THE SIGNIFICANCE OF MENTAL MODELS IN BUSINESS

ABSTRACT

The paper is about mental models in industrial companies in a business network setting. To recognize mental models is in line with ideas presented recently in the interaction and network approach literature where Welch and Wilkinson (2002) have proposed that in business relationships and networks there is a need not only to consider the activities, resources, and actors (the traditional ARA-model) but also "ideas" which are the mental models and frameworks that are present in companies, relationships and networks.

Considering the importance of mental models it is surprising that they have received merely scant attention in the studies about industrial companies in a business network setting. This paper addresses this knowledge gap by reviewing literature on mental models in IMP studies; comparing different marketing logics as mental meta-models; proposing a model of forces influencing the mental model in a company, and discussing implications of the perspective.

KEY WORDS: Mental models, managerial cognition, business logic, service transition

INTRODUCTION

Many industrial companies face challenges in developing their offering and are in the transition from products to services (Oliva and Kallenberg, 2003). Being in or transforming into the service business is considered crucial for many reasons but constitutes major managerial challenges. Becoming service-oriented requires organizational principles, structures and processes new to a product manufacturer (Oliva & Kallenberg, 2003; Neu & Brown, 2004). Yet what has often been shown to be the most difficult to change are the mental models of individual managers and the organization as a whole. Especially in such contexts where change is needed the way in which the people interpret the situation make a significant difference.

The very essence of what a service perspective means is currently debated not only in business but also in academia. In the marketing literature the traditional view that services are provided by the service provider has been challenged by a view that services are co-created together with the customer company. Service is viewed as the outcome of a co-creation process in which both the provider and the customer contribute with various resources being used when the customer's employees, sometimes in direct interaction with the service provider's employees, use their knowledge and skills to carry out activities to solve problems, fulfill needs to create value for the customer. The outcome of this co-creation process is labeled service. In order to stress the interactive process it has been suggested that service should be used instead of the traditional concept services (Vargo and Lusch, 2004; Lusch and Vargo (eds.) 2006; Woodruff and Flint, 2006). Following this shift in theoretical thinking a service perspective would, compared to a service company, be even more radical for an industrial company implying even further changes in mental models.

In the academic marketing literature an intense debate about "dominant marketing or business logics" have recently contrasted a traditional "goods dominant logic" with a "service dominant logic" and a "customer dominant logic". These theoretical approaches represent in our view idealistic mental models on a metalevel, models that applied in practice would fundamentally change how a company handles their business. This is also what is more or less normatively suggested and thus this discussion creates potential directions for change of mental models held by practitioners. Practitioners, however, do have to make compromises, therefore identification of practitioners' "dominant logics" represent a key area for research along the lines proposed in this paper. This research avenue would include the development of appropriate methods to capture managers' mental models or dominant logics as well as conceptual development to describe the content of mental models.

Research within the interaction and network approach focuses on the nature and role of interaction, relationships and networks in business markets. It is fundamentally based on two models. Firstly, the interaction model (Håkansson, 1982) that describes the nature of the interaction process and atmosphere of a relationship between two actors situated in a broader setting. Secondly, the ARA model (e.g. Håkansson and Snehota, 1995) that describes Actors, Resources, and Activities as the fundamental dimensions of relations in networks. Both models recognize cognition that mental models are built on but do not seem in models or empirical studies to pay explicit attention to it. For example the original interaction model specifies that objectives and experience are present on the individual-actor level but later these concepts have not gained further explorations. Neither have expectations as an atmosphere element or social system as part of the surrounding environment received research attention in IMP related studies.

Considering the importance of mental models it is surprising that they have received merely scant attention in the studies about industrial companies in a business network setting. This paper addresses this knowledge gap. The purpose of the paper is to analyse mental models in industrial companies in a business network setting. This is achieved by reviewing literature on mental models in IMP studies; comparing different marketing logics as mental meta-models; proposing a model of forces influencing the mental model in a company, and illustrating the misfit of mental models in dyads. That mental models in a company, both on an individual and an organizational level change is the result of several influencing factors that may represent contradictory forces. We will in the paper introduce a framework specifying four forces influencing the current mental model in use: historical roots, external mental models, internal mental models, future aspirations and visions.

First, we briefly review how mental models have been recognized in previous primarily IMP-related research suggesting that this issue has a potential for further research. Next, we discuss how mental models on a meta-level have shaped the views in academic research about which issues are key factors from a marketing and business point of view. The IMP focus on relationships and networks represent one such meta-level mental model. Currently, there are, however, several competing paradigmatic mental models or logics in the academic debate. We end this section with a comparison of different marketing/business logics focusing on the core question in these logics: how the value concept is conceived. In the next section we suggest a conceptual framework for studying the dynamics of mental models and connect this to the logics discussion. Finally, we conclude with some implications for further research.

MENTAL MODELS IN PREVIOUS RESEARCH

Welch and Wilkinson (2002) called for more research to identify and measure key dimensions of the mental maps used by firms to understand their relations and networks, to identify the factors shaping the development of these schemas over time and how they affect firm behaviour. As they find that the development of shared ideas and meanings affects each ARA dimension, they suggest that it should be analyzed as a separate network process. They group meanings, logics, norms, theories, recipes, knowledge systems, paradigms, cognitive maps, ideologies, schemas, scripts and mental models into one concept, i.e., Ideas, and add it as a fourth dimension to the ARA model. Welch and Wilkinson emphasized that sensitivity to underlying schemas and mental maps is needed. They define the logic that underlies the partner's view of the relationship, its functions and how it fits into their overall business: "Mental maps have different roles such as help to focus attention and trigger memory, or they can signal priorities and supply missing information." (Fiol and Huff, 1992, p. 282 in Welch and Wilkinson, 2002).

There are currently others than Welch and Wilkinson within the IMP field of research that have continued in a similar vein adding insights and tools that capture cognitive aspects in business networks. One such growing stream of studies applies so-called network pictures. Ford, Gadde, Håkansson, and Snehota (2003: 176) introduced the concept of "network pictures" as a cognitive component of industrial network management, formally defined as "the views of the network held by participants in that network". Ramos and Ford (2010) describe network pictures as "a representational technique that aims to capture or illustrate views that specific actors have of the networked environment within which they operate." The network picture concept has gained considerable interest as an empirical research tool

and many empirical case studies have been published that use the research device of network pictures (e.g. Öberg, Henneberg , & Mouzas, 2007; Ramos & Ford, 2010; Leek and Mason, 2010). The map metaphor has already been critically examined by Geiger and Finch (2010).

A key concept for cognitive aspects which fits well with organization' and network's identity construction in the IMP approach is sense-making. It is defined in line with Weick and his co-authors (Weick, Sutcliffe and Obstfeld, 2005) as an actor's ability to perceive, interpret and construct meaning of the emerging business landscape. Weick et al further conclude that it is " a process that is ongoing, instrumental, subtle, swift, social, and easily taken for granted." (page 409). Sense-making as a concept was introduced to IMP studies surprisingly late. Some research was published in a recent special issue edited by Naudé, Henneberg & Mouzas (2010) which also called for more research on sense-making in IMP studies (Henneberg, Naudé & Mouzas, 2010). Colville and Pye (2010) link sense-making network pictures and conclude that the metaphor of network pictures is not dissimilar to that of cognitive maps which has long been part of the sense-making approach. They would however like to incorporate the processual nature of the sense-making model in understanding network pictures. Möller (2010) applies a sense-making framework to radical innovation development in business networks. He develops a Sense Frame that captures a network actor's sense-making. Key elements are: network context; actor: position and resources; sense-making processes; cognitive frame, and outcomes. Möller (2010) highlights focusing and selecting — direction for strategic behavior and calls for more research on the process of sense-making.

MARKETING OR BUSINESS LOGICS

In the current academic debate, suggested logics tend to focus on idealized descriptions of what to pay attention to and what to do. In the text we use abbreviations and labels about different logics as they appear in the literature. The so called goods-dominant logic (GDL) or goods logic (GL) represent the contrast to recently suggested "new" mental models or logics in the marketing literature. Vargo and Lusch (for example, 2004, 2008, 2010) have strongly argued for a perspective called service-dominant logic (SDL). This perspective has many similarities with the IMP approach (Ford 2010; IMP group homepages) and some differences as well. Emanating within service research the SDL perspective claims that all business is service business and is covered by the perspective. Grönroos has in a series of articles as a response to the SDL writings argued for service logic (SL) with some important differences compared to SDL. Recently, Heinonen, Strandvik, Mickelsson, Edvardsson, Sundström and Andersson (2010) and Voima, Heinonen and Strandvik (2010) have proposed a perspective called customer-dominant logic (CDL) which differs in some significant respects from both CDL and CL, and naturally from GDL (representing traditional service and product marketing).

Grönroos (2010) suggests that service logic should be applied in business relationships where "service is to support customers' practices and business outcomes with a set of resources and interactive processes" (Grönroos 2008:300, Grönroos 2010:2). This differs from a traditional manufacturing approach, which he considers representing a goods logic, where the focus is more narrow, for example, concentrating on delivering a machine that fits the customer's production process. He defines a goods logic "as a business logic, where resources are provided to a given usage process for the customer's use in order to support that particular process in a value creating way (Grönroos 2006, Grönroos 2010). Essentially it can be

concluded that he suggests that service logic represents a broader and deeper involvement in the customer's activities and business than goods logic. Ideally, this support leads to economic effects for the customer which in principle can be calculated and motivates the "price tag". This represents one part of value created; another part is more favorable perceptions.

Grönroos argue that the supplier's involvement in the customers' processes opens up possibilities to influence the customer's value creation. Marketing has according to Grönroos the following goal: "The goal for marketing is to engage the firm with the customer's processes with an aim to support value creation in those processes, in a mutually beneficial way". He stresses that it is the customer who creates value, the supplier should support that. Co-creation is seen as a part of the support and has a strict definition; "Value co-creation is a joint value creation process, which requires the simultaneous presence of both supplier and customer." This can be seen as a response to the service-dominant logic researchers.

In the Service-dominant logic (SDL) service is defined as "the application of resources for the benefit of another party" and "is exchanged for service" (Vargo and Lusch 2004, 2010:4). Resources are natural resources (operand) and human knowledge/skills (operant). "Service provision implies the ongoing combination of resources, through integration, and their application, driven by operant resources – the activities of actors". There should not be a division into suppliers and customers "at an appropriate level of abstraction, all actors are fundamentally doing the same thing, co-creating value through resource integration and service provision" (Vargo and Lusch 2010:2). Vargo and Lusch (2010) therefore propose that "it's all B2B" or rather A2A (actor to actor). This view may according to their thinking unite all marketing fields "In our view, and apparently that of a growing number of scholars, the concept of service, at least as we define it …can provide the necessary common denominator." They propose that value is always co-created. Essentially they propose a systems-oriented view on markets (and beyond) which they in a service context see initially proposed in the service science approach "For service science the basic unit of analysis is the service system: '(a) value co-creation configuration of people, technology, value propositions connecting internal and external service systems and shared information' referring to Maglio and Spohrer (2008, p. 18).

Ford (2010) in a commentary on the service-dominant logic identifies similarities and dissimilarities between the already established IMP research tradition and the recently proposed ideas by Vargo and Lusch. IMP research has from the start been focused on describing and analyzing activities and resources in industrial sectors, in particular how they result in links and relationships between companies and in turn networks of interlinked companies. IMP studies even prefer to use the term actor instead of suppliers, buyers and competitors to indicate a neutral view of companies' role business-wise vis-à-vis each other. Interactions between companies and aspects such as adjustments and dependence rather than products or organizational issues have been explored. Managerial issues have not been of key interest nor have financial aspects gained attention. Many key researchers have even questioned the relevance of strategic thinking and management in a network context because of the limited possibility of companies to influence others in the surrounding network.

A Customer Dominant Logic perspective put the focus on *the customer's logic* and is interested in customer's experiences, activities, and practices (Heinonen et al 2010). A Customer-Dominant Logic argues that the customer is not driven by needs and wants but by the customer's reasoning (logic) based on a configuration of customers' aspirations, dreams,

resources and earlier experiences and these lead to a configuration of activities and practices as well as choices of service providers (Voima, Heinonen & Strandvik 2010). When value formation is seen as based on customer activities, customer experienced value in use is automatically related to customer's context and even a part of value in business over time. Strandvik, Holmlund and Edvardsson (2010a) using the customer's point of view suggest that industrial services are acquired to fulfil customer functions such as: relieving - replacing own responsibility with outside supplier e.g. outsourcing of maintenance; enabling - discovering and exploiting new business potential e.g. new skills increasing production efficiency, utilizing/moving available resources for new purposes; sheltering - securing of current business e.g. shortening and avoiding production stops and service breaks; energizing – strengthening business confidence. These functions together represent a customer needing, a concept that the researchers developed to describe how customers think in contrast to the supplier-oriented offering-concept.

In Table 1 we summarize and compare the discussed business logics according to four issues that from a marketing point of view are key elements in mental metamodels, more specifically:

1) Where is the management focus (who controls the process)
2) The view of what the company is selling – the *offering* (synonyms for example: product, services, service, solution, total solution, value proposition), its context (*management scope*) and what and why the customer is buying (*needing*)
3) How value is formed for the customer
4) How value is formed for the service provider

It can be concluded that there are fundamental differences in the logics with extensive implications both for research and in practice.

Table 1. A comparison of different marketing logics as mental metamodels

	GDL	*SL*	*SDL*	*IMP*	*CDL*
Management focus	Service provider	Service provider	System	Network	Customer
Offering (service)	Products, services (deeds, processes, and performances), solutions.	Service	Service. Value proposition. Resources used in co-creation and integrated by the customer.	Resources.	Fulfillment of Needings through value requirements.
Value formed for the customer	**Exchange value**, value delivered, focus on own production processes, and how the customer may participate.	Value in use. Value created by the customer **supported** by the service provider. **Interaction.**	**Value in use in context**. Based on **co-creation.** Customer integrates different resources.	Not in focus.	**Value in use in customer's context.** Value formed for the customer in their processes. **Not interaction, nor co-creation focused**.
Value formed for the supplier company	Exchange value Economic aspects not in focus in service management, except in relationship management literature.	Not explicitly discussed. Economic aspects not in focus.	Resource integration (not explicitly discussed) Economic aspects not in focus.	Not in focus Economic aspects not in focus.	Not explicitly discussed. Economic aspects implicit.

Taking as an example implications from changing the stress on offerings/solutions and similar to needings which will bring to light many new issues. Customer needings might not correspond to offerings in scope (correspond to the suppliers industry and current offerings) but might be larger encompassing several current industries or smaller representing only a part of current offerings. Customer needings highlight that emotions may be important in a business setting and that this causes change in how the supplier should think about dealing with customers. Needings highlight buyer companies- strategies, aspirations, and visions which today may not be recognized in the supplier's mental map of what it should consider. The willingness and ability to part to get involved in customers' process and business not to mention mental models may not be in tune with what the customers prefer.

A FOUR-FORCE MODEL OF MENTAL MODELS IN A BUSINESS CONTEXT

Normann (2001) considers the fundamental process of leadership to be "interpreting a (continuously evolving) context, formulating our notions of our own identity and the emerging new contextual logic into a set of 'dominating ideas' which are both descriptive and normative, and then translate these dominating ideas into various realms of action." (p. 3) The problem is that "the dominating ideas reflect a 'reality' of the past, not the 'reality' of the present or the future". Normann, points out, however, that this misfit is often obvious only in hindsight and that there are numerous interpretations and understandings of every reality. Specifically, mental models allow people and companies to predict and explain the world around them, to recognize and remember relationships among elements of the environment, and to develop expectations for what is likely to occur next (see Rouse & Morris, 1986).

Ideas are similar to mental models which as a concept have been used in a variety of disciplines over the years. A mental model refers to a common interpretive scheme that tends to set in within companies or in industries. (Huff, 1982) The mental-model concept similarly applies to companies the business actors' understanding of their business and business landscape and will determine what these actors perceive, how they make interpretations, and what they choose to do (see for instance, Gioia & Chittipeddi, 1991, Weick 1995). For the models to be effective they need to be articulated and accepted within organization. Mental models define and direct for example what companies consider as significant resources and capabilities as well as key customers and suppliers and business environment at large which in turn will determine for example how companies develop their offerings, handle customer and supplier relationships and define the borders of their markets and networks.

Mental models can be identified on different levels. These range from paradigmatic meta-level approaches of business phenomena (for example, considering business from a systems or network perspective) to specific understandings of a phenomenon (for example, how customers evaluate offerings). In this paper we are focusing on mental models on a high abstraction level, corresponding to what in the marketing literature lately has been labeled business logic or referred to as dominating ideas in companies (Normann, 2001). On a theoretical level different business and marketing *logics* (for example, goods dominant logic, service dominant logic, customer dominant logic, relationship focus, network focus) have been suggested as approaches to make sense of business phenomena and often also to advice managers. In practice managers will, however, have to struggle with not only creating and changing their own understanding but also with revealing and coping with other actors' understandings and changes in them. In the marketing literature, fundamental shifts in perspectives and logics have been suggested over the years, covering an extension of scope from a focus on transactions, to service episodes, to customer relationships, to networks of relationships and further on to embeddedness in the society. Adoption of such fundamentally new mental models in a company will not happen quickly nor easily and will affect both the own organization and other parties, causing market dynamics.

We propose that when mental models in a company, both on an individual and an organizational level are changing, it is the result of several influencing factors that may represent contradictory forces. The "theory-in-use" or mental model in use in a company represents the negotiated outcome of dominating actors in the company (Normann 2001). Their current mental map is related to what existed earlier in terms of mental maps in the company. There is mental map heritage embedded in for example processes, systems,

organizational structures, relationships and values as these often were designed by managers in the company's past. The *historical roots* are still living in the organization and influencing the current mental map. The mental map held by dominating actors is internally situated in a mental landscape that might be more or less compatible. For example, even if the dominating actors are thinking in terms of service, *internally* there might be functions, departments and groups that have a product focus. As the business environment in many industries has become less stable than earlier and also unexplored and unknown when there is a need to enter new markets because of for example growth *aspirations* or company *visions*, the current mental model may be affected. For example, service thinking might not be perceived to be suitable on all markets, or the opposite, it is perceived as a necessity to enter new markets. There are also frequently situations where new mental models are forced on the company; for example, mergers and acquisitions, appointment of a new CEO. Finally, *suppliers' and customers' mental maps* may represent the strongest influence on the dominating actors in the company. To conclude, there are many factors influencing the dynamics of mental models, some for and some against change.

External mental maps; suppliers/customers

Historical roots still living and influencing

The current mental model in use held by dominating actors

Future aspirations and visions
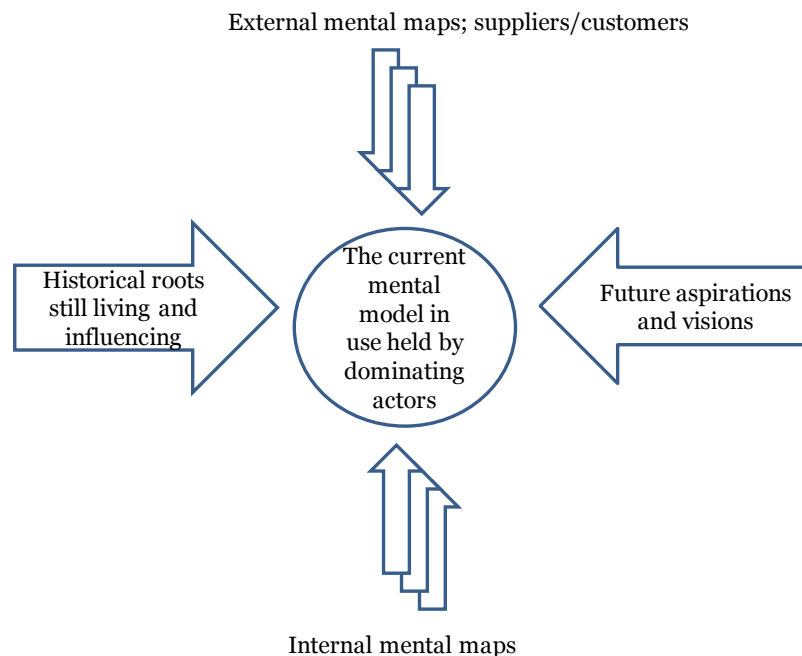
Internal mental maps

Figure 1. Four forces influencing the current mental model

We suggest that dynamics in mental models can come from each of the four forces, in addition to the company itself making the decision to make a change. The extent to which this will succeed and what it will imply for the company depends on many factors of which the present study accentuates the mental model negotiated and shared by dominating actors inside it.

On a company level mental models are relevant as 'dominating ideas' held by business actors – a concept coined by Normann (2001). "Service infusion in industrial companies" and "value creation" are as topical business issues used to illustrate the challenges of mental models. On these issues there has recently been a lively academic discussion that illustrates contrasting mental models. On a dyadic level the degree of fit and potential misfit between mental models in the dyad becomes a significant issue.

Misfits between mental models in supplier and buyer companies are not rare. The mental model that suppliers in most industries typically have about how buyers in outsourcing situations operate is that: at least customers within one industry are basically alike; prices and financial aspects are the main reasons why customers do not buy or stop buying; customers' true strategic business priorities are difficult to reveal, and all companies are not 'mature enough' to buy a certain product. The mental model that these buyers in contrast have is that: each customer is unique even within the same industry; the main reason for not buying or for changing buying policy or supplier comes from strategic priorities and goals and changes in these; being in line with strategic priorities and facilitating their achievement decide the extent to which suppliers are used and in what way this happens; customers and their strategies and goals, not suppliers and their products and sales, are the primary drivers of business, buying, and market shaping. Contrasting what the supplier sells with what the buyer buys exemplifies on situation when different mental models meet in business.

Figure 2 summarizes the three issues discussed so far; different marketing or business logics have different foci (GL and GDL a service provider focus, SL, SDL and IMP an interaction focus, and CDL a customer focus), the focal unit considered may range from a dyad to a network and the four forces from figure 1 are related to how mental models change. Within this framework the offering may be considered with varying scope from a component to a solution-type offering. In figure 2 the arrows represent directions of change that have been suggested in the literature leading to and led by a change in the underlying mental model of the actor.
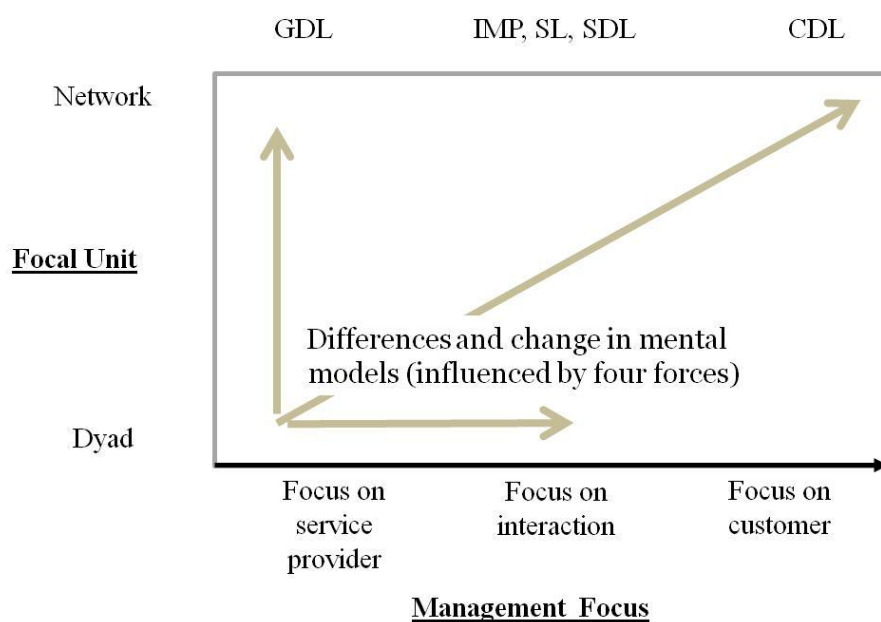

Figure 2. Different business logics as mental metamodels

Figure 2 can thus be used to describe different mental models concerning how value is seen to be formed and managed. An industrial firm situated in the low left-hand corner of the figure might through service infusion include services into their offering creating a network-based offering but still retain the (service) provider focus. A change sideways towards an

interaction based focus would imply that the offering is co-designed, co-produced with the customer – a completely different mental model leading to different use of resources and different activities. Furthermore a more radical change towards considering not how the customer can be involved in the company's processes but rather how the company can be involved in the customer's processes would represent a more dramatic change in their mental model.

What would a marketing manager with a mental model anchored in traditional goods dominant or goods logic conclude from the suggested new marketing logics? One common feature in the new perspectives is that she would need to recognize that the value of the offering they are providing cannot be completely determined in-house and that it is not predetermined, and that it is formed in interactions with the customer or even completely invisible to the service provider. This would also imply that it is important to be informed about how customers experience the offering. Furthermore, it might indicate that this insight would need to be integrated with product and service development processes in order to adapt the offering to customers' real use of the offering. Second, a common suggestion is that service providers need to engage themselves in co-operation processes with the customer. This goes beyond many current organization structures where the service provider's activities towards the customer are divided among many functions and departments without anyone in the organization having the same view on what is offered as the customer. Third, there seems to be a proposition that customers would want not only components, short-term transaction efficiency, and focus on the specific offering, but rather solutions, commitment over time, and insight into the context and system the customer is trying to manage. This obviously would demand completely new competencies from the service provider.

CONCLUSIONS

We allude to Normann's (2001) ideas of the importance of managers' individual and collective mental models captured in the title of his book "Reframing Business – When the Map Changes the Landscape". From a managerial point of view, a key challenge is understanding and managing not only the content but also the degree of fit (and misfit) of individuals mental models within a company. The concern can be extended to (mis)fits in relationships and business networks. Especially in situation where a change is needed the mental models need to be uncovered before change attempts can be made. Organizational mental models represent the frameworks of company rationalities and belief systems which impact formal analysis and policies and form the foundation for initiating and organizing subsequent action. That mental models impact by driving or hindering business is particularly evident in dynamic business environments since these changes are interlinked with changes in mental models.

Being in or transforming into the service business is currently considered crucial for most companies. Such a transition demands however a change in mental models in the organization. If successful, many positive effects has been claimed to follow. Transforming into service orientation has been shown to have many and significant positive effects. The literature (e.g., Oliva and Kallenberg, 2003; Penttinen 2007) widely claims that companies transforming into service oriented can financially benefit as they will be able: expand range of sold products, improve profit margins, and prolong and stabilize revenue streams. Besides these financial advantages, companies may also benefit as they respond to changing customer demands and increased service outsourcing by tying customers closer to themselves and

attract new customers with a new business model. In general, service-based business is seen as a stronger sustainable source of sustainable competitive advantage since services often are more difficult to imitate and this form the basis for a competitive advantage (see e.g. Heskett, Sasser and Schlessinger 1997).

There are however also challenges: What the new marketing logics do not seem to be interested in or do not have suggestions about are, firstly, whether this transition would have positive economic effects. For a manager, this issue might be of crucial importance. Second, there is no indication of whether all customers and all contexts are similar or whether there are important differences. Is for example, an experienced customer similar to an inexperienced, is a normal situation similar to an emergency situation, how could a service provider differentiate itself if other competitors are changing in the same pace to the new mental model? Third, if interaction and co-creation are crucial, what types of co-creation situations are there, which situations or constellations would be likely to succeed, which would be likely to fail. Fourth, how can a new mental model be adopted in practice in a company and what are the challenges related to the change. Fifth, how can a company create innovations that would give them competitive advantages in the future?

The discussion above shows how a change in the core of the mental model has widespread effects.

There are several implications from recognizing mental models in a business network setting
1. Mental models constitute a complementary type of content of business network to actors, resources, and activities. Mental models were originally recognized in interaction and network studies but have received scarce attention compared to the other elements. For example, mental models are inherent in key concepts in interaction and network studies such as for example adjustment and coordination, routinisation and other long-term aspects of interaction in the interaction model.
2. Mental models are particularly valuable to unveil dynamics – triggers, content and consequences of events and evolution which are inherent in business network studies. Mental models as a notion is linked to innovation, business renewal and strategic development.
3. More concepts are needed to cover aspects of mental models; on different levels, of different content etc.
4. More techniques and tools are needed to diagnose mental models in research but also in management.
5. If mental models are put in the foreground and seen as drivers of actors, resources and activities it is almost self-evident that new perspectives on many business issues will emerge. Consider for example the issue of where and how value is formed for the customer. The traditional mental model finds it related to the exchange value of an offering while the alternative mental model relates it to customer's actual use.

There are many managerial implications from recognizing mental models as well. For example, there is rather scant advice on what to do with current structures, practices and tools if the mental model changes. Should the company still have a marketing department, sales persons, customer service; should customer satisfaction surveys still be made; should innovation of offerings still be made in the same way as earlier; are current marketing communication practices still appropriate; and if not, what should be done differently and how? From a manager's point of view a marketing logic will always become a personal theory-in-use, it is other words connected to what the manager believes is viable in practice.

Although there has been a vivid discussion about different "marketing logics" recently in the service and marketing literature it does not have to correspond to the "logic" applied in business by companies and individual managers. Within marketing the recent discussion concerns how companies should conceive their role in relation to customers; their offering; and customer's reasons for buying. In business other more comprehensive logics might be applied even if they do not have specific labels, for example, "shareholder value logic", "cost-management logic", "growth logic", "risk aversion logic". Such logics might cut through all functions and levels of the organization and represent the guiding principle in the company and may affect how marketing is seen.

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