthesised analytical framework

The practices of social actors are shaped by social forces such as facilities, norms, interpretive schemes, and existing structures which constrain ICT use and limits the possibilities of the IT to enable the empowerment of users. Some of the pertinent relationships between these key concepts illustrated in figure 1 are explained in more detail in table 2.

Conceptual	Concept and Sub Concept Description
Principle	Users in a multi-channel context always have the potential to change their habits of use, and in this way change the structures they enact in their recurrent practices.
Assumption(s)	The stability of technology and its application and use is always provisional.
Agency	Agency refers to the capacity of human actors to do things and as such implies power.
	Facilities - Users draw on the facilities available to them such as hardware and software. Norms - Users draw on the norms such as protocols and etiquette that inform their ongoing practices. Interpretive schemes - Users draw on their tacit and explicit knowledge of their prior action and the situation at hand. Ongoing situated design and use of technology - Users recursively apply their knowledge, facilities, and habits of the mind and body to "structure" their current action that inform their ongoing processes.
Structure	Structure refers to rules and resources recursively implicated in the reproduction of the technology-in-practice
	Technology-in-practice - Ongoing enactment of technology reinforces it, so it becomes regularised and routinised, an expedient and habitual response to repeated use of a technology within the daily demands of social life. Rules - Rules refer to techniques or generalisable procedures applied in the enactment or reproduction of social practices (Giddens, 1984). Resources - Actors depend on two types of resources. Allocative resources (such as land, raw materials, technology) refer to capabilities or to forms of transformative capacity. Authoritative resources are non material resources involved in the generation

	of power, derived from the capability of harnessing the activities of human beings. Use-in-Practice - Use of technology using the practice lens involves a repeatedly experienced, personally ordered and edited version of the technological artifact, being experienced differently by different individuals or groups and differently by the same individuals or groups depending on the time or circumstance. Other structures (e.g. other service channels) - The enactment of a technology-in-practice is situated within a number of nested and overlapping social systems. This means that people's interaction with technology will always enact other social structures along with the technology-in-practice. E.g. English as the primary language over the Internet.

Table 2: A framework for analysis – Key Concepts and Defintions

3   RESEARCH METHODOLOGY

In order to investigate our research question, we chose an in depth longitudinal case study design in a healthcare insurance firm, as method of analysis (Yin, 1999; Benbasat et al., 1987). Yin (1999) also endorses the study of single facilities such as health centres, hospitals, and community mental health centres explaining that a single case can often produce a more penetrating study. The key reasons for the selection of this case are that health insurers' perform an information-intensive activity and they also offer traditional and alternative service options such as intermediaries, wellness practitioner networks, walk-in centres, branches and call centres which are well institutionalised, providing a richer and more complex environment for studying user practices. The field research for the case study was carried out in two main periods, consisting of three months in mid 2005, three months in late 2005, and another month in late 2006. We conducted a total of 55 formal interviews during this period with key informants who included key personnel representing business, the online self-service technology and IT staff as well as other specialist areas. Website feedback data also played an important role in addressing the complexity of usage processes and of the context studied. An extensive analysis of customer online feedback log of over 5000 responses since inception of e-service from 1999 to 2006 was conducted. This was supplemented by secondary data in the form of internal documents, management reports, prior research via internal and external parties, presentations, the organisation's publications, technical documents and internal reports, and a sample of recorded calls handled by the main call centre as well as the online call centre support team. In empirical terms, insufficient time was spent with actual users, despite the use of online feedback as well as internal surveys and reports as an appropriate surrogate for the user. Directly interacting with the users might have enlivened the accounts of the users, and possibly have led to added interpretive depth. However the use of the Website feedback was shown to be a very innovative and useful approach for collecting and analysing information to understand user practices. Website feedback data retains information about the user and the date of the feedback. This also gives us an historical perspective of user experiences and the ability to trace how these social actors structured the technology over time (Jones and Karsten, 2008; Pozzebon and Pinsonneault, 2005). Users are expressing themselves in a "real context" and not an artificial context created by researchers. Consequently, future research intending to understand e-services should also consider Website feedback as part of their data collection strategy. We used version 5 of ATLAS.ti to code and store these themes and categories at the textual and conceptual level and for the overall management of the research project and its associated data. This archive consisted of the case study field notes, case study documents, quantitative data and other electronic files generated during the case study. Using ATLAS.ti for easy cross-referencing assisted in maintaining a chain of evidence to support the case study conclusions (Muhr and Friese, 2004; Darke, Shanks, and Broadbent, 1998).

4　　CASE STUDY CONTEXT

The firm we studied, HIC, is a global healthcare insurance firm and our study focuses on its e-services initiatives located in South Africa and the United Kingdom (UK). The case study focuses on understanding the use of HIC's e-services initiative, an initiative that was predominantly aimed at facilitating the online electronic interactions between its clients and the organisation. During the dotcom wave in the latter 90's, HIC embarked on a key strategic project using Web-based tools to enable their insured members to monitor their claim activities, access funding availability information, and use tools for self-care and personal health appraisal (see figure 2).

Healthcare insurance firms such as HIC were now modelling their business on the so-called consumer-driven healthcare concept (CDH). Proponents of CDH believe that consumer's will feel empowered by using the Web because they have direct inputs into decisions about their healthcare, specifically with the online knowledge and tools they need to make those decisions. For managers the use of the Web bestowed a lot of appeal based upon the "substitution claim" of replacing traditional channels and other similar "efficiency" assumptions. HIC also integrated elements of wellness into their product design and were making these available through Web-based portals, as opposed to traditional channels such as a network of dieticians. Examples of these wellness approaches include online nutrition centres, online health risk appraisals, preventative care guidelines, lifestyle modification modules and disease management programs.
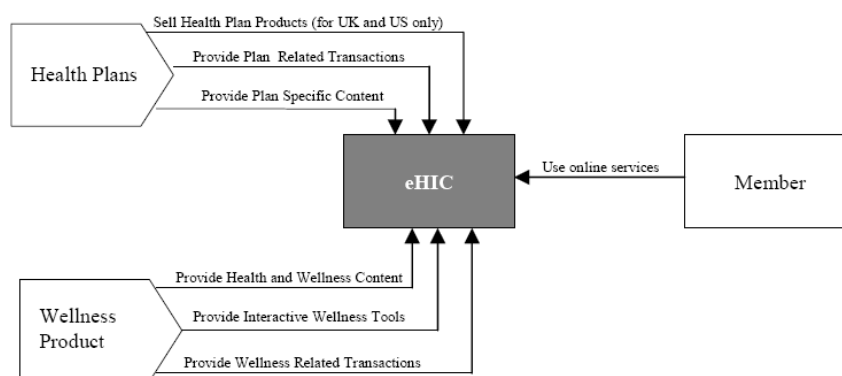

Figure 2: eHIC's e-service model for members

HIC's tremendous challenge was to overcome the intensifying issues relating to managing massive amounts of paperwork, fending off fraud, and coping with exponential growth in customer service demands. An online system had the potential to allow members to keep their personal records up to date, submit their claims, and constantly keep members in the communication loop through direct access to their own medical insurance information. Over the years, eHIC's growth was rapid. Whereas in 1999, eHIC had only 19 000 users registered, eHIC's registered user base by 2005 exceeded 430 000. This equated to 26% of their health insured member base (see figure 3). More than 25% of all interactions with HIC were now through the online channel. Although site interaction was relatively high, these interactions were made by a minority of members. The goal was to move the interactions to 51%, as this would imply in some circles that the Web was now the dominant channel. Despite this, only 26% of the membership base had registered. And even though there were valiant efforts to move this ratio to 40%, the ratio of active registered members would hover around the 25% mark for the next two years. Further analysis revealed that many of the 25% had a higher servicing need. These users tended to be either high claimers or loyal followers of the Wellness programme.
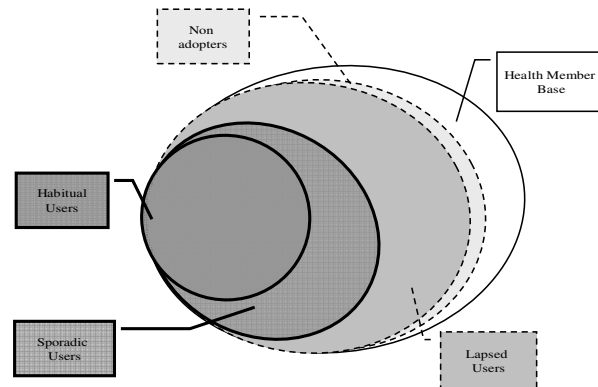
Figure 3: Self-service technology usage in practice: size representation of user segments

In the next section, the selected concepts from Structuration theory will be used as a starting point from which to analyse these user practices in richer detail.

5   SOCIAL ACTORS IN PRACTICE

Giddens (1990) suggests that many of our modern abstract systems are prone to *design faults*. While ideally design faults should be totally eradicated, this is more complicated and difficult to achieve in social systems. The view of this user (below) is evidence of how greater trust for call centres was reinforced by design faults inherent in the SST.

> *You will not have happy clients if, after taking the time on the very slowwwww system to update their details, clients find that they cannot save the information ... e-HIC still has a way to go but the service from the call centre is excellent. Hope you fix this soon. [Online feedback]*

Giddens (1990) also refers to a second factor, namely *operator failure*. Operator failure of an abstract system such as an SST results largely because those who operate it make mistakes. While Giddens (1990) acknowledges that good design can lower the possibility of operator failure, he asserts that the risk of operator failure is always likely when human beings are involved. The experience of this user is a typical example of operator failure experienced by users when attempting to use the new channel:

> *... my registration crashed numerous times and I had to phone ... to activate. (Online feedback)*

In contrast, the behaviour of only a minority of the users matched the intentions of the designers. Users who did not favour making a call to the call centre were particularly pleased with the new channel, as illustrated by the following excerpt:

> *I am so excited about the fact that I can actually keep track of my claims online, that I just had to tell you how great this is!!!!!!!!! I hate to use the phone, but love to go online!!! Thank you for a great opportunity that you give to your members!! [Online feedback]*

But for most of the members at the time, speaking to a call-centre agent when engaging with their health insurer was well *routinised* in their lives. One of the users expressed her satisfaction with engaging with the call centre in following manner:

> *... dealing with your Call Centre guys is JUST GREAT ... once you give them the membership number they have the information on their fingertips. Also the folks just seem to be enjoying what they're doing ..a pleasure to deal with … [Online feedback]*

A number of reasons made it a routinised practice for members to speak to call centre agents. First, the Web was entrenched in new norms. For instance, one needed to 'register' to use the online service, and one had to determine one's user name and password and remember them. But to interact with the call-centre agent, one had only to use a phone number and have access to one's membership number and ID number as part of the member's identification verification process. In contrast, the traditional practices were well institutionalised. The membership number is provided to a call-centre agent, who is then able to facilitate the discussion with the member. Meanwhile, security concerns were constraining the use of the SST, whereas the conventional channel, in the form of the telephone, is accessed using a telephone number.

Problems were also experienced with some of the core wellness tools. Part of the problem with 'remote' weight loss tools for instance is their lack of surveillance when compared with peer-based programmes or face-to-face encounters.

> *... The advantages of going to a dietician, you go into a professional environment, you are having that contact with the dietician who can read you and build a relationship with you and become a partner in this process ... I think at the end of the day it (the online tool) is no substitute for that human contact ... What I mean is that the body language and the personality and you get to know the person, and you get to understand them and understand their lifestyles. (Nutrition expert, interview 46, p 15)*

Following Giddens, it is apparent that the SST separates wellness practitioners and the patient in time and space, breaking the interpersonal connection between them which the practitioner normally uses to apprehend the condition of the patient. Shared physical presence allows for continuous inter-subjective orientations between the practitioner and the patient, and facilitates multiple role-playing. SSTs alter the context in which relationships take place and the traditional manner in which the practitioner develops and maintains relationships with the patient through physical contact. Therefore, the online wellness tools served to distort the actual role of the traditional wellness practitioner. These contrasting service performance experiences of the conventional and new channels would later influence the behavioural rationalisation and motivation of these social actors in selecting a preferred channel.

Moreover, healthcare insurance is a low involvement product, unlike banking – and hence online banking – which is already more routinised in the lives of Internet users. With health insurance firms, unless one is prone to sickness, one has a mostly hands-off relationship with the healthcare insurance provider. These remarks by a few senior managers allude to some of the differences between online banking and e-health services:

> *... I think the, the nature of our business, unlike banking, where you are required to interaction your account... So, it is a dynamic that we have given a lot of thought to, and we continue to juggle with over the challenge into how we exactly get people to come back to the site. [Operations manager]*

Another prevalent issue is that whereas banking transactions are frequent and the 'language' of banking is standard across banking institutions, the complexity of the health insurance product and its associated jargon were serving to constrain the use of the online channel. Embedded in the products is jargon like medical savings account, self-payment gaps, above-threshold balance, cryptic and abbreviated claims reason codes, all of which are beyond the understanding of the average user. A remark by a user demonstrates the frustration that is felt because of the product complexity and its associated language:

> *... could you please dilute your language ... not every member is highly educated to can understand your oxford english. the purpose here is to transmit info and not to impress via language protocol or style ... [Online feedback]*

However, banking terms such as withdrawals, transfers, borrowing rates, lending rate, deposits and overdraft are well accepted and are part of the individual's practical consciousness. The unintended consequence of consumer-driven healthcare products is that their complexity introduces an

administrative servicing challenge for the firm. While the profits of these firms are apparently associated with their product's ability to 'empower clients', ironically the cost burden appears to be inherent in the way it imposes its own complexity on the consumer. Indeed, the notion of customer empowerment is restricted by the norms of the product itself.

Corporate policy to standardise language use further constrained the use of SST. While the SST was restricted to one language, most of the call centre consultants were multilingual (English and Afrikaans). A common practice among many financial services organisations is to recruit staff that are proficient in both the English and Afrikaans language. Notwithstanding, the language barrier further contributed to the poor use of the SST and persistent use of the call centre channel. By excluding these languages the firm had in effect curtailed the social structures of communication that enabled the interaction and reproduction of interactions with the SST for certain major user groups.

> *Geen Afrikaans? Hoe dan nou mense? Of is ek blind? Ek is seker amper die helfte van julle kliente praat Afrikaans.. (Roughly retranslated: No Afrikaans? How come people? I must be blind? I am sure at least half of your client base speaks Afrikaans ..) [Online Feedback]*

> *It would be nice if we had the information in another African Language (e.g. zulu or shangaan). Its not easy for me to find what we are looking for in this somewhat difficult language. [Online Feedback]*

Another relevant contextual issue that influences use was the elements of sexist structures that persist in South Africa that are symptoms of an enduring patriarchal society. These structures, which stretch into broader society, also influence the design of SSTs. For instance, the current identities based on the roles contained in the health insurance policy were insufficient for the user requirements of the SST.

> *My husband is the main member. He does not do the internet thing ... he does not do the computer thing because he works and does not have the time for nitty gritty things. I have to do it. I am his spouse and you are just wasting time trying to contact him to register. Why on earth can I not do the registering? I don't know why you even waste your time to have a website. This is a shocking service you have. [Online feedback]*

It appears that in a patriarchal society many women play a lead role in managing the day-to-day medical aid practices of the household. Given their role in their social world, many wives often practised the lead role in managing healthcare issues. Therefore the designers had to realign system roles based on the policy level more closely with the social practices of the members. More importantly, this observation contradicts gender difference studies that claim that usage of the Internet is lower among females (Elliott and Hall, 2005). This study illustrates the limitations of gender studies on SST use if they do not seek to understand its social context.

The case study also provides evidence of the problems with views on demographics and use. For instance, while the majority of the users in the South African social context were generally younger, the UK SST was used more frequently by older semi-retired and retired users.

> *The people (in the UK) who ended up using the website quite a bit were a lot of elderly people, which we didn't quite expect. And, yes, that was quite interesting. They were also quite particular... Because they needed to have more control, because that is it. You know, if you are retired or semi-retired, you only have got so much to deal with. So, they have that time on their hands. [Business analyst]*

Simple cause-and-effect studies assume that older people are less inclined to use technologies such as SST (Parasuraman and Colby, 2001). By analysing the details of user adoption we can see how the type of product, incentives to drive down personal healthcare costs, and the broader social context can shape the use of the SST by older people.

Based on further analysis of these findings, the study identified social practices by four different user segments, specifically polygamous users, low servicing need users, interpersonal user, and the ideal user type (see figure 5). The model presented below illustrates the differences in reflexive monitoring among different user segments. It depicts how different groups of social actors emerged to develop different representations of the SST and how this depended on their socio-historical contexts with the healthcare insurer (Gal and Berente, 2008). In this way it contributes a new social interactive perspective which views adoption and use as a process where understanding of channel interaction is shaped from individual rationalisation and motivation (Blechar, Knutsen, and Damsgaard, 2005). In contrast to predominant constructs of technology acceptance theory the new perspective maintains that evaluations of technology can differ significantly depending on the service need. These observations further illuminate and underline how prior and concurrent experiences arising during the social monitoring of everyday engagement with the health insurer and alternative service channels are key to the shaping of the SSTs understandings and use.
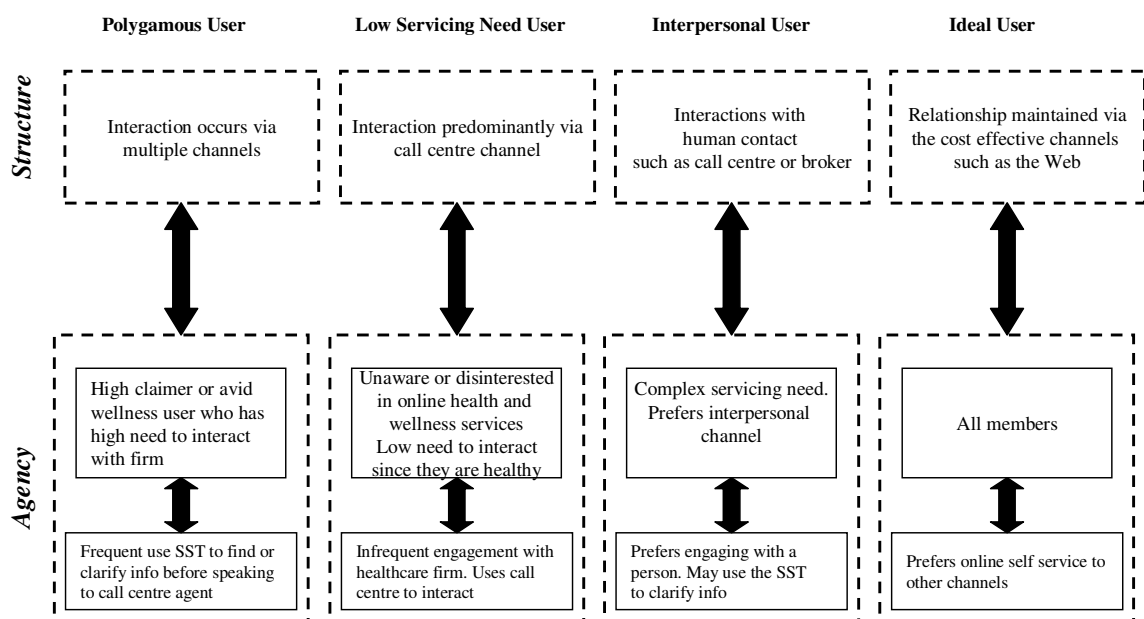

Figure 5: Self-service use in practice – enactments by users as social actors
Adapted from Orlikowski (2000) and Lamb and Kling (2003)

- The *low servicing need user* has fewer claims servicing needs. They are nevertheless relatively healthy members who have a low claims ratio and a low need to interact with their healthcare insurer.
- *Polygamous users* are characterised by a high servicing need through multiple channels. They call the call centre and use the Website frequently. They are more demanding and typically have a high propensity to interact with their health insurer as they experience problems with financially related matters such as unpaid claims more frequently. It is difficult to implement mechanisms to influence this category of user to switch to the online channel exclusively since their behaviour reflects that they have certain needs that are unmet on the online channel.
- On the other hand the *interpersonal user* has a high servicing need. Their predominant mode of interaction is via the traditional call centre channel or wellness practitioner and they prefer interpersonal contact. They may be unaware of the SST, or if they are aware they have chosen not to register. They may also be part of the population that simply does not have access to the SST. It is not improbable given design defects and operator failure that they also represent a

portion of members who are dissatisfied discontinuers of the SST. For these types of users the firm could drive targeted registration, recovery and awareness campaigns. However the difficulty lies in attempting to change their interpersonal preference.

- The *ideal user* type (for the firm) is composed of loyal SST users who exhibit a low propensity to call the call centre. Irrespective of their servicing need, they prefer self-service to call centre interactions. At the time of this study, this ideal user type represented a minority of the SST users and therefore challenged the notion that the SST had a critical mass of users that could justify its existence. By not serving the majority of users as envisaged, the stability and the sustainability of the e-service as the channel of choice was threatened. For a majority of the member base, the call centre would remain the dominant channel.

Perhaps this view of one of the senior manager's best sums up the future use of channels:

> *I think, if we look today at where we have come, our initial objective was to convert a channel (call centre) into another channel (online self-service). And lessons are learnt, that you know, this is a social environment, okay. There is no dominant channel. It's apparent to me that the channels are interlinked, merged, and one will use whatever is closest in proximity. [Operations Manager]*

From being anchored initially as the "preferred channel" or the "channel of choice", the online channel was now being touted in its new representation and objectification as a "complementary channel" to the call-centre, wellness practitioners, brokerage firms and other alternatives. In retrospect, the idea or replacing traditional channels was naively optimistic. The excerpt above also demonstrates that the surrounding world of management influences adjustments in their intentions. The ongoing rationalisation of the SST's purpose highlights again the reflexive form of knowledgeability that is also involved in the recursive ordering of channel design practices. Patterns of actual use behaviour of our knowledgeable and reflexive social actors also meant that over time, management had to concede to the institutionalised dominance of the traditional channels.

6   CONCLUSIONS

The central argument in this research is that the current user construct in IS is socially thin, largely because it decontextualises the user from the social context. Unless theoretical advances are made in this direction, we will not be able to sharpen our understanding of contemporary IS selection and use within complex social contexts. By amplifying the social specifics, the structuration framework of analysis was able to elicit a 'socially rich' perspective of the users (Lamb and Kling, 2003). For instance certain social user groups that emerged such as loyal, polygamous, interpersonal and ideal types, identified in the case were selective about the use of the SST. The model demonstrates that context and use by social actors is not static. Instead outcomes of SST use are clearly context-sensitive. In sharp contrast to variance theories (DeLone and McLean, 2004), this study revealed contrary use behaviours by gender and age groups.

This study also revealed that the structures of interactions that were defined by the designers of the SST were not appropriated by the users as intended. In many cases, users appropriated the channels to suit their own purpose. The major constraint for the SST appears to be other methods of interactions that have already been routinised into social practice. For instance, the SST did not significantly change the use of the phone or the 'physical' wellness practitioner. Indeed, the SST structure appeared to be the most malleable. Furthermore instead of achieving loyalty by a majority of the member base, the SST appeared to serve a minority – that is those health insured members who desired a high interaction with their provider. These unexpected patterns of use by these social actors led the designers to reconfigure the SST eventually to reflect "the way things are" (Berger and Luckman, 1967). In this case proponents of the SST had to concede to definition imposed by user behaviour which supported the notion of a 'complementary channel'.

Users can demonstrate a high level of autonomy over their channel preferences. This highlights one of the fundamental differences between users of Web-based, contemporary IS and traditional IS systems. Unlike information systems in the work context where designers are close to the internal users and can be prescriptive and therefore sanction user behaviour, external users in the context of multiple channels have much more discretion in their use. In other words despite efforts of designers working towards customising the channels for segmented audiences, the trend was clearly towards the user customising the use of channels to suit their own personal tastes. In a multi-channel context, designers are at the mercy of what individual users choose to do and how they choose to respond. Ironically, it seems that the very essence of being an empowered customer is not in just using the IT-based Web channel but from having the ability to choose from among multiple service channels. Therefore, the study shows that relying on Internet-self service technology alone to improve healthcare service delivery is a channel strategy fraught with hazard. Traditional channels are well institutionalised in day-to-day practices and show strong symptoms of being habitual. Thus, it emerged in this particular healthcare insurance context, a more appropriate objectification for the SST was that of a complementary channel and one that services less complex service encounters. Indeed, a convergence strategy that maps the role of each of the channels, both traditional and contemporary, based on their applicability and appropriateness can produce better results than an approach where channels attempt to compete with each other for the users' attention.

To understand the use of the IT we need to relate it to its social and historical context and in particular be able to review it in light of institutionalised and contemporary practices adopted by users. Consequently, a more socially rich view of users as multidimensional social actors is desirable. By incorporating these perspectives proactively, both academics and practitioners can reduce the risk of overestimation in predicting channel or IT use. Importantly, a socially rich perspective will enable consumer empowerment in a true sense of the word, since customers can ultimately choose to use the channel that best suits their circumstances at a particular moment. In concluding, the way for practitioners to introduce these contemporary forms of IS – in other words, how to do it better than in the past – is by taking into account a more detailed assessment of the day-to-day practices of users. In a multi-channel context, future studies should pursue these social practices that often elude us in order to develop a richer and better understanding of IS use.

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