

# Measuring Business Process Management in UK Financial Services

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## Abstract

There is a growing interest in the nature and significance of business processes both within the business community and in management research. For many researchers, process has evolved from its re-engineering origins to become a powerful tool for understanding and explaining business activity. Within this new paradigm, effective Business Process Management (BPM) is viewed as a pervasive and profound business challenge.

A number of case studies have explored how companies react to this challenge and several recurring themes have emerged: for example, companies must fully identify their business processes, and introduce 'end to end' process measurement and management. However, these themes have not yet been synthesised into a single model capable of being measured. In the absence of such a model, it is difficult to explain why some companies are more active and effective in managing business processes than others.

This paper reports on a collaborative exercise carried out with a large UK Bank to develop and test such a model in an empirical context. The findings suggest that the model is both valid and pragmatic. The results were used by the Bank to identify and implement business improvements. More importantly, the model provides a platform for assessing process performance across the financial services sector and underpinning future explanatory research. The paper concludes that BPM was an important consideration for the Bank, supporting the emerging paradigm, and recommends further research from within this perspective.

**Keywords:** Business Process Management, Process Measurement, Financial Services

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## **BUSINESS PROCESS MANAGEMENT**

### *From BPR to BPM*

In 1990, Michael Hammer launched the concept of business re-engineering, with his plea to companies to ‘Obliterate; don’t automate’ (Hammer 1990). The impact on the business community was profound, with surveys suggesting adoption rates for re-engineering across the business community as high as 75% (Al-Mashari & Zairi, 2000).

The impact on management theory and research was equally dramatic. One investigation into academic research found that over 700 articles linked to re-engineering were published in 1994 alone (Case, 1999).

The research generally focused on two main issues: to what extent was BPR successful and what factors encouraged success. A growing consensus emerged that BPR rarely delivered the targeted benefits. The business community was ‘moving on’ to other issues: the intranet; CRM; ERP etc. BPR was simply another ‘management fad’ with little to merit such high levels of research attention.

More recently, however, the nature of process has been re-visited by management theorists and researchers and a new paradigm is emerging which disentangles the concept of business process from its re-engineering origins and focuses on the inescapable relationship between process and service delivery, rather than locking it in exclusively to radical change. For a growing number of researchers, change is no longer the critical issue, process is. Hammer, himself, admits to a fundamental re-thinking of the significance of process in business activity: ‘I no longer see myself as a radical person; instead I have become a process person’ (Hammer 2001)

Melao & Pidd neatly summarise the transition from a BPR philosophy to BPM as a migration from a novel, radical, IT-led, mechanistic and inspirational approach to one which is hybrid, contingent, IT-enabled, holistic and systematic (Melao & Pidd 2000)

In this new perspective, processes are ‘a generic factor in all organisations. They are the way things get done’ (Armistead, Pritchard & Machin 1999). Processes are viewed as ‘strategic assets’, which require companies to ‘take a business process orientation’ (McMormack & Johnson 2001). The rapid growth in such process based initiatives as Six Sigma and EFQM reinforces the view that process is much more than the ‘management fad’ of re-engineering, but a more pervasive issue, requiring serious attention. ‘Process thinking has become mainstream’ (Grover, Kettinger, Teng 2000).

Critical to this new approach is the idea that process is both a business imperative and a means of understanding and explaining business activity. Processes are the way customer requirements get transformed into actual goods and services. All businesses must carry out this transformation; it is what business does. The interesting research questions concern how effectively this transformation takes place and why.

#### *The need for a BPM model*

A number of case studies have identified various common themes which underpin BPM:

Zairi suggests that BPM is governed by seven rules including the need for activities to be mapped, a focus on customers and measurement (Zairi 1997)

Armistead, meanwhile, suggests ten principles of managing business processes (Armistead 1996). Knowing the process is a key consideration, as are understanding the linkages and improving the process. Re-visiting the issue subsequently with Pritchard and Machin, he develops a strategic framework for BPM, underpinned by seven themes including strategic choice, organisational design and performance management (Armistead, Pritchard and Machin 1999).

In a case study of a large UK company, Lee and Dale explore corporate adherence to the disciplined application of BPM using five principles including ownership of processes, documentation and measurement (Lee & Dale 1998).

McCormack and Johnson argue that companies competing in the new economy will need to take a business process orientation with three key elements: process management and measurement; cross functional jobs; and the adoption of a process view (McCormack & Johnson 2001).

Hammer reinforces his new emphasis on process by identifying a number of steps towards process management. Again, process identification, measurement, ownership and improvement are key elements (Hammer 2002).

Whilst these studies have greatly extended our understanding of BPM, and reinforce the idea of process as central to business activity, there is a gap in the current literature. The themes have not yet been synthesised into a single model capable of being measured. In the absence of such a model, it is difficult to explain why some companies are more active and effective in managing business processes than others.

#### *Research Objectives and Context*

To address this absence of a model, a project was launched with a leading UK Bank.

The Bank is a large and complex organisation, with over 1000 retail branches. There are a number of subsidiary companies within the company, offering a wide range of financial products through diverse business processes. As such, the company mirrors the range of business processes found across financial services and provides a platform for assessing sector performance.

Historically, the Bank had taken a progressive stance towards process and was keen to gain a fuller understanding of their current performance. A Group wide Process Forum was established to sponsor the project and internal process experts were interviewed to help to develop the relevant methodology, building on the literature and existing industry applications.

The key objective was to develop a model which could measure the current and future condition of BPM within a Financial Services company. Clearly this could offer scope for further generalisation across the sector and, potentially, all service driven organisations.

In addition, the study would provide empirical evidence on the validity of the emerging BPM paradigm, specifically to explore whether BPM was a significant issue for the Bank and how actively and effectively the Bank pursued its BPM goals.

### *Research Method*

A systematic review of the Business Process Management literature identified five criteria critical to the development of an effective process infrastructure:

- Process Identification
- Process Measurement
- Process Management
- Process Improvement
- Process Strategy

These criteria were the most frequently cited in the relevant literature and were also recognised within existing practitioner process measurements such as the EFQM model. As such, the Bank process experts were familiar with them and felt comfortable and capable of using the criteria to assess their performance in an objective manner. Some consideration was given to the wholesale adoption of the process criteria of the EFQM as the basis for the model, but this was rejected for the following reasons:

Models such as EFQM have originated largely from within the quality perspective. The research sought to develop a BPM model which drew from a wider range of disciplines including organisational theory, supply chain management, systems thinking, BPR

The EFQM model, whilst recognising the centrality of process, focuses on the improvement of individual processes, rather than the creation of an integrated set of processes, underpinned by a process culture, which form a platform for ongoing organisational management.

The research looked to provide a detailed specification of the key dimensions of BPM, rather than the more general guidelines offered in EFQM

A number of researchers have expressed concern with the EFQM scoring system, most recently Li and Yang (2003)

A questionnaire was developed which specified detailed process conditions within each criteria (Table 1). Again the detailed conditions were located in the relevant literature.

**Table 1 BPM Criteria**

<b>Process Identification</b>	<b>Process Measurement</b>	<b>Process Management</b>	<b>Process Improvement</b>	<b>Process Strategy</b>
Key customer processes have been identified	Processes are measured End to End	There is a coherent overall process management structure	There is a structured approach to process improvement	Process is a key driver for business management
Management & Support processes have been identified	There is a structured approach to measurement	Process management is integrated into overall business management	Processes are improved on an End to End basis	Process takes precedence over function
Processes are defined on an End to End basis	Process measurement is holistic	Processes are managed End to End	Continuous process improvements are identified and delivered	Process is widely understood across the organisation
Processes are defined by customer requirements rather than organisational structures	Customer requirements are identified	Process managers are accountable for the day to day performance of their processes	Radical process improvements are identified & delivered	There is a documented process strategy
A common process architecture defines all processes and shows process boundaries	Customer satisfaction is measured	Process managers determine process strategy	Process improvements are implemented quickly	Processes are aligned to systems, people, reporting
Consistent process definitions are applied	Process variance is measured	Process managers establish performance improvement targets	Process benefits are quantified and their realisation is monitored	There is an executive champion of process in the organisation
Processes are documented (mapped) in a structured way	Error rates are measured	External (outsourced) suppliers are fully engaged within process management	A common 'best practice' approach is adopted for all process improvement	The organisation shows a high level of 'process maturity'
Processes are mapped to a relevant level of detail	Process costs are measured	Process managers can secure necessary resources	Process improvements are driven by customer requirements	Process roles are clearly identified and managed
A process repository is used to maintain maps in a timely and systematic manner	Process measurement output is widely accessible	Process managers deliver process improvements	Customer requirements are systematically identified through a range of techniques	
	Process measures are used to manage the processes	Process managers are systematically recruited, trained and motivated	New processes are modelled and simulated where appropriate	
	Process measurement is integrated with other measurement systems		Internal & external Benchmarking is used to support improvement	
	The measurement system is regularly reviewed and improved		New processes are piloted prior to implementation	
			Process operators are trained in new processes prior to implementation	
			Processes are developed using a range of innovative and creative techniques	
			Customers, staff & other key stakeholders are engaged in the improvement process	
			Process improvements are designed to deliver agreed capabilities	
			All change activity is process oriented	



The questionnaire asked respondents to specify the current condition for each criterion, using a Likert scale from 'strongly agree' to strongly disagree'. Responses could be analysed to provide metrics for BPM, based upon the degree of alignment to the detailed criteria.

No attempt was made to weight the relative impact of the different criteria, as the literature analysis could not underpin that level of specificity. Accordingly each section contributed 20% to the overall score. The ambition was to offer a baseline for future measurement and to identify the relative strengths and weaknesses across the key criteria. Practitioner models such as EFQM consider 65% as a world class performance and this was the both the target and expected result from the survey.

#### *Lessons from the Pilot*

A pilot exercise was carried out involving 10 process practitioners across the Group. Based on feedback from the pilot, a number of refinements were made to the questionnaire and scoring methodology.

Respondents were encouraged to provide free form feedback for each criterion, giving them the opportunity to comment on the relevance of the detailed conditions, offer alternative criteria if necessary and provide concrete examples of the significance and status of the criteria drawn from their own experience.

The scope was made explicit to allow respondents to separately identify local Business Unit performance from the overall Group performance. This was considered key to understanding true 'end to end' process management, and a potential weakness in EFQM where local submissions are accepted.

Similarly, the extent of deployment was separately quantified. More importantly, output measures were identified, including process capabilities and actual process performance, as evidenced, for example, by customer satisfaction measurement and sigma scores for major business processes.

Following detailed discussions with local process experts and a further review of both the BPM literature and practitioner models, the scoring methodology was revised to embrace these additional dimensions. In finalising the weightings, consideration was given to the implications of capturing output measures which would be viewed as highly business confidential and could be difficult to obtain, particularly if the survey were to be extended to other companies. Indeed it was felt that few companies could actually provide process specific measures such as six sigma. To avoid skewing the results with 'flat', estimated data, the following weightings were adopted: 60% process infrastructure, of which 10% reflected the quality & deployment of local BPM; 30% process capabilities; 10% performance metrics.

Many questionnaires suffer from poor response rates. Indeed, research has found that response rates flattened out at 32% in the mid 1990's and have not improved since (Frohlich, 2002). Clearly such poor response rates can undermine the validity and value of the research. To help overcome this problem and maximise potential returns, a number of additional data items were included in the questionnaire to reflect key business issues for the Bank.

Respondents were asked to identify which BPM tools & standards they operated. There was a perception in the Bank that a wide range of tools & standards were in use and there may be an opportunity to standardise to a common best practice set. Best practice was at the heart of two further sections. Respondents were asked to identify and rank barriers to BPM and to describe how they had overcome these barriers. Similarly, respondents were asked to identify and rank any benefits which had been realised and describe the means by which this had been achieved.

At this stage in the research, there was a growing feeling that the survey could be taken to other organisations and such 'experience' based data could provide an effective 'selling' tool. Companies could be offered the learning of others to accelerate their own BPM

In all, the questionnaire contained 10 sections. The first 5 sections dealt with the process infrastructure; Section 6 asked for details of the various tools and standards used to deliver BPM; Sections 7 & 8 covered the barriers and benefits of BPM; Section 9 measured process capabilities; Section 10 asked for details of process performance such as six sigma measurement.

As part of the reference data, respondents were asked to provide details of their Business Unit and specify their process experience and current BPM responsibility. This was used to ensure that respondents had sufficient knowledge to provide accurate information. The questionnaire was distributed to 70 process practitioners across the Group, with 50 completed returns.

*Findings.* A summary of the survey results for the Group are given below (Table 2)

**Table 2 BPM Survey Findings**

<b>Group BPM</b>			
	<b>Approach</b>	<b>Extent Deployed</b>	<b>Deployed Score</b>
Process Identification	66	60%	40
Process Measurement	59	50%	30
Process Management	58	50%	31
Process Improvement	61	60%	36
Process Strategy	56	50%	27
Functional process management			50
Process Capabilities			54
Process Performance			60
<b>Overall process management</b>			<b>44</b>

The survey identified that the company had successfully developed a strong process infrastructure. For example key processes were mapped; six sigma measurement was being introduced and Process Owner Teams had been established with accountability for improving ‘end to end’ processes.

However, deployment was limited with a focus on Retail Banking. These findings were reinforced by such comments as:

*Some parts of the organisation are well advanced but it tends to be only on the part of the process they own rather than on a true end-to-end customer process. Sister companies are not integrated*

*Lots of measurement, but not necessarily consistent or coordinated to reflect the need for robust group wide understanding of how we are delivering as a group to our customers*

*Whilst POTs have been established there is very little buy in to process management*

*Process is not used to drive the business strategy*

*Processes are still very much focussed on the Bank agenda rather than the customer.*

Process capability scores were mixed: traditional Banking capabilities such as ‘security’ scored highly; however there were concerns with the levels of errors in the processes and few processes were ‘paper free’.

Functional process management was more effective than ‘end to end’ process management across the Group, reflecting the complexity and variation found at the Group level. Average performance was 50%, but this obscured a wide range from 37% to 68%.

Overall the performance was not considered ‘world class’, a key company aspiration.

The survey findings were presented back to the sponsors and were subsequently used to develop an improvement plan incorporating the introduction of a process repository; the extension of six sigma measurement for all key customer processes, together with stretch targets for improvement; the integration of process measurement with other measurement systems and a substantial increase in process design resource and the adoption of consistent best practice approach. A communications strategy was implemented which

incorporated both Executive endorsement and local briefings. A key priority in the action plan was rapid deployment of BPM across all areas of the Group.

### *Evaluating the model*

The generic challenges to questionnaire based research are well documented. Basic considerations such as layout, language and sequence were addressed during initial design and amended where necessary, following the pilot. The pilot was also used to identify and eliminate potential measurement bias arising from respondents political motivations and to assure sample size and respondent knowledge requirements.

A key research objective was to provide a valid and reliable model for measuring BPM. A structured assessment tool developed by Malhotra and Grover was used to evaluate the findings and the relevant criteria were found to be satisfied (Malhotra and Grover 1998). In particular, the literature analysis provided evidence to support content validity; and this was reinforced by expert opinion from process practitioners. The literature was also used to ensure that the unit of analysis was correctly and consistently defined. Reliability was confirmed by a Cronbach Alpha test. The use of multiple respondents from the same Business Unit provided triangulation of results. Appropriate respondents were chosen and the sample frame and size adequately identified.

Nevertheless, the assessment identified some limitations to the model. Weightings used to create an overall score are not fully grounded in the literature. Similarly, the degree of granularity remains unproven - is the 1% difference between scores of 50% and 51% the same as the difference between scores of 60% and 61%? Further research would be needed to address these issues.

A legitimate requirement for management research, in particular Operations Management research, is to provide demonstrable value to managers and the business community. On that front the research can claim considerable success. The findings were used by the Bank to develop and implement a range of business improvements. Moreover, the collaborative

nature of the research process exercise generated positive feedback from Bank personnel: ‘as a result of this work, we have a much better understanding of our processes and we will use this knowledge to develop our process management going forward’.

## **CONCLUSION**

The research reinforces the view of process as a critical business issue. The Bank has dedicated considerable resource to understanding and managing its processes and is committed to embedding process fully within the organisation. Process is viewed as a necessary platform for the delivery of customer needs, rather than a ‘one off’ tool for driving out costs. One senior executive summarised their perspective: ‘For us, BPM is a journey we must make’.

The model, itself, clearly delivered benefit to the Bank. It enabled them to better understand the state of their BPM, identify areas of weakness and implement improvements.

In addition, by identifying the key dimensions of BPM and providing a valid and pragmatic measurement tool to quantify performance, the model opens up further research opportunities in two ways. Firstly the measurement can be extended across the sector to provide a comprehensive process audit. More importantly, such measurement offers a valuable starting point for explanatory theory. Researchers can now address the next challenge: if this is the state of BPM in the Financial Services sector, why does it look like this?

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