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BUSINESS STRATEGY ENACTMENT THROUGH AN IS:
A SENSEMAKING APPROACH

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Abstract

This paper seeks to advance the practice perspective on Information Systems (IS) and Organizational strategizing by drawing attention to individual, collective and organizational sensemaking that reveals some of the inner workings of strategy-in-practice. The paper presents the sensemaking view of organizations and IS strategizing that forms a theoretical bases for examining a case of an IS implementation as a way of enacting new business strategy. By interpreting the case of a bank that implemented a new loan assessment IS to change its risk management strategy and expand its loan business the paper a) reveals how micro-practices of IS deployment become a critical mediator of strategic change, b) proposes that effective enactment of IS-business strategy in practice required engagement of all levels of sensemaking (intra-, inter-, generic- and extra-subjective), c) shows that such change of practice was achieved as practitioners transformed themselves by transforming the technology and their business, and d) demonstrates how the practices of everyday sensemaking produced both the technology into being strategic and practitioners into subjects of strategy. In doing so the paper contributes to the strategy-as-practice perspective in IS and organization strategy research.

Keywords: IS—Organization strategy, Strategy-as-practice, A sensemaking approach to strategy studies.
1 INTRODUCTION

Contemporary research on business and information systems (IS) strategy and strategizing has been framed within three major perspectives: strategy as plan, strategy process and strategy as practice. The planning school sees business strategy and IS strategy as something to be planned and implemented, by adopting rational cognitive processes, formal planning techniques and a utilitarian model of IS as instruments of business strategy (Chiesa and Mazini, 1998). The strategy process school puts an emphasis on strategy formation by focusing on people and their actions in the production of ‘emergent strategies’ (Mintzberg, 1988; Quinn et al., 1988). More recently, the strategy as practice perspective turned attention to ‘praxis, practitioners and practices’ (Whittington, 2002), the actual micro-practices of strategizing and everyday routines of strategy formation (Chia, 2004). The strategy as practice perspective encourages researchers to ‘get off the veranda’ and immerse themselves in the ‘precarious and fluid going-on of organizational strategizing and sensemaking” (Chia, 2004, p. 29; Johnson et al., 2003). This paper takes up this challenge by exploring micro practices of business strategy enactment through an information system implementation.

The extension of the rational, analytic approach dominant in business strategy research to the study of information technology (IT) and IS strategy (Rieck and Dickson, 1993) was congruent with the engineering approach associated with systematic problem-solving and means-ends analysis. Conceiving IT and IS as instruments for realizing business strategy reiterated the formal planning view of IT and IS strategy that was primarily concerned with its integration or alignment with business strategy (Sabherwal et al., 2001). Strategy as a plan remained the province of high managerial echelons, mostly separated from human action and practice. Instead of ‘going with the army to the field’, to use military jargon, strategy remains in the cabinet. While focusing on strategic IT and IS investments, structures and implementation deadlines, the planning school in fact promoted a dematerialized approach to strategy, limited to rule-based cognition, formal plans, human intentions and actions. The critics found such an approach to strategy, especially technology strategy, too simplistic, divorced from the politics of strategy, and ultimately irrelevant for practice, even misleading (Pavitt, 1990).

In contrast the strategy process school emphasizes the politics of strategy formation and the significance of human action (Quinn et al., 1988). The scholars of strategy focused on human actors, individual and collective, who through their actions produce emergent strategies (Mintzberg, 1988; Pettigrew, 1992). In support for the process view of strategy, Tsoukas and Knudsen (2002) proposed a social constructivist perspective of strategy making, putting emphasis on human agency and those who set strategy. The process view, however, does not go far enough in understanding the micro-level practices of strategy formation and organizational and technological changes that woven together produce meaningful strategic outcomes.

The proponents of the strategy-as-practice perspective make the micro-processes and practices of organizational life the central concern of their inquiry. By doing this they aim to bridge the gap between the theory of what people do and what people actually do in organization and IS strategizing. The practice perspective, as Jarzabkowski (2004) pointedly expressed, examines “strategy not as something a firm has, but something a firm does” (p. 529). Most importantly the practice perspective has enriched the organizational and IS strategy research with a significant degree of realism that continues to inspire researchers and practitioners alike.

This paper seeks to advance the practice perspective on strategy by drawing attention to individual, collective and organizational sensemaking in order to enable a deeper and more refined understanding of IS—Organization strategizing. It is based on the sensemaking view of organizing and strategizing that we present in the next section. This is followed by a short description of the methodology and an empirical case study of a bank that implemented a new loan assessment IS to enact its new business strategy. By interpreting the case we demonstrate a) the micro-practices of strategizing through IS, b)
the ways in which practitioners transformed themselves by transforming the technology and their business, and c) how the practices of everyday sensemaking produced both the technology into being strategic and practitioners into subjects of strategy.

2 SENSEMAKING VIEW OF ORGANIZATIONS AND STRATEGIZING

In extending the practice approach to strategy we turn to a sensemaking view of organizations that considers sensemaking as a central activity in the construction and maintenance of organizations and their environments. Through sensemaking human actors create and recreate individual and collective meanings while maintaining social order (and generic meanings) in the face of complex, uncertain and changing environments. The interpretation and understanding of an event or a situation – achieved either individually or collectively – is an outcome of the sensemaking process that triggers or enables an action. Sensemaking is both an individual and social activity, and separating the two is seen as a recurrent issue (Weick, 1995, p. 6). As we understand organizations less as rational, formal systems with tightly controlled structures (such as those described by Weber, 1978), and more as open, loosely coupled systems, comprising coalitions of shifting interest and groups interacting with environment (Scott, 1987), we recognize more uncertainty and ambiguity, and consequently put more emphasis on sensemaking. In studying organizations and IS relationships and in particular the deployment of IS to realize a business strategy it is useful to distinguish between four types of sensemaking levels, as proposed by Weick (1995) based on Wiley (1994):

- **An intra-subjective sensemaking** refers to an individual (self, actor, subject) who makes sense of events and situations, work practices and conditions, organization and its environment, policies, decisions, IS, etc. An individual has thoughts, beliefs, feelings, desires, intentions, knowledge, skills, etc. that determine how she or he makes sense. This level of sensemaking is called intra-subjective as “meaning is within the self, and the subject is, by definition, fully present” (Wiley, 1994, p. 154). However, as an individual interacts with others and socializes in an organizational context his/her intra-subjective sensemaking is not an isolated, solitary process but one that draws from and is embedded in other sensemaking processes.

- **An inter-subjective sensemaking** involves individuals (actors) in social interaction who share their experiences and interpretations and thereby co-create shared, collective, inter-subjective meanings of events and situations, based on which they may take joint or coordinated actions. In a group of individuals in social interaction inter-subjective meanings emerge when ‘individual thoughts, feelings, and intentions are merged or synthesized into conversations during which the self gets transformed from *I* to *we* … [where] a level of social reality forms, which consists of an intersubject, or joined subject or merged subject’ (Weick, 1995, p. 71; emphasis in the original). At this inter-subjective or collective sensemaking level ‘the meaning is not within but between and among selves’ (Wiley, 1994, p. 154).

- **A generic-subjective sensemaking** involves creation and maintenance of generic meanings shared by members of an organization. Continuously created in social interaction inter-subjective meanings are synthesized into generic meanings, transferable to other actors that did not participate in its creation. In any organization there are common, generic meanings related to institutional roles, norms and rules, administrative and control systems, decision-making processes, policies, standards, and the like. The generic-subjective sensemaking emerges at the level of social structure resulting from a shift of ‘inter-subjectivity to generic subjectivity’ (Weick, 1995, p. 71). At the level of social structure and generic subjectivity the ‘concrete human beings, subjects, are no longer present. Selves are left behind at the interactive level. Social structure implies a generic self, an interchangeable part – as filler of roles and follower of rules – but not concrete, individualized selves’ (Wiley, 1994, p. 258).
• **An extra-subjective sensemaking** refers to a symbolic reality that involves customs, norms, rituals, stories, myths, metaphors and other language forms, that fall under the general rubric of culture, that underpins all other sensemaking levels. Culture, ‘composed of pure meanings, divorced from the individuals who, in any concrete meaningful act, are required to think or feel these meanings’ is by its nature extra-subjective (Wiley, 1994, p. 158). It provides an abstract idealised organizing framework transmitted through social interaction, common experiences and socialization of organisational members. Expressed in language, symbols, metaphors, and stories, culture provides a reservoir of background knowledge allowing and constraining meaning ascription and sensemaking at other levels.

Characteristics of the different levels of sensemaking in organizations are summarized in Figure 1 (Cecez-Kecmanovic, 2004). The three levels of sensemaking above the level of individual intra-subjective sensemaking should be understood as different generalizations of social reality, each more distant from an individual self. It has to be emphasized that the four levels of sensemaking are distinguished analytically. In practice they are not so crisply separated but untangled, mutually constituting each other. They should be seen co-present and inseparable, rather than in a hierarchal sense (Wiley, 1994).

| **Generic subjective sensemaking** (culture level) | • A reservoir of meanings (tacit, taken-for-granted beliefs, assumptions, values and norms) that determines the horizon of possible understanding among the members  
  • Expressed and transmitted through language, symbols, metaphors, rituals, stories... that affect meanings at other levels |
|---|---|
| **Generic-subjective sensemaking** (organisation structure level) | • Involves generic meanings that define social structure and ‘structuring property’ that reproduces it (Giddens, 1984),  
  • Generic-subjective sensemaking is expressed through roles and normative expectations, organisational design, administrative and control systems, decision-making processes, policies, reward systems, patterns of activities or actions, scripts, most of which can be encoded in information system |
| **Inter-subjective sensemaking** (collective level) | • Involved in social interaction individuals interpret events and situations inter-subjectively and co-create shared meanings and collective understanding: ‘the meaning is not within but between and among selves’ (Wiley, 1994, p. 154).  
  • Inter-subjective and collective sensemaking inheres in patterns of interactions or connections in the group engaged in social practice; inter-subjective sensemaking involves both shared understanding and collective identity |
| **Intra-subjective sensemaking** (individual level) | • An individual makes sense of their work practices, tasks, problems, organisational policies and standards, decisions, and the like, based on individual values, believes, knowledge, experiences, assumptions, feelings, interests, etc.  
  • At the individual level ‘meaning is within the self’ (Wiley, 1994, p. 154) and knowledge is individually owned |

**Figure 1  Sensemaking view of organisations (Cecez-Kecmanovic, 2004)**

The adoption of the sensemaking approach to organizations and IS highlights particular aspects of organizing and strategizing. Organizations are viewed as a dynamic web of ongoing sensemaking processes that often create tensions. Organizations are created and recreated by continuous and simultaneous interplay between all types of sensemaking: intra-subjectivity of its members and their inter-subjective sensemaking, that are continually emerging, mutually influencing and co-constituting each other; generic subjective sensemaking that tends to persist and resist changes; and extra-subjective (cultural) sensemaking that underpins and enables all other sensemaking processes. In particular the ongoing and dynamic (re)creation of intra- and inter-subjective meanings, on one hand, and the maintenance of social order and generic meanings, on the other, constitute the key tensions for strategy practitioners. For instance, introduction of a new business and IS strategy typically implies new social order and the change of generic meanings which in turn imply changes in work processes and practices. The more radical the strategic change the more tension it creates with existing inter-
subjective and intra-subjective meanings. Different approaches to business and IS strategy (such as strategy as plan, strategy as process and strategy as practice) essentially differ in the way they understand and deal with this tension.

3 \hspace{1cm} RESEARCH METHODOLOGY AND THE CASE COMPANY

Extending the practice perspective of strategy with the sensemaking view puts emphasis on how actors in their practices are constantly making sense of their organizational, technological and work processes and strategic changes to make them meaningful for themselves and each other. This requires examining business and IS strategizing in the field, as they are actually carried out through sensemaking in practice. This was the motivation to conduct a longitudinal case study of the business strategy enactment through an IS implementation in a South East Asian (SEA) Bank. This case is interesting as it exemplifies the intertwined nature of IS implementation and business strategic change and also because it allowed us to examine the inner workings of strategy-in-practice.

The SEA Bank is one of the largest in a country, with more than 22,000 employees distributed in over six hundred branches, managed by twelve regional offices. Currently the Bank has more than eight million customers. The Bank has been a leader in the adoption of IT in the banking industry in Asia. Historically the SEA Bank was built and owned by a large domestic business group, which absorbed all the collected funds (customer savings) to finance its own business. After the 1997 Asian monetary crisis, the Bank changed their orientation and adopted a strategy to become a broad range retail bank with a particular objective to radically change and expand its loan business to small and medium size enterprises (SME). The strategic importance of the loan business is explained by the Bank CEO:

\emph{We have done very well on the funding side but we are aware that we need to improve other aspect of our business...we review our policy...we have to focus on new loan business, this decision will make or break our business in the next four to five years.}

However the Bank “had no experience in the lending business” which made realization of strategy difficult and uncertain. This was the major reason for engaging a Western Bank (WB), one of the biggest in Europe, to acquire new knowledge of lending business and to assist them in developing the new SME loan strategy, including the Loan Application Information Systems (LAIS) to implement the strategy.

We examined the SEA Bank’s new SME loan strategy implementation via LAIS as it was carried out in practice. Our study was an interpretivist field study focusing on key actors and their work and sensemaking processes. During 2003 and 2004 one of the authors conducted two sets of interviews (52 in total) and had informal conversations with the CEO, directors, general managers, branch managers, loan managers, and most importantly account officers responsible for loan approvals. In addition 37 hard copy and electronic documents including the SEA Bank’s annual reports, strategy documents, LAIS project documents, etc. were collected. Apart from the Head Office, data were collected in 3 regional offices (A, B and C) and their branches. Regions A, B and C were chosen as they were first to implement LAIS and report their performance changes afterwards.

All interviews were transcribed and relevant parts of both interviews and documents translated to English. The analysis technique we adopted was thematic analysis that was theory informed (Neuman, 2006; Ezzy, 2002). We aimed to reveal how actors made sense of the new business strategy and the LAIS implementation process and how their understanding of their work processes and their behavior changed. At the first stage of data analysis however we intentionally conducted ‘open-coding’ to remain open to interesting ideas, concepts and themes. We then refined and redefined the codes and proceeded with our thematic analysis in a more theory driven way.
4 FINDINGS

In order to expand its SME loan business the SEA Bank engaged the WB to develop the new SME loan strategy and introduce a rigorous risk management process. The strategy involved a) a loan risk scoring system (the SEA Bank had no formal risk assessment system previously); b) the development of the new System LAIS that inscribed the risk scoring model to replace the existing manual report style system called the Descriptive Loan Application System (DLAS); c) establishment of regional credit centers as representatives of the Head Office in the regions, with redefined responsibilities between branches and regions; and d) the creation of a new role of Account Officer (AO) to process SME loan applications in the branches. The goals were to achieve a significant expansion of the SME loan business (50% per year, reaching the total of about AUD 10 billion loans to be dispersed in five years), to adopt the new risk management strategy and transform the loan approval process, and to cut loan approval times (initially from 3 months to 1 month, and eventually to less than 10 days).

The top management viewed LAIS implementation as a key instrument for achieving the goals and realizing the strategy. Of particular interest in this paper is the process of LAIS introduction and implementation in the three Regions (A, B and C) as an instrument of execution of the new SME loan business strategy. Based on the official SEA Bank documents and interviews LAIS development and implementation processes were reconstructed and summarized in Figure 2.

![Figure 2: LAIS development and implementation in Region A, B and C](image)

After an initial pre-implementation training, LAIS was implemented first in Region A (started with version 1.0), followed by Region B (version 2.5) and C (version 3.0). The implementation in three regions followed a similar pattern: period I of slow change where AOs variously resisted LAIS and continued with the use of DLAS; period II of fast changes and increasing degree of LAIS adoption in loan approval processes and period III of LAIS adoption by majority.

Furthermore, the official SEA Bank evidence shows that, 16 months into LAIS implementation the Bank succeeded in realizing its strategy and radically transforming its SME loan business. The Bank achieved significant performance improvements: much faster loan approval processes (processing time cut to 1/3 on average) and 50% more money landed while still preserving low percentage of bed debt (in some cases it was reported even lowering percentage of bad debt). This raises two interesting questions: a) How did LAIS implementation and use assisted the Bank in realizing its strategy and achieving the desired goals? and b) How and why did the LAIS implementation produced different results in the three regions? To answer these questions we draw from the sensemaking view of organizations.
Looking at LAIS implementation and its relationship to the SEA Banks’ strategy through the lens of sensemaking focuses attention on individual and collective sensemaking engaged in changing the loan approval processes and work practices instigated by LAIS implementation. The sensemaking lens also enables seeing the change introduced by LAIS at the social structure level where generic meanings are maintained and re-created. Namely, as LAIS exemplified the essential changes in SEA Bank strategy and structural arrangements of work – expansion of SME loan business, new risk management for SME loans and the new organizational structure for loan approval and management – its implementation inevitably implied the change of generic meanings. Looking more closely we saw how LAIS implementation changed the content of the loan application document (reducing the data set sought from applicants), routines and procedures for loan approvals, norms and rules governing work practices and decision making (the basis of and the criteria for decisions). This indicates that LAIS implementation implied a radical change of generic meanings at the organization structure level. This is consistent with the broader view of IT and organization structure as aspects of social structure that are mutually implicated (Orlikowski, 1992). In the case of SEA Bank the change of organization structure (a new division of responsibility between branches and a region as well as the region and the Head office; new AO’s role) and the introduction of LAIS simultaneously produced a shift in generic meanings that destabilized the existing accord among individual intra-subjective and collective inter-subjective sensemaking on the one hand and generic-subjective sensemaking on the other.

We have to repeat here that the very purpose of developing and implementing LAIS was the strategic change in the SME loan business: the SME loans were to become an important part of the core business of the SEA Bank; the Bank set targets to significantly increase SMEs loans and to radically change its risk management strategy (by accepting higher levels of risk). Within the sensemaking model such a change can be seen as taking place at the organization structure level where generic-subjective meanings are created and maintained. By defining the new loan approval process, that included the new risk assessment system (a prescribed set of variables and the algorithm for processing recommendations embedded in LAIS) and the division of responsibility between a branch, a region, and the Head office, LAIS implementation effectively introduced new loan approval structure and new generic meanings in loan approval practices. Compared to existing structures and practices of loan approval processes (using DLAS) throughout the SEA Bank, the implementation of LAIS implied extensive organizational changes. These changes were met with various levels of resistance initially, but the Bank eventually successfully implemented LAIS and with it the new SME loan strategy, as evidenced by changed risk management practices and increased performance levels.

As shown in Figure 2, LAIS implementation and adoption in the three regions followed a similar pattern of resistance and slow change (period I), fast change and increasing degree of LAIS adoption (period II), and LAIS adoption by majority (period III). However, in each case there were differences in the dynamics of LAIS adoption and the emergence of learning, including the length of specific phases, which we discuss next.

5.1 Resistance to LAIS implementation (period I)

When LAIS was first introduced in a branch in Region A, AOs tried to make sense and seek coherence in an apparently non-sensible (thoughtless) imposition of the system (LAIS) that did not make sense within their view of the SEA Bank loan business and their mental models formed through past experience. AOs perceived the imposition of LAIS as an action by the top management that ignores the potential loss of decision making quality. A senior AO Agus from Region A expressed it politely:
Management wants to achieve higher turnover and process more loans … and I understand we are being pushed in that direction, but it is my hope that the quality of the decision-making process is not ignored. … I can see the board of director’s point of view in wanting to increase turnover, but in the field we still need to consider loan quality. (Agus, Senior AO in Region A)

In their view the use LAIS ignored their AOs’ vast experience and knowledge, and, even forced them to abandon their high quality work practices and replace them with “evidently far inferior practices”. That their loan approval practices were exceptionally good was not just their subjective conviction – they maintain they had a hard proof for it. Their bad debt was very low, actually lower than 2%, which was much below the tolerated 5% defined by the Central Bank. Now they are forced to give it all up and adopt LAIS’s that looked “so ridiculously simple” as Agus explained:

When LAIS was first implemented, we didn’t know what the system was, what it contained, and even when we were shown the prototype and compared it to the work we did, we couldn’t understand why the system was so ridiculously simple. When I was making final decisions it was very difficult because I was comparing LAIS to DLAS. When I was making decisions based on LAIS I was very confused and not at all confident, because what the system contained was so simple. That was the early version. That was what we thought probably – (laughs) – that we can’t trust the system.

Transition to LAIS, in AOs’ view, was threatening the Bank’s future as it involved the drastic change of work practices, the change that was “certainly leading” to lowering the quality of the loan approval decisions. In all regions LAIS training was conducted 2-3 month ahead of implementation. Such training involved explanation of software use, system interface, processes of data entry and what to do when LAIS gives an assessment of a loan application (white, gray, black). LAIS training helped them understand ‘What to do’ but not ‘Why’. “‘Why is the Head Office forcing us to do a poorer (inferior) job?’ – was the question they could not find a meaningful answer to. The concept and structure of the loan approval process encoded in LAIS software was not transparent (WB insisted it remained confidential) and even more importantly they differed significantly from AOs’ existing practices. The training could not bridge the gap between the practice as implied by LAIS and required by the Head Office and the practice commonly adopted by the AOs’ community. Hence, they could not make sense of LAIS and did not learn.

From a Sensemaking view, the before-implementation training was conceived with the assumptions that a) the job of AOs is an individual, solitary job performed by skilled staff; b) LAIS is seen as a tool that AOs have to master to do their jobs; and c) re-skilling and change of individual comprehension (implicitly relying only on their intra-subjective sensemaking) are therefore required to adopt LAIS. These assumptions resulted from an oversimplified and rationalistic view of both work practices and the nature and role of LAIS. This approach failed, AOs did not understand LAIS nor the arguments for its implementation. They more or less openly rejected to use LAIS and continued with their DLAS practice.

LAIS training and implementation in practice also assumed uniformity of AOs identity and prior knowledge which was not the case. AOs in the new structure were recruited from former credit analysis and marketing staff. AOs with credit analysts’ experience felt threatened by LAIS which “ridiculously” simplified loan assessment and diminished their identity as knowledge workers and their authority as “loan experts”. AOs recruited from marketing staff, on the other hand, accepted LAIS as a tool more readily as they did not know much about the job done by credit analysts anyway. They accepted the new role and identity rather naively, without real understanding either the job or its nature.

The resistance to LAIS implementation however was not the same across the three cases. LAIS introduction and implementation in Region A took much longer than in other regions. The major reason was that the initial versions of LAIS (version 1 and 2) were problematic and did not match the loan assessment situation in the Asian country. In Region A the implementation of LAIS in fact involved LAIS re-development. In contrast Region B and C started with an advanced version of LAIS (version 2.5 and 3 respectively) and their period I lasted less than a month in B and about one month in C.
5.2 Fast adoption (period II)

After about eight months LAIS implementation in Region A moved to fast adoption. It is only in Region A that AOs worked with DB staff in re-developing LAIS. Through telling stories how they used to work with DLAS and conducted thorough analysis of loan requests before even considering approval, AOs shared their experiences among themselves and with DB staff in their work context. They used both systems in parallel and through such experience learned what needed to be changed in LAIS:

“When we were using DLAS and LAIS in parallel, we raised our issues with Project Manager and WB expert: “these items are not available, but are very important, please put this functionality in the next version” … We asked that the minimum standard of LAIS should include what we consider to be very important for decision-making, and WB developers improved the system several times, adding more functionality and making changes. Every time they added new functionality, we reduced our usage of DLAS, and that was the improvement process. So that now we feel LAIS meets our needs and we have confidence in the system. (AO in Region A)

In such a way AOs’ intra-subjective sensemaking developed reciprocally with that of DB developers thus leading to their increasing mutual understanding of meanings of both DLAS and LAIS – what criteria and elements for assessing a client and a loan are included and how they are recorded and checked; how the elements are processed, etc.

The training and subsequent discussions with DB team involved an interplay between AOs and DB specialists in which intra- and inter-subjective sensemaking are enmeshed, questioned and recreated, leading to their collective understanding. This enabled DB staff to develop improved versions of LAIS and in turn assisted AOs and managers to acquire better understanding of the intended content of LAIS and how to interpret its data sets and recommendations.

In Region B and C the implementation past the resistance period much faster due to both the advanced version of LAIS they started with and also on-the-job-training in regional office where AOs spent several days on rotations. Unlike initial training that introduced LAIS as a tool in an abstract way, on-the-job training focused on LAIS in their work and social context. Being co-located AOs were able to discuss LAIS as part of work practice and tell stories that relate their previous practices with DLAS to practices implied with LAIS. This helped AOs to use LAIS more meaningfully and skillfully. Although some AOs cling to their old DLAS practice in parallel to LAIS, empirical evidence demonstrates increasing understanding and learning at both individual and collective level:

“In the beginning, I think we were all a bit confused, but it wasn’t a problem because we were all in the same boat – we were all confused! We were still only learning – would you say that was our ‘learning curve’? ... Now, seven months after LAIS was implemented, we’re starting to see the results... (A senior AO in Region B)

The key features of fast adoption of LAIS are: 1) LAIS was conceived as an essential component of loan approval practice; 2) AOs engaged with LAIS embedded in their collective or social work practice; 3) as part of collective or social practice LAIS implementation involved individual and collective sensemaking intertwined in complex ways – through social interaction, sharing of experiences and knowledge, collective engagement in problem solving with LAIS and through stories or jokes told during breaks; and 4) the collective, inter-subjective sensemaking processes and social work practices involved in LAIS implementation have many characteristics of what Lave and Wenger (1991) called ‘communities of practice’ (see also Bown and Duguid, 1991). Especially in Regions B and C, AOs may be seen as creating communities of practice involving joint working, innovating and learning with LAIS.

AOs’ collective sensemaking and cooperative work practices provided a social context within which they constructed both the new vision of their job and the new shared context as created by LAIS. This new context in turn helped them develop their new shared identities as AOs. As Brown and Duguid (2001) explain ‘members of such groups collectively develop an outlook on work and the world’ that may reflect on the one hand the organization structure and generic meanings (imposed by LAIS as bearer of new strategy) as well as the emergent collective sensemaking and meaning co-creation. This emergent process involved merging of individual AOs’ intra-subjective sensemaking into their
collective making of sense and working with LAIS, thus leading to their collective learning. This suggests that communities of practice and collective sensemaking of LAIS are creating a vital link between the imposed strategic changes through IS implementation and changing work practices.

Such making sense and learning, as community of practice engagement with LAIS, is significantly richer than the formal, individual based LAIS training. It involves not only explicit knowledge of LAIS and its use but also sharing and co-creation of tacit knowledge of LAIS as practice through shared work and social context. Training of LAIS features as a tool can be seen as teaching about know that (about the explicit facts, rules, procedures) while communities of practice based learning is about know how. Acquiring knowing that does not necessarily lead AOs to apply this knowledge as demonstrated in the period I. Importantly, knowing how may not be defined or acquired in terms of knowing that (Ryle, 1949, p. 32). Knowing how needs to be experienced through social practice.

5.3 Adoption of LAIS by majority (period III)

One of the Regional managers Rudi remarked that it is not enough for AOs to learn to use LAIS, “we need to adopt the new mindset…We need to understand the essence of LAIS”. The transition to broad adoption of and high confidence in LAIS use in practice was possible due to the change of AOs’ mental models. Such change happened gradually as they came to realize the essence of LAIS as a new risk management practice and its meaning within the Bank’s new strategy in SME lean business. The new view of LAIS based loan approval process made much more sense to their abandoning of the old DLAS practice.

This change of mental model happened when intra-subjective and inter-subjective (collective) sensemaking enmeshed with cultural, extra-subjective sensemaking of changes introduced by LAIS. Namely, the metaphors and stories heard from General Manager at the beginning of the study found their way throughout the Bank, proliferating to branches and AOs. For instance General Manager explained that the essence of the strategic change in the SME loan business (implemented through LAIS) is in the transformation of the AOs’ role from a ‘specialist doctor’ to the role of a ‘general practitioner’ (GP). He described the AOs’ traditional SME loan approval processes (using DLAS) as similar to specialist doctors engage to treat common, everyday cold and other non-serious illnesses. The Bank aimed to introduce a much more rational, efficient and simplified SME loan approval – albeit more exact and well measured in terms of risk – for which they did not need specialist (doctors) but well trained GPs. It was due to LAIS that incorporated the risk management model and structures for assessing loans that enabled AOs to be trained to act as GPs. When AOs used this metaphor and talked about themselves as “becoming GPs rather then specialists”, it indicated that the new role of AOs has become part of the Banks’ cultural knowledge. It also suggested that OAs’ individual and collective sensemaking and engagement with LAIS throughout the transformation of their work practices also involved reconstruction of their identity. Through this engagement and collective sensemaking they internalized the new norm for the role of an AO in the SME loan business together with the GP metaphor.

Furthermore, the adoption of LAIS in the period III was characterized by a more reflective attitude of AOs and managers. They were capable to critically reflecting on their previous practices, the long time spent in collecting data for each loan, no matter how small or how risky. They also realized that their old DLAS practice was informal and idiosyncratic, without much standard descriptions and with no structured assessment of risks. The transition from resistance to full implementation of LAIS is graphically presented in Figure 3. using the same graphical way to distinguish between different sensemaking levels as in Figure 1. It describes LAIS introduction as a tool at the social structure level (in period I); LAIS as integral to collective work practices involving individual and collective or inter-subjective sensemaking (period II); and LAIS as the new risk management strategy and collective work process that engaged cultural or extra-subjective sensemaking level (stories, metaphors, language) (period III) as well. Throughout the transition from period I to III AOs implemented LAIS and thereby realized the Bank’s SME loan business strategy. In such a way the SME loan strategy
was not something the Bank had but became something the Bank did. The enactment of Bank’s strategy through LAIS was possible thanks to AOs’ engagement of individual, collective, generic (structural) and cultural sensemaking of LAIS as part of the transformation of SME loan approval processes. In such a way the everyday intertwined sensemaking of technology and work practices produced LAIS into becoming a strategic system and made them (AOs) subjects of the Bank’s strategy in practice.

<table>
<thead>
<tr>
<th>Extra-subjective sensemaking (culture level)</th>
<th>Period I</th>
<th>Period II</th>
<th>Period III</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS understood as a strategic tool LAIS</td>
<td>IS engaged in loan approval practice LAIS</td>
<td>IS as mediator of new risk management strategy and loan approval practice LAIS</td>
<td></td>
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<tr>
<td>Generic-subjective sensemaking (structure level)</td>
<td>LAIS</td>
<td>LAIS</td>
<td>LAIS</td>
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<tr>
<td>IS as mediator of new risk management strategy and loan approval practice LAIS</td>
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<tr>
<td>Inter-subjective sensemaking (collective level)</td>
<td>LAIS</td>
<td>Collective work practice LAIS</td>
<td></td>
</tr>
<tr>
<td>AO trained to use LAIS On the job and practice-based training LAIS</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Intra-subjective sensemaking (individual level)</td>
<td>LAIS</td>
<td>Reflecting on and reconstructing practice LAIS</td>
<td></td>
</tr>
<tr>
<td>Stories and metaphors expressing new risk management philosophy LAIS</td>
<td></td>
<td></td>
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</tbody>
</table>

Figure 3 LAIS engagement of sensemaking: from failure to make sense of LAIS (period I), to LAIS gradual engagement in practice (period II), to sensemaking of LAIS (at all 4 levels) and its situated entanglement in practice

6 CONCLUDING REMARKS

The sensemaking perspective of business/IS strategy that informed the interpretation of the case findings enabled several insights into and extension of the strategy-as-practice view of IS-business strategizing. Firstly, LAIS can be seen as a critical mediator between the Bank’s new business strategy and loan approval work practices. It is a critical mediator in a sense that the micro-practices of its deployment to engender strategic change effectively determined an overall outcome – rejection of or engagement with the system. IS-organization strategy as practice exemplified by the LAIS case illustrates how the change of generic meanings through LAIS use triggered vigorous sensemaking processes within micro-practices that effectively carried out the strategic change. It is through the dynamic of sensemaking at different levels that actors recreated and co-produced the new LAIS-based loan approval practices and work processes together with the transformation of their roles and identities as organizational actors. LAIS implementation fully succeeded in engendering a strategic organizational change only when all levels of sensemaking – intra-subjective, inter-subjective, generic subjective and extra-subjective – have been innovatively and productively engaged.

Secondly, LAIS has been conceptualized by the top management as a strategic technology that was to be the major instrument by which the Bank’s strategy – transformation of the SME loan business – would be implemented. The implementation of LAIS as an instrument or tool of business strategy, as
we have seen, failed. That LAIS was seen as a technology that by its very nature has the property of being strategic implies an essentialist conception of “strategic—ness” as a given and stable property of the technology. Such a conception of LAIS in fact prevented its productive engagement in the processes of organizing, strategizing and sensemaking. Thirdly, we learn that instead of being a given property, strategic—ness of LAIS emerged as an outcome of actors’ individual and collective engagement with and sensemaking of technology in everyday practice, the engagement that left neither unchanged. Such engagement transformed both the technology and their individual and collective identities. Fourthly, the paper also demonstrates how the practices of everyday sensemaking produced both the technology into being strategic and practitioners into subjects of strategy. In doing so the paper contributes to the strategy-as-practice perspective in IS and organization strategy research.

References