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Bridging the Business/IT Gap through the Relationship Management Maturity Model

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Abstract

The gap between the IT organization and the business presents a major challenge for companies. Causes and ways of bridging the gap are uncertain as there has been a lack of research in this area. In this research project, we follow a relationship management (RM) initiative in a large financial services institution, the purpose of which was to improve the business/IT relationship. The outcome was the development of the Relationship Management Maturity Model (RMMM), a tool to define RM best practices and to enable the company to bridge the gap. This work presents the RMMM – the first model for integrating and improving the business/IT relationship.

Keywords: Business/IT relationship; relationship management, Relationship Management Maturity Model

INTRODUCTION

There is a perceived gap between the IT subunit and the other business subunits that presents a major challenge for business organizations. Poor practice in these areas results in negative effects on communication and trust, leading to poor co-ordination of work practices, project management deficiencies and defective information systems. This often results in an ineffective alignment of IT solutions and services to business needs.

In this paper we describe and discuss a large-scale effort to bridge the gap in a large financial services organization. This was done through the implementation of a significant relationship management (RM) program designed to bring about a 'one-team' vision and improve communication. We follow the progress of the RM initiative, resulting in the creation of the Relationship Management Maturity Model (RMMM). This paper presents the Relationship Management Maturity Model in detail. It describes how the RMMM was developed and illustrates the different working facets as a tool for bridging the business/IT gap.

In Section 2, we argue that there is a lack of focus on social relationships as a causal factor of the gap. Section 3 introduces the company and the early research, while Section 4 describes the research method and the theoretical underpinning. In Section 5 we describe the structure of the RMMM; the levels, process areas, goals and practices. Section 6 describes examples of the business/IT process problems and illustrates how they were dealt with and Section 7 discusses how these examples were defined as RMMM process areas, broken down into goals and practices. In Section 8 we discuss the contribution that this work makes, and in Section 9 we conclude that the model provides an initial endorsement of the relationship management perspective for better understanding of the business/IT relationship.

THE BUSINESS/IT RELATIONSHIP

Many IT projects are delivered over budget, over time and fail to fulfill user requirements (Willcocks and Margetts 1998). Business/IT perceptions of each other suggest that these problems reveal a gap through a lack of understanding of each other's issues (Ward and Peppard 1996). For example, the internal customer's view of the IT organization is that IT is preoccupied with state of the art technology and systems are unfriendly. 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 that goes wrong.

Peppard and Ward (1999) claim there are four influencing factors that negatively impact the business/IT relationship, although none of them are cultural:

- 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 can be impaired.
- Values and beliefs: the way IT is managed in organizations is immensely influenced by people's values and beliefs.

In contrast, Schein (1992) claims that information flow is affected by differences in assumptions and use of information between business and IT staff, illustrating a cultural gap. IT staff assumptions 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. On a related theme, Avison, Cuthbertson and Powell (1999) base their study of business/IT alignment on power, contending that the low status of the IT organization is responsible for poor alignment. Reich and Bensabat, however, (2000) claim that there are two schools of thought on business/IT alignment. One is focused on examining strategies, structure and planning methodologies, and the other is focused on investigating the actors in organizations, their values and communication practices. They claim that little is known about the social dimension, the former one being more prevalent in management literature.

These approaches, though highly relevant in themselves, are fragmented and non-conclusive. They say little about the complex nature of the social relationships between business and IT staff, and certainly even less on how to bridge the gap. To investigate this in more detail, we focused on Finco, a large financial services institution.

EARLY WORK

Background

Finco is based in the UK, with a customer base of over 15 million people. Over the few years preceding this study there had been increasing competitive pressure within the financial services sector. This led to each of the business divisions within Finco becoming more externally competitive, with diverse strategies and customers, and 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. It consists of business units catering for customer service, retail sales and information management and 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. In contrast to the business side of Finco, the IT organization is relatively centralized.

For these reasons, the business/IT relationship has emerged as an area of organizational concern. Some early infomal workshops with IT staff revealed such problems as poor communication, lack of trust and entangled organisational structures between business units and IT. They expressed a desire for a common language and a more cohesive view. Workshops with business staff revealed that IT solutions delivery lagged behind strategic direction. For these reasons, we identified two axes of tension in Finco (Figure 1):

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

The IT Director for the Retail Bank expressed a profound interest in solving the issues of the business/IT gap. At the time he was in the process of recruiting a team of Relationship Managers, intended to be responsible for tackling these issues. He had concerns about several challenging issues:

- IT people needed to learn to ask the right questions from users: they are domain-focused.
- Users were challenging IT people more – they know more about technology.
- The business units saw IT as expensive, slow and unresponsive.
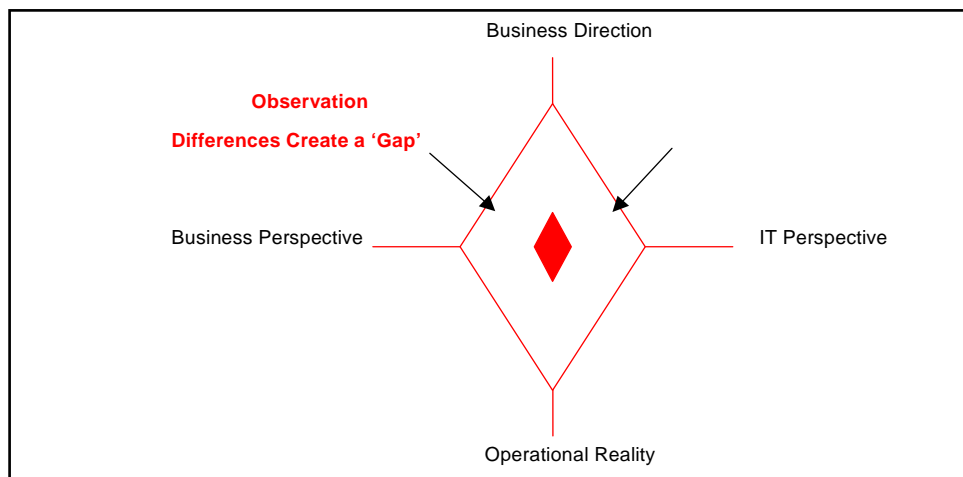- IT saw business staff as poor communicators who expect too much.

Figure 1. Axes of Tension

This early research revealed that the problems of the gap are primarily social in nature. There appeared to be communication problems between business and IT, accompanied by a lack of trust and credibility, and poor understanding and appreciation of each other's issues. It was at this stage that the Director invited us to collaborate in the new RM initiative.

Interviews

The next phase of the research was done through a series of interviews with staff on either side of the business/IT divide. The objectives of the data collection exercise were to gather opinions and views on the business/IT relationship, and the potential for RM to tackle these issues. Regarding the first research area, the major issues of the business/IT barrier, the findings revealed two areas of major importance:

- Alignment of Business/IT Strategy: (a) poor involvement in decision-making (b) need to understand business/IT needs (c) lack of cohesion in prioritisation of projects (d) inconsistent ways of working
- Cultural Inconsistencies: (a) need for a shared understanding of expectations (b) need for recognition of IT contribution (b) over-the-wall mentality

These areas further confirmed the social nature of the business/IT gap. Although other factors, such as lack of investment in IT infrastructure, contributed to the gap, Finco was primarily concerned with the social relationships. Synthesising the data collected, there was a clear view that the functions of the relationship managers were to:

- Identify issues/ raise opportunities.
- Clarify involvement and leverage strengths.
- Maintain relationships.
- Provide closure and continuous learning.

The principal concerns expressed by the interviewees were that RM should (a) provide a conduit and not a blockage to communication between various parties and (b) have facilitation rather than a decision-making orientation. These issues were perceived to be what the RMs must do to ensure better working relationships between business and IT.

BUILDING THE RMMM

Identifying Best Practices

In March 2002, three Relationship Managers were recruited to lead the RM programme. The research aims and objectives for us at this stage were (1) to investigate and describe the RM programme, and (2) to define a model

of best practice in RM, in collaboration with the RM team. Participant observation methods with the new RMs were used to investigate their role in improving the business/IT relationship. The participant observation research included:

1. Shadowing of the RMs: We accompanied each of the RMs individually and collectively whenever the occasion arose.
2. Examining documents: We were often able to examine the diaries and notes of the RMs.
3. Asking questions: We were able to ask frequent questions of both the RMs and the people they interacted with.
4. Collaborative workshops: We carried out a series of workshops with the RMs.

Theoretical Underpinning

We developed the Relationship Management Maturity Model in collaboration with the RM team. The knowledge which helped to define it was contributed through the participant observation methods, including the workshops. The challenge we faced was developing a model of change that could be used to define a model of best practice for RM between business and IT:

- There was a need for clear performance indicators for business/IT process improvement
- There was also a need to allow for emergent, unplanned improvements in the form of learning and culture change from both business and IT.

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/Capability Maturity Model Integration (CMM/CMMI) frameworks, found at the Software Engineering Institute website (2004). These models are based on the premise that as organizational functions grow or change, the effect is often like a patchwork quilt of unrelated and uncoordinated activities (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. However, this is not achieved quickly: the company must go through an extended period of change and commitment to improvement. In terms of processes, this usually means from unmanaged processes, to definition and understanding of company processes, through to managed processes. Maturing occurs when the staff are fully involved in ownership and improvement of these processes. 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. The CMM/CMMI modles are based on the concept of maturity levels. Each maturity level is a well-defined plateau of achievement that establishes a new level of maturity for the company to aspire to. In the CMM/CMMI there are five.

We also had in mind the concept of the Community of Practice (CoP) as a way of visualizing the integration of the Retail Bank and the IT organization. Wenger (1998) promulgates the 'Community of Practice' as a holistic way of viewing and understanding organizational knowledge. A community of practice (CoP) is a group of people who share a common bond through working together in a commonly understood area of expertise and know-how. A CoP is built on collective learning over a period of time, which results in practices and social relations that reflect the expertise of the community. We reasoned that as we were trying to define and bridge social barriers, the CoP model could be utilised as a way to visualise the development of the RM best practices based on close working relationship and knowledge sharing.

RMMM DEFINED

Capability Levels

The capability levels of the RMMM are associated with introduction, development and establishment to full participation in the RM vision. The research team used theories on Communities of Practice (CoPs) to visualise the ways in which the RM work may progress in the future, and this helped to build the five levels of the RMMM. Level 1, for example, represents the division between business and IT, and this is where Finco was at the initiation of RM. Level 2 represents the gradual identifying of knowledge and information needs, defining

RM processes and smoothing lines of communication. In particular, the RMs will have identified relevant social networks that already exist and can help integrate these processes. Level 3 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 as yet ownership of the processes by the business/IT staff will be limited, though there will likely be sub-communities. Level 4 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, and there should be less need for direct intervention by RMs. Level 5 is the stage where full, or almost full, participation will be reached, where the RM CoP will have become self-organizing and the role of the RMs changed to a supporting role, intervening when necessary. People will be creative in their use of knowledge, know who to share it with and where sources of expertise are located within the RM CoP. Figure 2 illustrates the five levels:
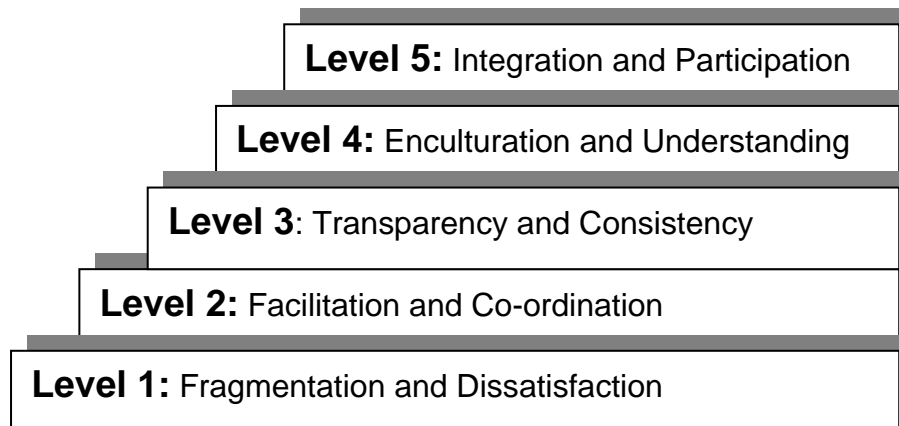
Level 5: Integration and Participation

Level 4: Enculturation and Understanding

Level 3: Transparency and Consistency

Level 2: Facilitation and Co-ordination

Level 1: Fragmentation and Dissatisfaction

Figure 2. RMMM Levels

This model was adapted from the CMM/CMMI, and some of the terms were changed to suit RM. For example, 'facilitation and co-ordination' was substituted for 'monitoring and control', as the vision of RM was not management or control of staff but facilitation of better relationships.

Process Area Categories and Process Areas

Each maturity level in the CMM/CMMI is composed of several process areas. Three process area categories covering 10 process areas were defined for the RMMM through continuous and iterative work with the RMs, keeping the model of the Axes of Tension in mind. They were 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 to direct the competitive strategy of the organization, assess the availability of information for achieving it, and outline a capability development plan for obtaining strategic knowledge. Thw work in this area grew out of the first area defined in the initial interviews: Alignment of business/IT strategy.

    Process Areas:
    - Strategic Decision-Making Facilitation
    - New Initiatives Facilitation
    - Capability Planning
    - Risk Management.

- Process Area Category 2. Information Management: This process area category covers the facilitation of organizing, monitoring and coordinating processes 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 became clear that information was considered crucial to their work.

    Process Areas:
    - Crisis Management

- Information Capability Management

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

    Process Areas:
    - Organisation Analysis
    - Cross – Functional Process Integration
    - Cross – Functional Teaming
    - Cultural Integration.

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.
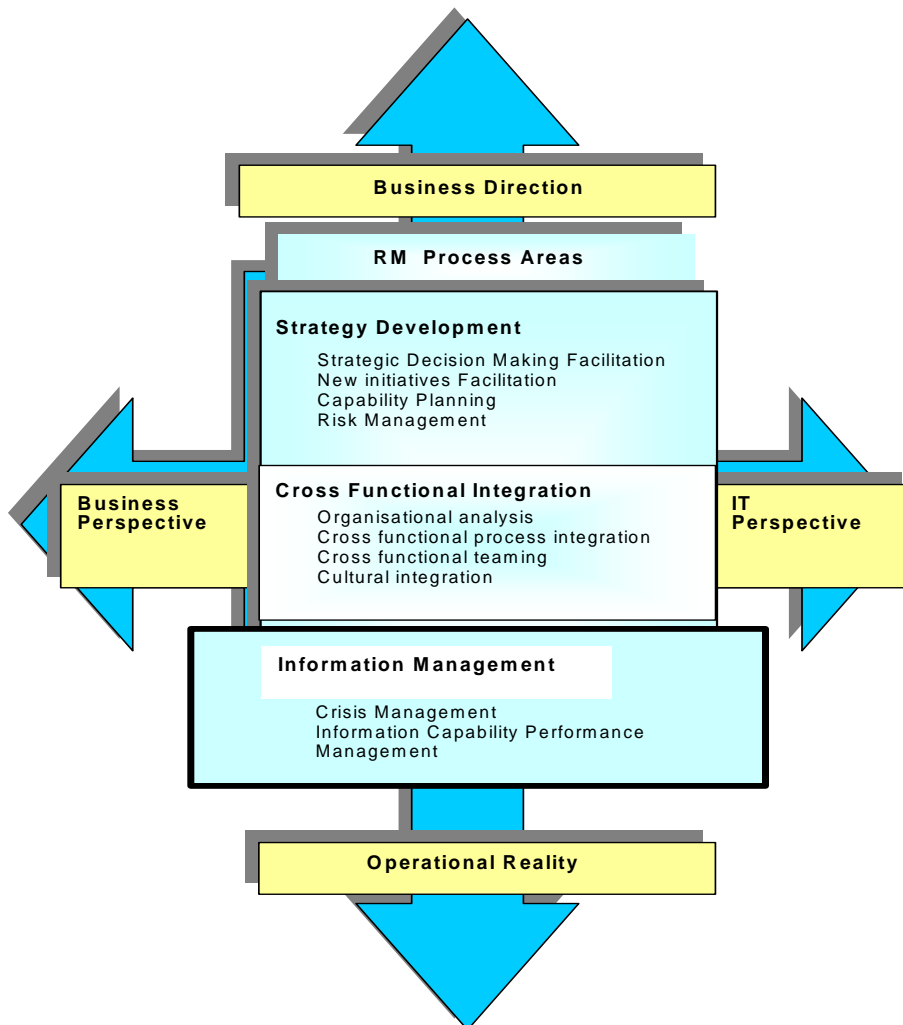

Figure 3: RM Process areas mapped onto the Axes of Tension

Goals and Practices

Goals and practices are how the process areas are achieved in the CMM/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 organisation's RM programme as a whole. They cover all process areas in the RMMM, that is, 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 generic goals and practices of the CMM/CMMI models. However, they were adapted to suit the RM circumstances, especially terminology. These changes were made because it was realised that the terminology of the original models were too restricting for the relationship oriented and facilitative nature of the RMMM. For example, 'framework' was substituted for 'policy', and 'coach' was substituted for 'train'

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 CMM/CMMI, replacing the specific goals and practices with ones which were more relevant for the RMMM and which were derived from the participant observation and workshops. Like the process areas, they were defined through a process of iterative elicitation, achieved through our observations and the workshops. Each process area in the CMM/CMMI models has between one and four specific goals. Specific goals are unique to a single process area. Each specific practice is mapped to exactly one specific goal. Between two and seven specific practices are mapped to each specific goal.

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:
- The Retail Bank staff insisted on controlling the allocation of IT resources but often exceeded the IT organizations capabilities.
- Retail Bank staff favored their own social networks and so circumvented formal prioritization processes.

The RMs were observed to be in the process of identifying exceptional past initiatives and the factors that contributed to their success, attempting to obtain commitment from colleagues and informing colleagues of issues that needed to be tackled.

Process Area: Crisis management, from PAC Information Management

Problems observed:
- Systems were often down, people were not informed, and often operations managers had to go through non-crisis channels.
- Problems were dealt with by exception.
- Issues with systems performance were not communicated to business people.

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. The RMs were seen to be handling crises as they arose, for example, responding quickly and finding people to deal with them. They were also observed to be keeping diaries on crises.

Process Area: Organisational Analysis, from PAC Cross Functional Integration

Problems observed:

- 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.

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. Another aspect that the RMs were looking at was to identify relevant social networks which already existed, and which could help further strengthen the relationship between business and IT.

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

	RMMM PROCESS AREA	RMMM SPECIFIC GOALS	RMMM SPECIFIC PRACTICES
1.	**New Initiatives Facilitation,** from process areas category *Strategy Development*	SG 1: Coordination of initiatives is mediated in exceptional cases only	SP 1.1: Identify exceptional past initiatives and factors that constitute them SP 1.2: Obtain commitment from colleagues that could help with similar situations
		GG 1: Achieve specific goals	GP 1.1 Perform base practices GP 1.2 Establish an organizational framework.
2.	**Crisis Management,** from process area category *Business Information Management*	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.
		GG 1: Achieve specific goals	GP 1.1 Perform base practices GP 1.2 Establish an organizational framework.
3.	**Organizational Analysis**, from process area category *Cross Functional Integration*	SG 1: Key needs 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.
		GG 1: Achieve specific goals	GP 1.1 Perform base practices GP 1.2 Establish an organizational framework.

Table 1: Defining RM 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, with one example of a generic practice. In most of the process areas, the RMs were already achieving goals at Level 1, leading them into Level 2. Levels 3, 4 and 5, for the most part, were projected, under the visualisation of a CoP. This was done in order to visualise future best practice for the RMs, and also to provide guidance for them. At the higher levels, aspects such as continuous improvement, empowerment, participation, and a knowledge-sharing culture were visualised. Levels 4 and 5 are focused on the future development of the RM vision where the RMs will not, in theory, have to take such a direct role in building these relationships. 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 activities and not leave this responsibility remaining in the hands of the RMs.

Table 2 illustrates the same three process areas, goals and practices at Level 5 of the RMMM:

	RMMM PROCESS AREA	RMMM SPECIFIC GOALS	RMMM SPECIFIC PRACTICES
1.	**New Initiatives Facilitation,** from process areas category *Strategy Development*	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
		GG 5. Institutionalize an optimizing process	GP 5.1: Continuous process improvement is ensured.
2.	**Crisis Management**, from process area category *Business Information Management*	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.
		GG 5. Institutionalize an optimizing process.	GP 5.1: Continuous process improvement is ensured.
3.	**Organizational Analysis**, from process area category *Cross Functional Integration*	SG 5: A climate of continuous organizational learning and improvement is established	SP 5.1: Help senior management establish and communicate a framework for introducing organizational change projects SP 5.2: Help senior management communicate the link between continuous organizational improvement and company strategy
		GG 5. Institutionalize an optimizing process.	GP 5.1: Continuous process improvement is ensured.

Table 2: Defining RM process areas at Level 5, including goals and practices

DISCUSSION

Our approach to this research has been primarily academic in nature, and has provided insight into the following areas:

- *Nature of the business/IT gap:* The research has uncovered a deeper insight into the nature of the business/IT relationship in Finco. The literature and background work with Finco showed that there was much uncertainty as to the nature of the poor relationship between business and IT, but ineffective social relationships may be a significant factor. The early interviews revealed that, in Finco, this was indeed a significant factor in the business/IT gap, as did the subsequent work with the RMs.

- *Bridging the gap:* The RMMM has mapped a route for the gap to bridged, with the leadership of people who are committed to improving social relationships between business and IT staff. The RMMM demonstrates this through i) defining social and communication processes between business and IT in Finco and ii) defining the role of the relationship managers as facilitators of relationships 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 way to integrate business and IT in a manner not previously seen.

- *Implications for 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 the RMs to deal with these issues. For example, the CMM/CMMI models are basically management tools, practice driven, and by their nature are highly pragmatic. The RMMM acts as a major management tool, and will act as a future reference for the RMs as they attempt to further develop the business/IT relationship. However, practitioners need to take care that RM is realized as a long-term goal based on a community of practice. This implies full participation and buy-in with no imposing of business agendas, control or blame, to fulfill the self-organizing aspects of a CoP.

CONCLUSION

This research has provided an initial insight into improving the business/IT barrier through relationship management. It shows a clearly defined way to break down barriers for both business and IT, and provides a new perspective on the barrier which is holistic and social in nature. We have shown that a significant causal factor is ineffective communication and social relationships. Our long term view of the business/IT barrier 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 i) further investigation of the causal factors of the business/IT gap and ii) 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 relationship 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. The RMMM may be the basis upon which organizations integrate the IT organization with the business for competitiveness in a knowledge intensive economy.

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