Standard Bank, by using QPR software for their Six Sigma initiatives, were able not only to map the processes to a standard, but to produce measures aligned to higher level objectives, with targets that were realistic and achievable, resulting in hard savings.

Simon Holloway
Supporting Operations Management at Standard Bank

Introduction

The need to streamline and adapt to reduce time to market, eliminate waste and meet customer demand has quickened as a result of expanding global competition and uncertain economic times. Organisations need to critically evaluate the performance and agility of their operations. The manufacturing sector has gained benefits from adopting a number of methods such as lean manufacturing and Six Sigma to take control of operations management and make it leaner and meaner. What has become clear over the last few years is that these techniques can be applied to the services sector as well.

In today’s service sector marketplace, it is vital to make the processes that deal with the operation of business not only effective and efficient in terms of customer, supplier and employee use, but also compliant with regulations both statutory and organisational. In addition, these processes have to support the implemented business strategy of the organisation. Operations Management is about measuring and managing effectively; this includes leveraging management techniques such as Six Sigma to determine the criteria for measuring the process and, as the ability to manage the resource, employees or 3rd parties to deliver the required services in the desired timeframe.

In 2005, Standard Bank faced these issues and embarked on a Six Sigma project with a difference—which was the need to simplify as well make their operation business processes more effective and efficient.
Standard Bank

Standard Bank is the largest of the four major banks headquartered in South Africa. Since its foundation in 1862, Standard Bank has established itself as a household name and is one of the most recognised brands in the country. The bank is a public company listed on both the Johannesburg Stock Exchange, and on the Namibian Stock exchange. In 2008, ICBC, the International Commercial Bank of China purchased a 20% share of Standard Bank. The bank had total assets of over R1 333 billion (approximately $172 billion) at 30 June 2009 and employs more than 50,000 people worldwide.

The three main pillars of business are Personal and Business Banking, Corporate and Investment Banking, and Wealth. Personal and Business Banking (PBB) provides banking and other financial services to individual customers and small to medium sized enterprises in South Africa, the rest of Africa, and Argentina. The group contributes around 34% of the Standard Bank Group’s earnings. A Centralised Operations area consists of just under 5,000 people, and is responsible for all aspects of operations within PBB. A Performance Measurement Capability within Business Operations is responsible for the measurement of people and process.
Facing the challenges

Back in 2005, the bank faced some major challenges in the way they ran their operations in PBB. These included:

- The business was structured in a product-centric fashion, with individual silo operations for each product group. This meant that functions were duplicated across each business operations area, with each area maintaining and managing its own service capabilities.

- There was no single view of the customer. This was due to the lack or porosity of integration between the many large backend systems that were used by PBB to run its business.

- The effect of application silos led to there being a large number of business processes. Each area maintained its own processes and associated documentation.

- Many of the processes had been designed a long time ago, and due to poor measurement systems, PBB was not in a position to identify problem areas, not to mention fixing these problems.

- There was excessive error, reworks and waste in their processes, and consequently had employed additional staff to fix the problems and also to check work to ensure quality.

Finding a solution from manufacturing

The bank looked into the marketplace to see what other organisations were doing. What they found was that the manufacturing sector had a number of well-know names who had adopted some sort of total quality management approach. All of these approaches were based around a concept of “lean”. One of the derivatives is Six Sigma, which is a business management strategy originally developed by Motorola, in 1981.

From this review, there came about a fundamental change in the bank’s thinking, which was the realisation that banking and manufacturing are not all that different. Both disciplines run a process, and while one might produce a tangible product and the other not, the fact that there is a process, and an outcome to that process, is far more relevant.

Lean principles come from the Japanese manufacturing industry and it is a production practice that considers the expenditure of resources for any goal other than the creation of value for the end customer to be wasteful, and thus a target for elimination.

Six Sigma seeks to improve the quality of process outputs by identifying and removing the causes of defects and minimising variability in the business processes. It uses a set of quality management methods, including statistical methods, and creates a special infrastructure of people within the organisation (called “Belts”.) who are experts in these methods. Each Six Sigma project carried out within an organisation follows a defined sequence of steps and has quantified targets. These targets can be financial, such as cost reduction or profit increase, or whatever is critical to the customer of that process such as cycle time, safety or delivery.
Implementing Six Sigma in the bank

In 2005, the bank initiated a Six Sigma program within Business Operations in PBB. They began by using external trainers to skill selected internal staff as internal champions. An introductory awareness training covering the concepts of Lean was given. One set of projects focused on the reduction of waste and rework and, in the main, required little major IT intervention. The other set projects focused more on process redesign and optimisation. Financial targets were set for these 2 sets of projects respectively of R50k and R400k.

By the end of 2005, Six Sigma projects had delivered savings of R60 million (€5.93 million) to the bottom line. Although much of the savings came from easy “low hanging fruit” types of projects, it was evident to the bank’s management that this initiative was extremely viable in the longer term.

However, Business Operations had identified some challenges, the biggest of which was that they had no common process repository. Process modelling took place in Visio, or in the IBM WBI tool, and there was no centralised structure to store process models. There was not only a lack of version control but no common standard or governance around how processes were modelled. In addition, poor measurement systems associated with the processes led to the inability to track process performance.
Simplicity, Urgency and Excellence (SUE)

The start point was to go back to basics in terms of developing standards for process mapping, scorecard building, and user management, and the introduction of a framework and a methodology for determining and documenting metrics. This put pressure on the need for a repository with the following requirements:

- Must enable methodology from strategy to process management.
- Needed to be able to support scorecarding and dashboard, process management, and collaboration.
- Needed to have a single user interface
Selecting the right operations management solution

When one looks at the operations management software products available in the market space, it is very noticeable that they are very diverse in terms of what they support. This is due to two factors. Firstly, the products have usually been developed from a consultancy-based initiative that has been turned into a repeatable solution. Therefore there is a focus on the areas that were covered in the initial work. Secondly, when operations management solutions are implemented they have to take into account what already exists within the organisation’s software portfolio and be able to adapt through the dropping of modules and the integration of existing applications. This means that any solution must be capable of being easily integrated into an organisation’s existing platforms, so an integration bus and its associated APIs, in association with a process and rules engine, are very important to provide the required flexibility. The alternative approach is that the products come from a business intelligence perspective and have a lot of marketing behind them, but little added functional capability to handle the core functional areas of operations management.

QPR Software Plc provides a performance management solution, which combines QPR ScoreCard and QPR FactView. QPR ScoreCard provides both support during the formulation of business strategies for the capture of objectives and measures as well as the automatic collection and consolidation of data from business processes. The information is provided in the form of scorecards, digital dashboards and strategy maps. QPR FactView is a BI add-on to QPR ScoreCard. It provides support for dashboards and alerts, multi-dimensional analyses, and slice and dice of data. QPR FactView is a tailored version of QlikView from QlikTech and the technology provides in-memory analysis and data association so that data is loaded, prepared and presented on the fly. The solution is fronted by the QPR Portal to provide a solution that can be personalised to individual and role based requirements.
Piloting and the roll-out for SUE

The bank was already using 3 products that could possible provide the solution. So it made sense to look at these three first before going anywhere else. After this initial review, a tender was issued to 2 of the 3; one of which was QPR. As a result of the tender, it was decided to put QPR into a pilot for 6 months. The initial attraction to QPR’s solution was the integrated view of process and performance. QPR also had a very active partner in EBS. Leon Breil, Managing Director of EBS, explained, “For the pilot, we mapped several of the key processes and scorecards for the call centre environment. This helped in establishing the method that would be used by Standard Bank for all future process and scorecard definitions. EBS then mapped these standard operational procedures to the QPR toolset.” John Gaydon, Head, Performance Measurement, Personal and Business Banking Operations said “We found the software easy to use, with minimal training required before resources were up and running.”

Once the go-ahead for the full project was given, consultants from EBS developed customer training for Standard Bank designers for both the Process Guide and Scorecard modules. This covered:

- How to model the processes and break down a business process into lower levels of data, in fact from level 1 to level 6.

*Figure 2*: Modelling the levels of process in QPR (Source: Standard Bank)
**Piloting and the roll-out for SUE**

- For the scorecards, this covered how to produce the high level strategic plans in a format called C@PS, and then how to cascade them down through all the levels. This involved objectives at each level being aligned to success factors at the same level, and these in turn are aligned to objectives at the next level up.

![Figure 3: Business Operations C@PS Documents, showing the alignment of Purpose, Mission, Vision and Values to Success Factors and Objectives.](image)

Briel said, "Once we had developed the training and given the first sessions, we went into skills transfer mode, assisting Standard Bank wherever their people had an issue. During this phase, our consultants spent six months on site"

A four pillar Kaplan and Norton style balanced scorecard was developed for every person in Operations. Custom elements were created to present performance in a consistent fashion across all levels. The lowest levels in the scorecard could be expressed as an actual value, a percentage of target, or a score. Built into each element was a banding table that translates the actual value into a score on a scale of 1 to 5. Scores then roll up to higher levels according to the weightings shown in the ovals on the top of the elements. This created a weighted average based on the importance of each measure.
Piloting and the roll-out for SUE

Dashboard views for managers were developed. These pull information from a number of different scorecards and present it in graphical format on a single page, so as to give process owners clear sight of what is working well, and what is not. These graphs are hyperlinked to the scorecards where the information was sourced so the viewer can drill down for additional detail.

The Navigator view in QPR is less graphical than the scorecard view, but is much easier to read when the number of measures on the scorecard is high. Gaydon explained, "On these views we display the Red, Amber, Green status, as well as the actual and target values. We show the derived score, and the banding table used to calculate the score. In some cases, a measure only becomes relevant after a specific date. In these cases we have written a formula to ignore these measures until such time as a value is entered. The percentage weighting applied to that measure is then proportionately allocated to the remaining measures."
ESB consultants also have written scripts to import process models from Visio and WBI into QPR. Scripts were also written to transfer models between Aris and QPR in a hybrid model where Aris is responsible for the design of process and is integrated into SAP. All models are stored in QPR. In QPR a work instruction component has been added, and the models are published via the QPR Portal.

**Figure 6:** A Navigator view, used when number of measure is high

**Figure 7:** Importing and exporting process diagrams in Standard Bank
Conclusions

In a recent Bloor report on operations management, we stated, "Operations management is a management discipline which requires technology support to ensure that the business processes involved can be the most agile and flexible possible. Therefore the operations management platform you choose has to be flexible and able to incorporate existing applications and infrastructure components. Whilst it may be possible to buy a solution direct off-the-shelf and implement it, it is more likely that you will need to invest time to configure the solution to match your environment. In today’s market the faster you are to market the better, so you need to look closely at the implementation capabilities of the vendor solutions you assess.”

Gaydon explained the results of the project, “Six Sigma initiatives in the business operations area realised hard savings of R90m in 2006 (€8.89m), R130m in 2007 (€12.84m), and R158m in 2008 (€15.6m). The journey would not have been nearly as successful without the ability to map processes to a standard, to store them centrally, and to make them visible to users at all levels in the organisation. In addition, we were able to produce performance measures aligned to higher level objectives, with targets that were realistic and achievable, and people talked about their performance daily. This would not have been possible without QPR”

Further Information

Further information about this subject is available from http://www.BloorResearch.com/update/2051
Bloor Research overview

Bloor Research is one of Europe’s leading IT research, analysis and consultancy organisations. We explain how to bring greater Agility to corporate IT systems through the effective governance, management and leverage of Information. We have built a reputation for ‘telling the right story’ with independent, intelligent, well-articulated communications content and publications on all aspects of the ICT industry. We believe the objective of telling the right story is to:

- Describe the technology in context to its business value and the other systems and processes it interacts with.
- Understand how new and innovative technologies fit in with existing ICT investments.
- Look at the whole market and explain all the solutions available and how they can be more effectively evaluated.
- Filter “noise” and make it easier to find the additional information or news that supports both investment and implementation.
- Ensure all our content is available through the most appropriate channel.

Founded in 1989, we have spent over two decades distributing research and analysis to IT user and vendor organisations throughout the world via online subscriptions, tailored research services, events and consultancy projects. We are committed to turning our knowledge into business value for you.

About the author

Simon Holloway
Practice Leader
Process Management & RFID

Simon established Holloway Consulting in 2002. The company provides a range of quality IT consultancy services to clients in all sectors of industry, commerce and the public sector based around RFID, integration and business process management. Holloway Consulting bring their experience of the relevant business sector and innovative skills to introduce fresh new ideas and different approaches to the business users and IT. Holloway Consulting packages the service to ensure that the client is clear what is being delivered, the timescales and costs.

Simon has worked for a number of organisations, including Solidsoft, Microsoft, Sun Microsystems, Forté Software and Redfern Consulting, where he has built up a reputation for his ability to provide translation between the business and IT worlds. His background spans some 20 years as an IT consultant specialising in IS/IT strategy planning, information management, corporate data and process modelling, business process reengineering, software selection and project management. He has worked in a wide variety of industry and service based companies including Cadbury Schweppes, PITO, British Airways, Glaxo and Scottish Widows.

Simon has several areas of specialism from his wide-ranging manufacturing, BPM and RFID experience. For example, he is well versed in the concept of agile manufacturing and the use of web services in the sector. He is also knowledgeable in the use of virtualisation within supply chains. In particular, the issues in the construction industry around gaining better control of equipment and raw materials, as well as health and safety is a particular focus.

Simon is married with two grown up children. He is the county hockey coach for the Hertfordshire under-17 and U21 men’s team. He sings with the Chipperfield Choral Society. Both he and his wife are keen ramblers.
Copyright & disclaimer

This document is copyright © 2010 Bloor Research. No part of this publication may be reproduced by any method whatsoever without the prior consent of Bloor Research.

Due to the nature of this material, numerous hardware and software products have been mentioned by name. In the majority, if not all, of the cases, these product names are claimed as trademarks by the companies that manufacture the products. It is not Bloor Research’s intent to claim these names or trademarks as our own. Likewise, company logos, graphics or screen shots have been reproduced with the consent of the owner and are subject to that owner’s copyright.

Whilst every care has been taken in the preparation of this document to ensure that the information is correct, the publishers cannot accept responsibility for any errors or omissions.