

## Submission to “Learning Organization – An International Journal”

### Research Paper

### Cultivating Knowledge Sharing through the Relationship Management Maturity Model

#### *Biographies*

#### **Dr Valerie A. Martin**

Department of Management Systems  
Waikato Management School  
University of Waikato, Hamilton, New Zealand  
Email: [valeriem@waikato.ac.nz](mailto:valeriem@waikato.ac.nz)

With an MSc in Information Management (Strathclyde University, UK), and a PhD in Computer Integrated Manufacturing (Cranfield University, UK), Dr Valerie Martin has had substantial research and consulting experience in the areas of enhancing understanding in the organizational context in which information systems function, and she has specialized in manufacturing, financial services and small companies. She also has considerable experience as a facilitator of learning clusters for small companies in the supply chain. Prior to taking up a lecturing position at Waikato University, she was a research fellow at Brunel University, West London. She has published in a wide range of international conferences and journals.

#### **Ms Tally Hatzakis**

Department of Information Systems and Computing  
Brunel University, Uxbridge, Middlesex, UK  
email: [tally.hatzakis@brunel.ac.uk](mailto:tally.hatzakis@brunel.ac.uk)

Ms Tally Hatzakis, holds a BSc in Marketing Management (The American College of Greece), a MBA, awarded with distinction (Aston Business School), and is completing her PhD research in Information Systems (Brunel University). Prior to returning to education, Ms Hatzakis has worked as an account manager managing national and international corporate projects. Her research concentrates on all aspects of people management issues triggered by IT-related organizational change. She is currently engaged in ongoing research with a number of organizations regarding collaboration issues between business and IT during information systems development, change and maintenance.

#### **Dr Mark Lycett**



Department of Information Systems and Computing  
Brunel University, Uxbridge, Middlesex, UK  
email: mark.lycett@brunel.ac.uk

Dr. Mark Lycett holds a BSc in Computing and Business Management (Oxford Brookes), a MSc in Information Systems (Brunel University) and a PhD in Information Systems (Brunel University). Prior to returning to education, Dr. Lycett spent a number of years in industry and he has both worked on and managed a number of national and international feasibility/development projects. Dr. Lycett's research concentrates on all aspects of component-based software engineering and he is currently engaged in ongoing research with a number of organizations. He has published research findings in a number of leading journals and international conferences.

### **Professor Rob Macredie**

Department of Information Systems and Computing  
Brunel University, Uxbridge, Middlesex, UK  
email: robert.macredie@brunel.ac.uk

With over 10 years of research experience, Robert Macredie has worked with a range of organizations, ranging from large, blue-chip companies, through small businesses, to government agencies. Robert's key interest lies in the way in which people and organizations use technology, and his research aims to determine how work can be more effectively undertaken by improving the way that we understand how people and technology interact in organizational settings. He is Professor of Interactive Systems and Head of the School of Information Systems, Computing and Mathematics, Brunel University. He has undertaken work on a range of issues associated with people, technology and organizations and has over 150 published research contributions in these areas.



# Cultivating Knowledge Sharing through the Relationship Management Maturity Model

Valerie A. Martin

*Department of Management Systems  
Waikato Management School  
University of Waikato, Hamilton, New Zealand  
Email: valeriem@waikato.ac.nz*

Tally Hatzakis, Mark Lycett and Robert Macredie

*Department of Information Systems and Computing  
Brunel University, Uxbridge, Middlesex, UK  
email: tally.hatzakis@brunel.ac.uk, mark.lycett@brunel.ac.uk,  
robert.macredie@brunel.ac.uk*

## **Abstract**

**Purpose** – This paper presents the development of the Relationship Management Maturity Model (RMMM), the output of an initiative aimed at bridging the gap between business units and the IT organization. It does this through improving and assessing knowledge sharing between business and IT staff in Finco, a large financial services organization.

**Design/methodology/approach** - The objectives were achieved by i) undertaking ethnographic research with the relationship managers (RMs) as they carried out their activities, and ii) developing the RMMM by visualizing the development of a community of practice (CoP) between business and IT.

**Findings** - The RMMM demonstrates a learning mechanism to bridge the business/IT gap through an interpretive approach to knowledge sharing by i) defining knowledge sharing processes between business and IT and ii) defining the tasks of the relationship managers as facilitators of knowledge sharing.

**Research limitations/implications** - More research is necessary to determine whether the RMMM is a useful tool on which Finco can base the development of RM over the next few years.

**Practical implications** - The RMMM acts as a practical knowledge management tool, and will act as a future reference for the RMs as they attempt to further develop the business/IT relationship.

**Originality/value** - The findings provide an initial endorsement of the knowledge sharing perspective to understand the business/IT relationship. Also, the RMMM can be used to identify problematic issues and develop processes to address them.

**Keywords** - Business/IT relationship, knowledge management, knowledge sharing, financial services industry, relationship management, Relationship Management Maturity Model.



## **INTRODUCTION**

There is a perceived gap between the IT organization and the other business subunits that presents a major challenge for business organizations. Because of ineffective communication and poor knowledge of each other's issues, critical knowledge sharing cannot occur. Symptoms of this misalignment include poor co-ordination of work practices, delays and de-scoping of projects and inflexible information systems.

In a previous paper (Martin, Hatzakis, Lycett and Macredie, 2004), we described a program of relationship management (RM) which aimed to reduce the gap, through improving knowledge sharing. This program accounted for the social networks between people in order to ensure that the right knowledge is shared at the right time across these networks. The outcomes of the project showed the results of the relationship management initiative after one year. In this paper we present the Relationship Management Maturity Model (RMMM). We follow the progress of the development of the RMMM initiative, describing the theoretical underpinning, philosophy and structure behind the model, and how it works as a tool for bridging the gap.

The objectives of this paper are:

- To capture the essence of the work of the relationship managers (RMs) in a case study company, that is, the activities that enable better knowledge sharing.
- To provide a mechanism for improving and measuring the maturity of the business/IT relationship through knowledge sharing in the company.

We begin by arguing that the business/IT gap may exist because of poor understanding of knowledge and communication in organizations, and we suggest that bridging the business/IT gap needs an interpretive approach to knowledge management. Following this, we introduce the company and the early research, describing the research method and the theoretical underpinning. The structure of the RMMM is then explained; the levels, process areas, goals and practices. The next section describes examples of the business/IT process problems, illustrates the knowledge management dimension and discusses how these examples were defined as RMMM process areas, broken down into goals and practices. We then go on to introduce an evaluation strategy for the RMMM and we discuss the contribution that this work makes. We conclude that the research approach and model endorse the validity of the RMMM to provide a means to improve and measure RM in this company.

## **THE BUSINESS/ IT RELATIONSHIP**

Business and IT perceptions of each other suggest a gap through a lack of knowledge and understanding of each other's issues. For example, the internal customer's view of the IT organization is that IT is preoccupied with state of the art technology, whether it is aligned with business or not. On the other hand, IT personnel view internal customers as providing no strategy guidance for IT, having no understanding of IT issues, and making IT the 'whipping boy' for everything (Ward and Peppard, 1996).



Organizational culture has often been used as a way to explain the gap between business and the IT organization. Schein (1992) claims that there is a cultural gap between business and IT, whereby information flow is affected by differences in assumptions and use of information between business and IT staff. IT staff assumptions about information tend to focus on the information that can be manipulated through electronic information technology. This mindset is in contrast to the business mindsets that are more concerned with the holistic and human aspects of dialogue and communication.

Peppard and Ward (1999) argue that the field of organizational culture is not cohesive enough upon which to base theories of the gap. They claim there are four influencing factors that negatively impact on the business/IT relationship:

- *Leadership*: the leadership styles of the IT organization and the business are often disparate.
- *Structure and processes*: the organization of IT within the business is often mismatched.
- *Service quality*: the ability of the IT organization to deliver service criteria is often inadequate.
- *Values and beliefs*: the way IT is managed in organizations is often dependent on whether business managers believe that IT is strategic or not.

In the related area of business/IT alignment, Avison, Cuthbertson and Powell (1999) base their studies on power, contending that the low status of the IT organization is responsible for poor alignment. This view is hardly surprising as the alignment theories generally tend to be focused on strategic objectives and the degree to which they are supported by IT (Chan 2001, Brancheau, Janz and Wetherbe, 1996). Reich and Bensabat (2000) claim that there are two schools of thought on business/IT alignment: one is on examining the strategies, structure and planning methodologies. The other is on investigating the actors in organizations, their values, communication styles and their knowledge of each other's domains. They name these dimensions the intellectual dimension and the social dimension respectively, borrowed from Horovitz (1984), claiming that little is known about the social dimension. They conclude that short term alignment is fairly easy to understand through the daily activities of staff, but long term alignment is harder, as there is still no real understanding of shared domain knowledge.

These approaches, though highly relevant in themselves, are fragmented and say little about the complex nature of the social relationships between business and IT staff. However, they infer that social issues, and certainly knowledge and information sharing issues may be some of the causal factors of the poor relationship.

## **KNOWLEDGE MANAGEMENT THEORY**

### **Prevailing Paradigms**

The field of knowledge management (KM) is diverse, spanning a multitude of areas and paradigms. One of the most prominent debates in KM is the tacit/explicit debate that gained popularity through the work of Nonaka, in particular, his 'Spiral of



Knowledge' (1991). This argument in itself has many strands, and the notion of tacit knowledge in particular has given rise to a multitude of theories. Polanyi (1967), for example, believes that all knowledge is fundamentally tacit, and even explicit knowledge is rooted in tacit experience. However, tacit knowledge is fundamentally impossible to articulate. Teece (1998) and Huang (1997) simply believe that tacit knowledge can be articulated, but it is difficult to do so. The difficulty in defining tacit knowledge is a major drawback of the tacit/explicit debate. Another difficulty is the flaw in Nonaka's spiral of knowledge in the tacit-explicit stage (Hildreth and Kimble, 2002). If tacit knowledge is inarticulable, or hard to articulate, this stage simply cannot work - yet the primary KM approach to managing tacit knowledge is to try to make tacit knowledge explicit.

One of the most dominant paradigms in KM, however, is the IT, tool driven paradigm, a type of explicit knowledge. Through a survey, Scarbrough, Swan and Preston (1999) found that nearly 70% of articles on KM were in the IT/IS areas, and many of these were practice driven, with the emphasis on explicit knowledge. Managers hope that these tools can be exploited to retain knowledge within the company. This view is illustrated by Schultze and Leidner (2002) in analyzing the predominant discourses in knowledge management. They claim that the vast majority of research in the area of knowledge management falls under the normative discourse, from Deetz (1996). The normative discourse is concerned with codification of objective knowledge, and the generation of law-like relationships between variables, with generalizable results.

Schultze and Leidner contrast the normative discourse with the interpretive discourse, arguing that the knowledge management research that falls under this paradigm is socially constructed. They illustrate this by referring to the work of Stenmark (2000/2001), who claims that knowledge is pluralistic and there are many types of human knowledge. In this paradigm knowledge is not an object that is separate to humans, but is part of a web of distributed and interrelated activities in organizations. According to the interpretive discourse, knowledge is interrelated with the social practices of individuals.

It is questionable if the tacit/explicit debate, by itself, can capture the nuances of more complex issues such as human relationships, and degree of involvement and depth in a knowledge sharing community. If human expectations and relationships are the basis of knowledge sharing between business and IT, then the approach must be interpretive. Relationships are complex: people are active sense makers who often share common views, but also conflict and disagree. They like to make sense of things through codifying knowledge and formalizing processes, while often preferring informal dialogue and networks to share knowledge (Martin, Lycett and Macredie, 2003). Where the business/IT gap is concerned, our reasoning was that a more interpretive and holistic approach to knowledge sharing may improve the relationship.



## **Knowledge Sharing and the Community Of Practice**

Hildreth and Kimble (2002 op cit.) promulgate the notion of the 'Community of Practice' (CoP) as a way of viewing and understanding organizational knowledge and social relationships. Influential work in this area is that of Wenger, McDermott and Snyder (2002). They describe a community of practice as a group of people who are bound together informally through sharing expertise and enthusiasm for something. This definition is shared by others - O'Donnell and Porter (2002) argue a CoP is about sharing experiences and knowledge in creative ways, and this can lead to new approaches to problem solving and innovation. They point out that the activities of people in a CoP are largely voluntary, that is, not driven by the goals of management. Melcrum (2000) claims there is a difference between a CoP and a team: teams are driven by deliverables and defined tasks whereas CoPs are driven by values, knowledge and know-how.

Knowledge sharing is important to a CoP, and it can be defined as the circulation of knowledge throughout the organization (Yang, 2004). The opposite of hoarding, sharing usually comes about through the removal of barriers between people and departments. Sometimes called 'knowledge transfer' (Davenport and Prusak, 2000), there are many factors which can prevent sharing from happening, including lack of trust, diverse cultures and lack of time. Therefore, the cultivation of a CoP can help to bridge gaps between people and departments.

We took the view that the limited understanding of the business/IT relationship was because of a limited understanding of the nature and importance of knowledge sharing. We believed that the business/IT relationship would be improved through a more interpretive approach to knowledge: one based on the concepts of a community of practice between business and IT. This was to be investigated through the relationship management initiative in Finco, a large financial services provider.

### **EARLY RESEARCH**

Finco is based in the UK, with a customer base of over 15 million people. It is a large financial services organization that has experienced increasing competitive pressure in recent years, leading to each of the business divisions within Finco becoming more externally competitive. This has resulted in fragmentation of company strategy and competitive use of IT resources. On the business side of the business/IT relationship, this study is focused on their largest business unit, Retail Banking, which is relatively distributed. The IT side of the business/IT relationship is made up of separate units catering for solutions delivery, infrastructure, IT architecture and customer support, and is relatively centralized.

The first phase of the research was done through a series of semi-structured interviews with staff on either side of the business/IT divide. The main reason for the interviews was to provide a better understanding of the reasons for the gap. The findings revealed two areas of major importance:

- *Alignment of Business/IT Strategy:* (a) poor involvement of IT in decision-making; (b) need for more knowledge of business/IT needs; (c) lack of



cohesion in prioritization of projects by retail bank staff; and (d) inconsistent ways of working between both parties.

- *Cultural Inconsistencies*: (a) need for a shared understanding of expectations; (b) need for recognition of IT contribution by retail bank staff; and (c) over-the-wall mentality between both parties.

These areas further confirmed the social nature of the business/IT gap, and especially the need for better knowledge sharing. For these reasons, we identified two axes of tension in Finco:

- *Reality*: The difference between business direction and operational reality (Operational meaning IT support).
- *Perception*: The perceived differences between business and IT that impact negatively on the Company as a whole.

Figure 1 illustrates these axes:

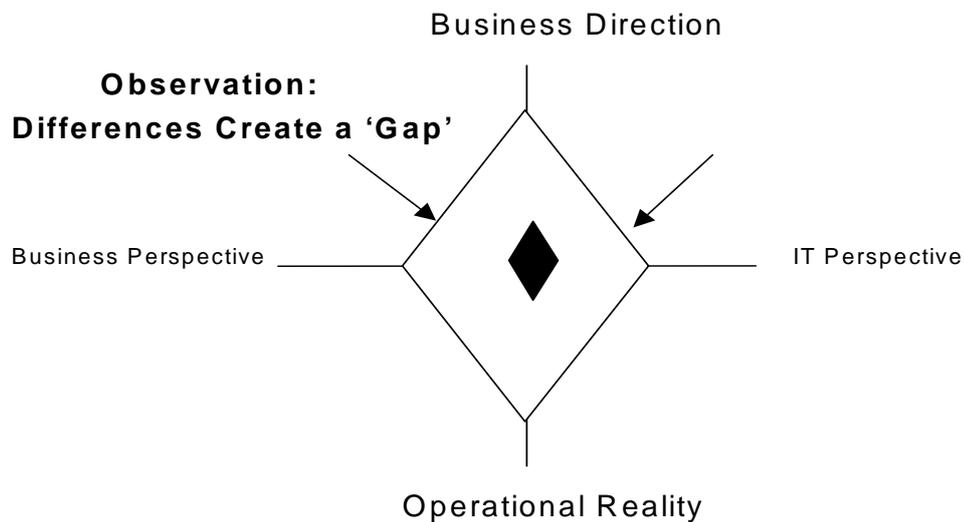


Figure 1. Axes of Tension

## RESEARCH METHOD

The IT Director for the Retail Bank was in the process of recruiting a team of Relationship Managers (RMs), intended to be responsible for tackling these issues. He had concerns about several challenging issues:

- *IT staff*: IT people, being domain-focused and skilled, needed to broaden their knowledge of business issues and understand the broader organizational context within which the company was operating.
- *Retail Bank staff*: They were challenging IT staff more – nowadays they know more about technology, but still needed the co-operation and expertise of IT.



These comments stressed the lack of cohesion and knowledge sharing between the two divisions. The main advantage of RM was perceived to be the facilitation of social networks between business and IT which would enable staff to understand and share knowledge more effectively. We were invited to collaborate in the RM initiative.

Three Relationship Managers (RMs) were recruited to lead the RM program. The research aims and objectives for us were to define knowledge needs between Retail Bank and IT staff and to develop a model of best practice in RM, in collaboration with the RM team. The program of research involved a period of live-in research lasting six months. Participant observation methods with the new RMs were used, including:

1. Shadowing of the RMs, including sitting in at meetings.
2. Examining documents.
3. Asking questions (semi-structured interviews).
4. Collaborative workshops.

Over the six months we were able to hold a number of workshops with the RMs. This allowed them time out for reflection about their work, and also a chance for us to work on the development of the RMMM with their co-operation. The challenge we faced was developing an explicit tool that could be used to help the RMs make sense of what they were doing, and to project a future vision to improve the relationship. There was a need for clear performance indicators and guidelines for RMs due to the sparse theoretical grounding of RM. At the same time, the model needed to incorporate guidelines for long-term sustainability of the RM initiative.

The framework selected as a guideline for defining the RM best practices was the concept of the maturity model, as seen in the Capability Maturity Model Integration (CMMI) framework, developed by the Software Engineering Institute at Carnegie Mellon University (2004). This model is based on the premise that as organizational functions grow or change, the effect is often like a patchwork quilt of unrelated and uncoordinated activities (Ahern, Clouse and Turner, 2001). This scenario was seen as being highly relevant to the business/IT gap issues within Finco. A maturity model is a phased approach to improving business processes over a substantial period of time. Maturity is achieved at the advanced level when processes are not only being managed well, but staff are involved in continuous process improvement on a daily basis.

By defining the business/IT issues as processes, we rationalized that these models could provide a clearly defined technique for process change, with defined stages of achievement, and defined, albeit flexible, methods for achieving these stages.

## **RMMM DEFINED**

### **Capability Levels**

The CMMI framework is based on the concept of capability levels. Each capability level is a well-defined plateau of achievement that establishes a new level of maturity for the company to aspire to. In the CMMI there are five.



Adapting the CMMI framework, we visualised the capability levels of the RMMM as follows:

*Level 1:* This level represents the division between business and IT, and this is where Finco was at the initiation of RM.

*Level 2:* This level represents the gradual identifying of knowledge and information needs, defining RM processes and smoothing lines of communication.

*Level 3:* This level represents the full definition of RM processes and practices, and the leadership of them by the RMs. However, at this level, the RMs will still be leading the management of the processes, and ownership by the business/IT staff will be limited.

*Level 4:* This level is the stage at where widening participation in the RM CoP will come about as a result of a culture change. Knowledge and social relationship capabilities should be more widely understood and practiced by staff.

*Level 5:* This level is the stage where full, or almost full, participation will be reached, where the RM CoP will have become self-organizing. People should be creative in their use of knowledge, know who to share it with and where sources of expertise are located. Figure 2 illustrates the five levels:

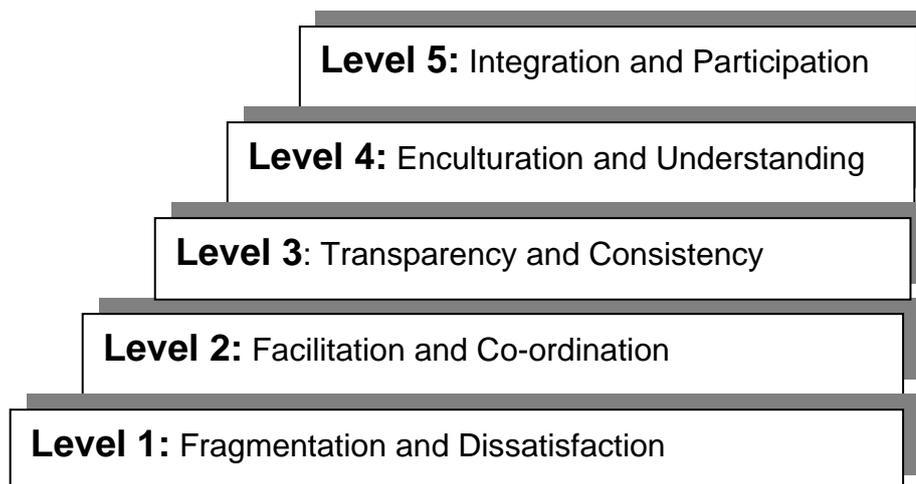


Figure 2. RMMM Levels

Some of the terms were changed to suit RM. For example, ‘facilitation and co-ordination’ was substituted for the ‘monitoring and control’ at level 2 of the CMMI, as the vision of RM was not management or control of staff but facilitation of better relationships and knowledge sharing.

### **Process Area Categories and Process Areas**

Each maturity level in the CMMI is composed of several process areas. Three process area categories covering 10 process areas were defined through continuous and iterative work with the RMs: Strategy Development, Information Management and Cross-Functional Integration.



*Process Area Category 1. Strategy Development:* This process area category covers the facilitation of the decision making activities required, assessing the availability of knowledge, and outlining a capability plan for obtaining strategic knowledge. This grew out of the first area defined in the initial interviews: Alignment of Business/IT Strategy.

*Process Area Category 2. Information Management:* This process area category covers the facilitation of obtaining and communicating information in order to ensure that the organization has the know-how to achieve its competitive strategy. Through the work with the RMs, it was clear that information is crucial to their work.

*Process Area Category 3. Cross-functional Integration:* This process area covers the improvement of processes and structures to facilitate cohesion and knowledge sharing between business and IT. This area evolved from the second area defined in the initial interviews - Cultural Inconsistencies.

The 10 process areas are illustrated in Table I.

<b>Process Area Categories and Process Areas</b>		
<b>Strategy Development</b>	<b>Information Management</b>	<b>Cross-functional Integration</b>
<ul style="list-style-type: none"> <li>• Strategic Decision-making Facilitation</li> <li>• New Initiatives Facilitation</li> <li>• Capability Planning</li> <li>• Risk Management.</li> </ul>	<ul style="list-style-type: none"> <li>• Crisis Management</li> <li>• Information Capability Management</li> </ul>	<ul style="list-style-type: none"> <li>• Organization Analysis</li> <li>• Cross – functional Process Integration</li> <li>• Cross – functional Teaming</li> <li>• Cultural Integration.</li> </ul>

Table I. Process Area Categories and Process Areas

Figure 3 represents the 10 process areas of the RMMM mapped onto the Axes of Tension model from Figure 1. Strategy Development is mapped onto the Business Direction/Operational Reality axis (Reality Axis) and Cross Functional Integration is mapped onto the Business Perspective/IT Perspective axis (Perception Axis). We viewed Information Management as an inherent aspect of both axes, permeating all aspects of the business/IT relationship.



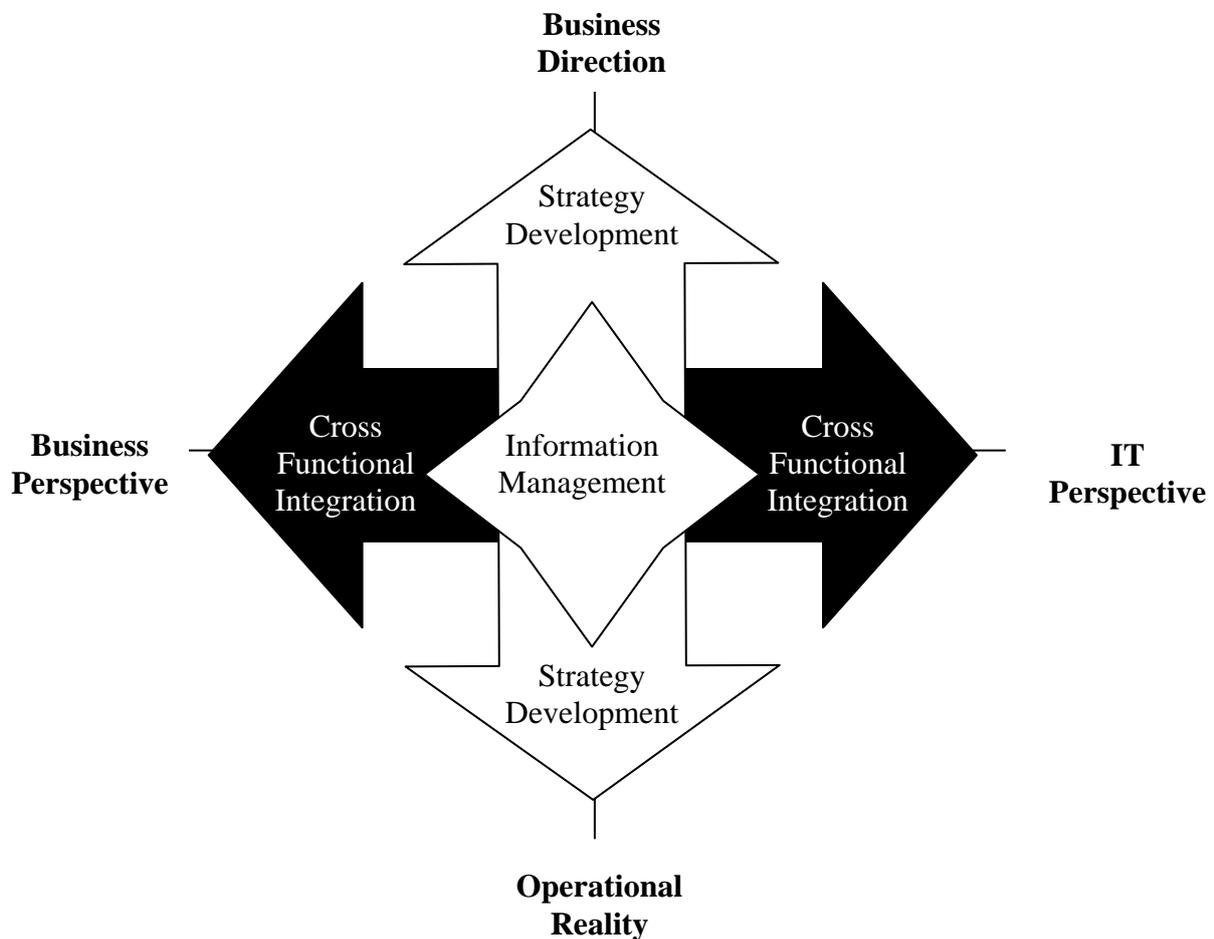


Figure 3. RM Process areas mapped onto the Axes of Tension

### Goals and Practices

Goals and practices are how the process areas are achieved in the CMMI models. A goal represents a desired end state, when a certain degree of process improvement has been achieved. Practices are the means of achieving a goal. Every practice in the RMMM is mapped to exactly one goal. There are two types of goals and practices:

*Generic Goals and Practices:* They demonstrate where performance measures can be defined for the organization's RM program as a whole. All generic goals and practices are the same over each of the 10 process areas. To define the generic goals and practices, we used the basic concepts and descriptions from the CMMI model. However, they were adapted to suit the circumstances, especially terminology pertaining to the knowledge oriented nature.



*Specific Goals and Practices:* Unlike the generic goals, the specific goals and practices are all different according to which process areas they pertain to. To define the specific goals and practices, we adapted the basic tenets of the CMMI, replacing the specific goals and practices with ones which were more relevant for the knowledge-oriented focus of the RMMM. Each process area in the CMMI model has between one and four specific goals.

Figure 4 illustrates the RMMM structure:

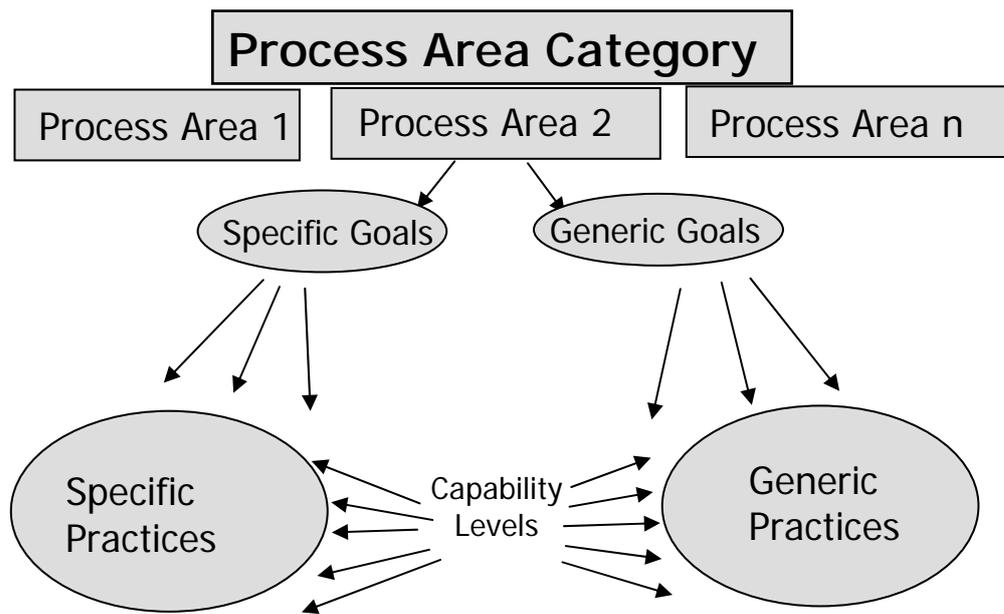


Figure 4. RMMM Structure, adapted from the CMMI model

## RMMM EXAMPLES

Some of the main issues that we observed are used here as examples to illustrate how we defined the RMMM best practices. There is one RM issue from each of the three process area categories (PACs).

*Process Area: New Initiatives Facilitation, from PAC Strategy Development*

*Problems observed:* Retail Bank staff favored their own social networks and so circumvented formal prioritization processes whenever they could. For example, the RMs reported that new ideas from Retail Bank staff were being filtered through to them on an informal capacity, with little desire on the part of the staff to co-ordinate these ideas between business units and IT staff.

*RM practices:* Once they became aware of these issues, the RMs participated in regular strategic business meetings to counsel business people from an IT



point of view. We were able to observe the points of view being presented on both sides of business and IT, the arguments and contentions that arose, and steps taken to resolve issues.

*Process Area: Crisis management, from PAC Information Management*

*Problems observed:* Retail Bank staff complained that systems often crashed. When they did, the fact they had crashed was often not communicated to business people, making it hard for them to do their job. Also, systems operations managers claimed that it was hard to communicate with Retail Bank staff as they did not know who the right business person to contact was. For these reasons, they often went through non-crisis channels when the problem was of crisis proportions.

*RM practices:* The RMs were already aware of this from the IT side, and they set themselves up to be a hub of crisis communication. They also set up a RM mobile number to act as a hotline: this was already in place when the researchers were seconded into the RM team. We observed the RMs frequently receiving phone calls about systems problems.

*Process Area: Organizational Analysis, from PAC Cross Functional Integration*

*Problems observed:* As systems problems sometimes reduced the productivity of branches and call centers, the RMs decided that there was a need for organizational analysis spanning both the Retail Bank and the IT organization. During a meeting of the RMs, at which we were present, they agreed that there was a lack of forward vision within the process areas of both the IT organization and the Retail Bank. The problem was complicated by the fact that the IT organizations' process areas were often very different to those of the Retail Bank.

*RM practices:* The RMs talked to people in the branches up and down the country, to find out exactly what the problems were with the systems, recording the findings and analyzing them. The RMs documented this in the form of an action log, which detailed what the problem was, where it had been, and what actions were to be taken by the RMs.

Table II illustrates these three process areas, with their defined generic (G) and specific (S) goals (G) and practices (P) at Level 1 of the RMMM.

<b>RMMM PROCESS AREAS</b>	<b>RMMM Goals</b>	<b>RMMM Practices</b>
---------------------------	-------------------	-----------------------



		GG 1: Achieve specific goals.	GP 1.1 Perform base practices GP 1.2 Establish an organizational framework.
1.	<b>New Initiatives Facilitation</b> , from process areas category <i>Strategy Development</i>	SG 1: Coordination of initiatives is mediated by RMs in exceptional cases only.	SP 1.2: Obtain timely information on these issues to pre-empt escalation. SP 1.4: Organize workshops to discuss problems.
2.	<b>Crisis Management</b> , from process area category <i>Information Management</i>	SG 1: Crises are dealt with on a day-to-day basis.	SP 1.1 Communicate the role of RM as the first point of contact for crisis issues across the organization. SP 1.2 Handle the coordination of other colleagues for solving crisis issues, explore underlying reasons and communicate with the person(s) raising the issue, and other interested stakeholders.
3.	<b>Organizational Analysis</b> , from process area category <i>Cross Functional Integration</i>	SG 1: Key needs and problems areas for organizational knowledge sharing are identified.	SP 1.1: Identify colleagues' needs for knowledge. SP 1.2: Identify colleagues' perceptions of key barriers to knowledge sharing.

Table II. Defining RMMM process areas at Level 1, including goals and practices

In each of these examples, only Specific Goal 1 is illustrated, with two examples of specific practices from that goal. Generic Goal 1 is also illustrated at the top, with two examples of a generic practice.

Levels 2, 3, 4 and 5, for the most part, were projected, using the CoP as a reference framework. This was done in order to visualise future best practice in knowledge sharing for the RMs, and also to provide guidance for them. Level 5 is focused on the future development of the RM. The crux of RM is that the participants in the RM CoP, which by Level 5 should be a substantial part of both the Retail Bank and IT, will take ownership of their own relationships and knowledge sharing activities and not leave this responsibility remaining in the hands of the RMs. In other words, knowledge sharing should be voluntary. The role of the relationship managers will be



to simply monitor and intervene when necessary; however it will still be an important job.

Table III illustrates the same three process areas, goals and practices at Level 5 of the RMMM.

	<b>RMMM PROCESS AREA</b>	<b>RMMM SPECIFIC GOALS</b>	<b>RMMM SPECIFIC PRACTICES</b>
		GG 5. An optimizing process is institutionalized.	GP 5.1: Ensure continuous process improvement.
<b>1.</b>	<b>New Initiatives Facilitation</b> , from process areas category <i>Strategy Development</i>	SG 5: New initiatives derive seamlessly from strategy and deployment is agile and efficient.	SP 5.1: Constantly ensure that stakeholders are happy and understand the criteria, measurements and processes of new initiatives implementation/deployment. SP 5.2: Ensure that new initiatives implementation practices follow strategic values and principles.
<b>2.</b>	<b>Crisis Management</b> , from process area category <i>Information Management</i>	SG 5: Crisis management is continuously refined to meet changes and new challenges.	S.P. 5.1: Records and logs are updated regularly. SP 5.2: Communication channels are constantly clarified and kept open.
<b>3.</b>	<b>Organizational Analysis</b> , from process area category <i>Cross Functional Integration</i>	SG 5: A climate of continuous organizational knowledge sharing and improvement is established.	SP 5.1: Help senior management establish and communicate a framework for introducing organizational knowledge projects. SP 5.2: Help senior management communicate the link between continuous organizational knowledge sharing and company strategy.

Table III: Defining RMMM process areas at Level 5, including goals and practices

## EVALUATION

To the best of our knowledge, there is no literature that directly addresses the evaluation of the impact of a program of RM on organizations. It is assumed that most evaluation exercises in organizations will be driven by (a) the need of senior management to establish the economic or business value of their investment in RM and (b) the need of those practicing or managing relational change to examine and demonstrate the nature and degree of their contribution to organizations.



We stated early in the paper that the RMMM has two main purposes – to capture the essence of the work of the relationship managers and to provide a mechanism for improving and measuring the maturity of the business/IT relationship through knowledge sharing. However, we realised that the building of a CoP between business and IT through all five maturity levels would take some time, probably years. At the time of writing the RM program had only been running for nine months and we believed there would be no value in measuring the results before this time.

Nonetheless, an informal evaluation was carried out amongst some of the managers and directors from both business and IT. These initial findings indicated that there had been some initial improvements in the following areas, establishing the beginning of a transition from Level 1 to Level 2:

- Quality of information for project planning in new initiatives
- Ability for IT staff to get voice heard in senior management at short notice
- Access to expertise and knowledge of Retail Bank contacts.

(Martin et al. 2004)

In the future there will be a need to measure the degree to which the RMs are achieving the generic and specific goals in each of the process areas. This will most likely be done by means of a Likert scale. This will define where they have got to in terms of each of the levels. For example, if they score 5 points over all the goals in a particular process area, they will have reached the next level of maturity. Achieving full maturity at Level 5 should result in more effective delivery of IT solutions and services.

## DISCUSSION

Our approach to this research has provided new insight into the following areas:

*KM and the nature of the business/IT gap:* The research has uncovered a deeper insight into the nature of the business/IT relationship at Finco. The early interviews and the RM research revealed that, at Finco, ineffective knowledge sharing was indeed a significant factor in the business/IT gap. The research has also shown that knowledge can be interpretive, based on relationships between people and groups. The dominant paradigms in KM theory, such as the tacit/explicit debate and the normative discourse, are too limited to explain the complex business/IT gap that is based on poor vision and relationships between people.

*Development of the RMMM:* The RMMM demonstrates a way to bridge the business/IT gap through an interpretive approach to KM through i) defining knowledge sharing processes between business and IT at Finco and ii) defining the tasks of the relationship managers as facilitators of knowledge and conduits for communication. More research is necessary to determine whether the RMMM is in fact a useful tool on which Finco can base the development of RM over the next few years. However, its strength is that it provides a means to integrate business and IT in a way not previously done.



*Practice:* Though these concepts are probably easy for any practitioner to grasp, it is unlikely that they would have the time to do so without the aid of a formal tool. The guidelines that the RMMM provides are designed to enable managers to deal with these issues. For example, the CMMI model is basically a management tool, practice driven, and by its nature highly pragmatic. The RMMM acts as a major knowledge management tool, and will act as a future reference for the RMs as they attempt to further develop the business/IT relationship.

However, there are limitations to this research. Apart from the difficulties of evaluation, more research is necessary to determine whether the RMMM is in fact a useful tool on which Finco can base the development of RM over the next few years. This will only be done by further use of the model by the RMs. In addition, the model itself may not be regarded as externally valid until it has been used and tested in other companies. Another limitation of the research is that the issues surrounding the business/IT gap are not limited to knowledge sharing, but cover a wider range of areas such as trust, politics and power.

## **CONCLUSION**

This research has provided an initial insight into improving the business/IT relationship through knowledge management. It shows a clearly defined way to break down barriers for both business and IT, and provides a new perspective on the gap which is social in nature. We have shown that a significant causal factor of the gap is ineffective knowledge sharing. Our long term view of the business/IT gap was the establishment of a CoP between business and IT, where communication would be effective and both sides would understand each other's issues.

We followed the RMs in their everyday activities, describing some of their main activities in relation to the Retail Bank/IT organization gap problems. In addition, the development of the RMMM was undertaken to help extend this new research and to help both academics and practitioners understand and practice these concepts. We established, from this model, that Finco was well into the transition process between Level 1 and Level 2. Therefore, future directions for the study of the business/IT gap may point to testing of the RMMM in Finco as the RM program continues, and also in different types of companies.

We conclude that the findings provide an initial endorsement of the knowledge management perspective for better understanding of the business/IT relationship. We also conclude that the RMMM can be used to identify problematic issues and processes to address them, and this may enable companies of different types to bridge the gap through improved knowledge sharing. The RMMM may be the basis upon which organizations integrate the IT organization with the business for competitiveness in a knowledge intensive economy.

## **REFERENCES**

Ahern, D.M., Clouse, A., Turner, R. (2001), *CMMI Distilled: A Practical Introduction to Integrated Process Improvement*. Addison-Wesley, Boston.



- Avison, D., Cuthbertson, C. and Powell, P. (1999), "The paradox of information systems: strategic value and low status", *Journal of Strategic Information Systems*, Vol 8, pp.419 – 455.
- Brancheau, J C., Janz, B D. & Wetherbe, J C. (1996), "Key issues in information systems management: 1994 -95 SIM Delphi Results", *Management Information Systems Quarterly*, Vol 10, No 2, pp. 225-242.
- Carnegie-Mellon/ Software Engineering Institute. Capability Maturity Models: Available (Feb 2005) <http://www.sei.cmu.edu/cmm/cmms/cmms.html>.
- Chan, Y, E. (2001), "Aligning business and information systems: the importance of informal organization structure", Working Paper 2001-02. Available [www.business.queensu.ca/research/wpapers/index.jsp](http://www.business.queensu.ca/research/wpapers/index.jsp).
- Davenport, T. and Prusak, L. (2000), *Working Knowledge: How Organizations Manage What They Know*. Harvard Business School Press, Boston, MA.
- Deetz, S. (1996), "Describing differences in approaches to organization science: rethinking Burrell and Morgan and their legacy", *Organization Science*, Vol 7, No 2, pp. 191-207.
- Hildreth, P. and Kimble. C. (2002), "The duality of knowledge", *Information Research*, Vol 8, No 1. Available <http://informationr.net/ir/8-1/paper142.html>.
- Horovitz, J. (1984), "New perspectives on strategic management", *Journal of Business Strategy*, Winter, pp.19 – 33.
- Huang, K. (1997), "Capitalizing collective knowledge for winning execution and teamwork", *Journal of Knowledge Management*, Vol 1, No 2, pp. 149-156.
- Martin, V.A., Lycett, M. and Macredie, R. (2003), "Exploring the gap between business and IT: an information culture approach", *Proceedings of ALOIS 2003, Action in Language, Organizations and Information Systems*, University of Linköping, Sweden, March, pp. 265-280.
- Martin, V.A., Hatzakis, T., Lycett, M. and Macredie, R. (2004), "Building the business/IT relationship through knowledge management", *Journal of Information Technology Cases and Applications*, Vol 6, No 2, pp. 1-23.
- Nonaka, I. (1991), "The knowledge creating company", *Harvard Business Review*, Vol 69, Nov-Dec, pp. 96-104.
- O'Donnell, D., Porter, G., McGuire, D., Garavan, T.N., Heffernan, M. and Cleary, P. (2002), "Creating intellectual capital: a Habermasian community of practice (CoP) introduction", *Journal of European Industrial Training*, Vol 27, Nos 2/3/4, pp. 80-87.
- Peppard, J., and Ward, J. (1999), "Mind the gap: diagnosing the relationship between the IT organization and the rest of the business", *Journal of Strategic Information Systems*, Vol 8, No 1, pp. 29-60.
- Polanyi, M. (1967), *The Tacit Dimension*, Routledge and Kegan Paul, London.
- Reich, B. H. and Bensabat, I. (2000), "Factors that influence the social dimension of alignment between business and information technology objectives", *Management Information Systems Quarterly*, Vol 24, No 1, pp. 81-113.
- Scarborough, H., Swan J., and Preston J. (1999), "Knowledge management and the learning organization", Report for the Institute of Personnel Development, UK, October.
- Schein, E. (1992), *Organizational Culture and Leadership*. Jossey-Bass, California, USA.
- Schultze, U, and Leidner, D. (2002), "Studying knowledge management in information systems research: discourses and theoretical assumptions", *Management Information Systems Quarterly*, Vol 26, No 3, pp. 213-242.



- Stenmark, D. (2000-2001), "Leveraging tacit organizational knowledge", *Journal of Management Information Systems*, Vol 17, No 3, pp. 9-24.
- Teece, D.J. (1998), "Research directions for knowledge management", *California Management Review*, Vol 40, No 3, pp. 89-292.
- Ward, J., and Peppard, J. (1996), "Reconciling the IT/business relationship: a troubled marriage in need of guidance", *Journal of Strategic Information Systems*, Vol 5, No 1, pp. 37-65.
- Wenger, E., McDermott, R. & Snyder, W. (2002), *Cultivating Communities of Practice*, Harvard Business School Press, Boston.
- Yang, Yen-Te. (2004 ), "Job-related knowledge sharing: comparative case studies", *Journal of Knowledge Management*, Vol 8, No 3, pp. 118-126.

