CHAPTER 5

AN INTRODUCTION TO THE IMPLEMENTATION OF BPR AND CERTAIN CONSIDERATIONS DURING THE PROJECT

5.1. INTRODUCTION

Chapter 4 discussed the relevance of BPR in a short-term insurance business and that it is possible to successfully implement the principles of BPR in such a business. However, to ensure BPR is implemented successful in any business, it is necessary to follow the correct implementation methodology and to manage the BPR project effectively.

This chapter will focus on three aspects, namely:

- A summary of the different stages when implementing BPR;
- The importance of on-going evaluation during the BPR project; and
- Certain considerations and problems that are experienced during a BPR project and how the BPR team should resolve these problems.

The nature of this chapter is of such that the information is not short-term insurance specific, but applicable to any BPR project. The subsequent chapters will expand on these different stages and where applicable, will refer to specific application in the short-term insurance business.
5.2. THE DIFFERENT STAGES DURING A BPR PROJECT

A variety of resources were consulted in determining the different stages during a BPR project, which included Jacobson (1995), Ballé (1995) & Cross et al. (1994). From these resources, the different opinions of the authors were consolidated into the following stages and steps included in each stage.

Generally, any BPR project can be divided into the following stages:

- **Planning stage**, which includes the planning of the BPR project;
- **Pre-study stage**, which includes understanding of the current processes; and
- **Execution stage**, which includes redesigning and implementation of alternatives.

The **planning stage** should include the following steps:

- Formulating the BPR strategy;
- Consider what & when to reengineer;
- Define the mission and the scope of the BPR project;
- Define the methodology that will be applied during the BPR project;
- Define the role players in the BPR project;
- Plan each different project stage according to its specific needs; and
- Evaluation of the planning stage.

During the **pre-study stage**, the following should be reviewed:

- Identify customers;
- Identify the company’s value propositions;
- Segmentation of customers;
- Analyse customer requirements;
- Understand the impact of external market conditions on the business;
- Understand the current core & non-core processes;
- Understand the current support functions; and
- Evaluation of the pre-study stage.

The **execution stage** should include the following steps:

- Before the BPR team redesign alternative options, it is important to first perform benchmarking in order to ensure that the company’s own process goals surpass those of its competitors.

The BPR teams should then:

- Design options and alternatives for the core and non-core processes;
- Map these options and alternatives;
- Reengineer the support functions to support the reengineered core and non-core processes;
- Perform gap analyses between:
  - The current processes and the designed options and alternatives;
  - The designed options and alternatives and the ideal situation.
- Select the best alternative;
- Develop a change management plan;
- Implement the selected alternatives; and
- Evaluate the results.

On completion of the execution stage, it is important to implement procedures that will ensure continuous improvement in the future.

The study will encompass the different project stages as follows:

- Chapter 6: Planning stage;
- Chapter 7: Pre-study stage;
- Chapter 8 & 9: Execution stage; and
- Chapter 10: An illustration on the specific application of BPR principles in a short-term insurance industry.

5.3. THE IMPORTANCE OF ON-GOING EVALUATION

As explained in the preceding paragraph, results should be evaluated on completion of each project stage. It is also important to evaluate results during each project stage. An on-going evaluation process is critical to the success of the BPR project.

Both informal and formal evaluations should be performed. Jacobson recommended that informal evaluation be performed during each project stage of the process while formal evaluations be performed on completion of each stage (Jacobson, 1995:313–316).

It is possible that more formal evaluations are required, depending on the complexity of the BPR project, the experience of the project team and the complexity of the organisational processes and IT systems. It may be necessary to implement formal evaluation processes on completion of each process during the execution stage, e.g. a formal review on completion of the reengineering of the claims process and another formal review on completion of the broker commission process.

Different evaluation methods can be used during different project stages. These evaluation methods can include:

- Informal and internal questioning of work performed (E.g. par. 5.3.1);
- Formal review of documents (E.g. par. 5.3.2);
- Evaluation or quality control committee can be appointed as subcommittees of the BPR team;
- Inspection (E.g. par. 5.3.4);
- Walkthrough (E.g. par. 5.3.3);
- Benchmarking;
- Performing a gap analysis (E.g. par. 5.3.5.6), etc.

Where the BPR team uses automated tools to assist them in completing the different steps of each BPR stage, formal quality controls can be built into the process as part of the methodology.

The following paragraphs will discuss how different evaluation methods can be applied during and on completion of each stage and who should be involved in the evaluation process.

5.3.1. Evaluation during the planning stage

For the duration of the planning stage, it is important that the reengineering team always considers the Group’s functional strategy (refer Chapter 6.2). All objectives set in the planning stage should support this strategy. The team should ask themselves the question whether every step in the planning stage supports the functional strategy.

Other areas, which should be considered, include:
- Are the planned steps and procedures practical in terms of execution?
- Are the planned steps and procedures cost effective?
- Were all project-detail considered during the planning phase to ensure completeness of the planning stage?
As this is an informal evaluation method, the reengineering team should ask these questions during the planning stage and test every action point against the set parameters.

When considering what processes to reengineer, it is recommended that a formal evaluation be performed to consider the return on investment or the costs versus benefits of the project. Par. 6.3.2 discusses a number of considerations during this process, including an analysis of the costs and benefit. Cost and benefit or return on investment analysis can be calculated by using various methods, including:

(a) Calculating the net present value (NPV) of the future cash flows and subtracting the initial capital investment from it to determine whether the net present value of the capital investment is positive (Drury, 1996:390);

(b) Calculating the internal rate of return (IRR). The IRR represents the “discount rate that will cause the net present value of an investment to be zero” (Drury, 1996:391). Any capital investment during a BPR exercise should only be accepted when the IRR exceeds the cost of capital of the company; and

(c) Performing a cost-benefit analysis (hereafter referred to as CBA). This method is applicable where investments cannot be evaluating only in terms of monetary costs and benefits or where it is extremely difficult to determine the future cash flows. This will most probably be the scenario when implementing BPR.

CBA take into account all the costs and benefits that accrue from an investment by defining the costs and benefits in much wider terms than those in the IRR or NPV calculations (Drury, 1996:403).
5.3.2. Evaluation on completion of the planning stage

At the end of the planning phase, the reengineering team should prepare a formal planning document for approval by the Board of directors (or the director appointed as the sponsor of the project) or subcommittee appointed to specifically review progress on the BPR project. The planning document should include all detail regarding the strategy, mission and scope, methodology to follow, role players, etc. as described in chapter 6.

It is important that quality measures are determined by the project manager and the reengineering team in order to regularly review the quality of any work performed. This can include:
- Document standards;
- Quality control;
- Distribution list before completion; etc.

The planning document should be forwarded to all team members for review of completeness and accuracy. The Board of directors or the subcommittee should then formally review and evaluate the planning document and approve continuing to the next project stage.

5.3.3. Evaluation during the pre-study stage

Evaluation methods during the pre-study stage will differ depending on the specific step performed by the BPR team during the pre-study stage.

When the BPR team identifies customers, it is important that the identification is complete in terms of all types of customers. Someone with in-depth industry
knowledge as well as BPR knowledge should review the list of customers for completeness. As customers should be identified for each process, it is recommended that employees who are closely involved in these processes be included in the review team.

Defining the company’s values is of critical importance in terms of the mission and focus of the BPR team. It is recommended that once the BPR team has identified the company’s values, senior management or the Board of directors review it.

Evaluation during the pre-study stage should also consider the appropriateness of the method that was used in the segmentation of customers. This method could differ depending on the type of business and industry.

The evaluation of the analysis of customer requirements will depend on the process followed to obtain this information. Should a customer survey be conducted as recommended by par. 7.3.5, it is important to evaluate both the survey and the results of the survey in terms of the following:

- Type of questions and time allowed for customer response:

  Before the survey, which can also be outsourced, is distributed to customers, senior management should carefully evaluate the type of questions included. The type of questions should be in terms of the company’s value propositions and focus on core customers. The committee should formally sign off the survey document as well as the procedures on how the survey will be conducted. These procedures should include who should complete the survey, the time allowed for customer response, etc.
- Format of the survey:

  The BPR project manager should review the format of the survey to ensure it is in accordance with the document control. The survey should be in such a format to ensure it can be analysed easily and analytically.

- Feedback and comments from customers:

  The number of responses should be statistically sufficient to support results. Comments from customers should indicate that customers spent sufficient time on the questionnaire and that senior staff members of customers co-operated in the survey.

- Analysis of results:

  Results of the survey should be formally analysed and reviewed by the BPR project manager as well as senior management or the Board of directors. Quality controls should be included in the review process to ensure all responses are included in the analysis and the conclusions are in line with responses.

When the current processes and procedures are analysed and documented evaluation can either be done formally or informally. Jacobson recommends that informal reviews are performed during the stages and a formal review be performed on completion of the stage (Jacobson, 1995:313–316).

The information review of the analysis and documentation of the current processes can be performed by using the walkthrough process.

Walkthrough is the most frequent method of evaluation. The reengineer will lead one or more project members of the reengineering team through a segment of the model that has been written. The other members will make comments on the style,
technique, possible errors, violation of reengineering standards and other problems. No formal documentation on the meeting need to be kept. However, it is the responsibility of the reengineer to correct errors (Jacobson, 1995:313 – 316).

5.3.4. **Evaluation on completion of the pre-study stage**

On completion of the pre-study, the BPR team should formally document the results of the pre-study as well as the implications of these results on the remainder of the BPR project. This document should first be reviewed by inspection and then be approved by the BPR subcommittee or the Board of directors.

Both inspection and approval by the Board of directors must form part of the formal evaluation process. Inspection is the most powerful of all methods of evaluation and should comprise of an “inspection team”. The role of the inspection team can be compared to the role of the testing team in the development of new software. The results of the inspection should be documented. Inspection leads to good control of the reengineering project and may give valuable information for the future. The results of the inspection team will be followed up and reported to the review meeting (Jacobson, 1995:313-316).

Subsequent to the evaluation process performed by the inspection team, the subcommittee or the Board of directors should formally approve the document and continuing with the execution state.
5.3.5. **Evaluation during the execution stage**

Evaluation during the execution stage is most definitely the most important evaluation process as well as the most difficulty and lengthy evaluation process. The detail in which this stage is evaluated will determine whether the redesigned processes operate accurately.

There are numerous different evaluation methods that can be applied during the execution stage. Some of these evaluation methods include:

**5.3.5.1. Benchmarking**

Benchmarking, which will be discussed in more detail in paragraph 8.2, is an important evaluation method that can be used before the implementation of BPR as well during and after the implementation of BPR. As benchmarking could be a lengthy and costly exercise, it is recommended that its preferred application be before and after the implementation of BPR. However, it can still be used as a method of evaluation, especially where the BPR team would like to evaluate certain critical areas within processes.

An example where benchmarking was used during the execution stage to evaluate staff, was in Dames & Moore Group, a Los Angeles-based engineering firm. Benchmarking was used to track how many invoices each of the accounts-payable clerks processed per day. The same tracking was performed for other processes. Error-rates were also monitored. The company was able to create benchmarks for each of these processes. One of the interesting results from the benchmarking was that the top performing
accounts-payable clerk processed twice as many invoices as those at the bottom (Bartholomew, 2001).

5.3.5.2. Document controls

Standards should be set and documentation should be evaluated in terms of these standards. Document standards can include:

- Standard format (e.g. system descriptions should include a flow chart, a description of all transactions within a process, a list of interfaces with other processes, a list of customers dealing with the processes, etc.);
- The process in which the documentation should be circulated amongst team members for review of completeness and accuracy; etc.

5.3.5.3. Informal discussions

This evaluation method is probably the most commonly used during the execution phase of the BPR project. Informal discussions between fellow team members and employees to ensure redesigned alternatives will meet the requirements in terms of the mission and objective of the BPR process are critical. It is also important that discussions with employees and middle management be held to identify practical impediments.

5.3.5.4. Formal evaluation of each process

Once a process has been redesigned (but before completion of the total BPR project), formal evaluations can be done by means of investigation or a test run. A specific quality control subcommittee that includes both members of the BPR team and management can perform the investigation. Such a process
will reduce the time spend on evaluation on completion of the project and will identify possible areas of concern.

When a test run is performed, it is important that all aspects and scenarios be tested within the process.

The formal evaluation of each process should also include a cost comparison between the current and future costs. As the objective of BPR is a significant reduction in costs (par. 2.4), it is important to ensure that costs are reduced by implementing the redesigned alternatives.

5.3.5.5. *Formal evaluation of interfaces*

In addition to the formal evaluation of processes, it is absolutely critical that all interfaces between internal processes as well as external processes be evaluated.

This can be evaluated by the same methods as discussed in par. 5.3.5.4, namely an investigation by a subcommittee or a test run.

5.3.5.6. *Perform a gap analysis*

A gap analysis is another method of evaluating the redesigned alternatives in terms of the mission and objectives of the process. The gap analysis will be discussed in more detail in par. 8.7.
5.3.5.7. Cost-benefit analysis (CBA)

Par. 5.3.1 discussed how the CBA methodology could be used in evaluating a BPR project during the planning stage. However, this method can also be used to evaluate the redesigned alternatives when selecting the best alternative.

The CBA method can also be successfully applied when considering customisations to information technology systems, which will be discussed in more detail in par. 9.5.

5.3.5.8. Completeness checks

During the execution stage, the BPR team should perform completeness checks to ensure all aspects have been reviewed and incorporated in the redesigned alternatives and IT systems. This can be done by:

- Referring back to documentation of the pre-study stage (e.g. system descriptions, flow charts, transaction lists, etc.); and
- Discussions with BPR team members and employees; etc.

5.3.6. Evaluation on completion of the execution stage

On completion of the execution stage, a final and formal evaluation should be performed to identify any areas that require additional attention as well as to evaluate the overall success of the project.

The evaluation should cover two areas:

(a) The success of the operational aspects; and
(b) The financial success in terms of cost savings and other benefits.

The success of the operational aspects can be evaluated by testing the newly implemented processes and information systems. Discussions with employees will also provide the evaluation team with valuable information on areas that need additional attention as well as areas where improvement was significant.

Operational aspects should also be evaluated in terms of the mission and objectives of the BPR project. This can be evaluated in terms of the performance measurement systems that have been implemented (e.g. comparison between the number of policies underwritten per day in the past and currently).

The financial aspects can be evaluated by comparing financial information on costs in periods prior to the implementation of BPR to current periods as well as by calculating the return on investments as discussed in par. 5.3.1.

The evaluation process on completion of the execution stage will be discussed in more detail in par. 8.10.

The final evaluation results should be presented to the Board of directors in order to evaluate the success of the project and identify future developments.
5.4. THE BPR PROJECT TEAM SHOULD BE AWARE OF GENERAL PROBLEMS

5.4.1. Introduction

A BPR project is extremely demanding as the project has at its core the management of change and most of the time, change that will affect the total business and its employees. Although the objective of this study is not to provide a detailed analysis of possible problems during the BPR project, there are certain general difficulties of which the project team should be aware of before commencement of the project as these can influence the result of the project and the project team.

5.4.2. Interruption

According to Michael Ballé, interruption of a project is the greatest time waster and source of errors. It is important that if one person starts with a task, he completes the task himself and that he is not interrupted to perform other tasks in between. A solution to the problem of interruption is an efficient and robust process where work happens uninterrupted from start to finish (Ballé, 1995:33).

5.4.3. Overspending

Another problem is overspending on budgeted costs. It is extremely important to monitor costs closely. During the early stages of the project, only a tentative budget can be assessed on the best estimate of information available. The project manager should monitor and reassess the budget as the project develops (Day, 1994:40).
5.4.4. Communication

A lack of communication is probably the origin of most problems. It is important to communicate regularly with all parties involved in the process.

The project manager should keep the project team focused by briefing them regularly and by ensuring everyone understands the objectives and methodology of the project.

Regular reporting to the client if consultants are involved should also be performed to inform the organisation about the progress on the project. Any variations from the initial plan should be reported immediately (Day, 1994:74).

5.4.5. Unproductive time spent on unnecessary activities

Ballé brought to attention the problem of wasting time on “looking for things and shuffling them here and there”. Some people tend to feel busy when they have large in-trays. However, time spent on looking for documents and reorganising the documents is time wasted (Ballé, 1995:32). It is important that the project team works according to certain standards, which include the following:
- All in-trays should be cleared by the end of the day; and
- All documents should be properly filed.

These principles should also be implemented in the new process design.

5.4.6. Lack of sustained management commitment and leadership

The success of the BPR project depends significantly on sustained management commitment and leadership. As soon as the BPR plan is approved, management should do everything necessary to ensure the project is executed as soon as possible.
If not, staff members and the BPR team lose their focus. It is important that everybody believes that BPR can create a win-win situation. This will ensure all stakeholders of the project contribute and keep enthusiastic about the project (Rand Afrikaans University, 2001).

Should there be a lack of management commitment and leadership, certain consultants believe that the project leader should drive the BPR project himself (Rand Afrikaans University, 2001).

### 5.4.7. Conclusion

Although the objective of this study is not to provide a list of all problems and reasons why BPR projects could be unsuccessful, it is important that the project team is aware of certain common difficulties when implementing a BPR project. The role of the project manager should not be underestimated in keeping the team focused and focusing on the important aspects.

### 5.5. Conclusion

This chapter serves to provide a brief summary of the different stages of the BPR project, which will be discussed in chapters 6-9. The different stages are the:

- Planning stage;
- Pre-study stage; and
- Execution stage.

The planning stage of the BPR project will be discussed in chapter 6. The pre-study stage includes the analysis of customer needs and the current systems and processes. The pre-
study stage will be discussed in chapter 7. The execution stage, which includes the redesign of the core processes, support functions and information systems, will be discussed in chapters 8 and 9. Chapter 10 will include an illustration on the specific application of BPR in the short-term insurance industry.

Due to the importance of continuous evaluation throughout the BPR project by applying both formal and informal methods, the evaluation of each project stage was discussed separately in this chapter to ensure this important aspect is not abated in the detail steps of each stage.

Lastly, the chapter briefly referred to some general difficulties that the BPR team can expect to experience during the BPR project. Although it is not the objective of the study to provide a detailed list of problems during the BPR project, it is important that the team is aware of certain problem areas before commencement of the project.
BIBLIOGRAPHY