FACTORS THAT AFFECT THE OUTCOME OF PROCESS IMPROVEMENT PROGRAMMES IN SOUTH AFRICAN FIRMS

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ABSTRACT

Process Improvement programmes are often embarked on in organisations to close gaps in performance. It is becoming increasingly important to understand what the drivers of success are of these improvement programmes to maximise the investment (effort and monetary) in these programmes. The study aimed to identify what factors affect the outcome of Process Improvement programmes in South African firms.

A qualitative study was undertaken, using purposive sampling, a set of companies that met the criteria of having undergone Process Improvement programmes in the past 0-5 years was determined. A total of 20 individuals from 15 organisations were interviewed.

The study confirmed that the factors (strategic alignment, structural alignment, IT alignment, executive commitment and employee empowerment) as identified by Lok et al. in their 2005 research as being important factors that influence the outcome of Process Improvement programmes in selected South African organisations. A further set of five factors were identified in the study that were of significance and were critical to the success of Process Improvement programmes: value and clarity of the proposed changes; pace of the change; inherent culture of an organisation; sustainability of the change; and skills.

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1 INTRODUCTION

In challenging business environments, organisations are constantly trying to find new ways of remaining viable, and for some, the challenge is even greater, when seeking to be an industry leader. An organisation’s strategic definition or review process may yield a desired vision for the company that the current operational context may not be able to fulfil entirely, resulting in a gap. Gaps can also be identified at the operational level where an undesirable level of performance has been observed. Process Improvement programmes are often embarked on to close these gaps. The nature of the gap between the current business context and the defined strategic objectives will determine what form of Process Improvement programme i.e. whether incremental changes or drastic/breakthrough changes are required in order to implement the strategy.

It is becoming increasingly important to understand what the drivers of success are of these improvement programmes to maximise the investment (effort and monetary) in these programmes. Over the past 20 years, many organisations have undergone Process Improvement programmes. Paper and Chang [1] explain that during the 1990’s, Business Process Re-engineering was a popular programme to embark on to aid organisations that were underperforming as a turnaround strategy. These improvement programmes have experienced varying degrees of success over the years and have been the subject of numerous research topics with the intent of developing frameworks: Chang and Powell [2]; Lok et al.[3] and defining success criteria: Paper and Chang [1] and Smit and Cronjé [4].

This study examines factors that influence the outcome of Process Improvement programmes in South African firms. A summary of the literature review, research hypotheses, methodology, results, discussion and conclusions of the study are presented.

2 LITERATURE REVIEW

The main concepts involved in the study are Process Improvement Programmes, Performance and Critical Success Factors for Process Improvement Programmes.

2.1 Process Improvement Programmes

Process improvement strategies that firms employ can be described as either those that target incremental change (e.g. Continuous Improvement) or those that come about from breakthrough improvements (e.g. Business Process Reengineering). Slack and Lewis [5] delineate the difference between the two strategies using the characteristics as noted in Table 1 below.

Table 1: Features of Breakthrough and Continuous Improvement (based on Imai) (after Slack and Lewis [5])

<table>
<thead>
<tr>
<th></th>
<th>Breakthrough Improvement</th>
<th>Continuous Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect</td>
<td>Short-term but dramatic</td>
<td>Long-term and long-lasting but undramatic</td>
</tr>
<tr>
<td>Pace</td>
<td>Big steps</td>
<td>Small steps</td>
</tr>
<tr>
<td>Time-frame</td>
<td>Intermittent and non-incremental</td>
<td>Continuous and incremental</td>
</tr>
<tr>
<td>Change Involvement</td>
<td>Abrupt and volatile</td>
<td>Gradual and constant</td>
</tr>
<tr>
<td>Approach</td>
<td>Select a few champions</td>
<td>Everybody</td>
</tr>
</tbody>
</table>

80-2
<table>
<thead>
<tr>
<th></th>
<th>Breakthrough Improvement</th>
<th>Continuous Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stimulus</strong></td>
<td>Technological breakthroughs, new inventions, new theories</td>
<td>Conventional know-how and state of the art</td>
</tr>
<tr>
<td><strong>Risks</strong></td>
<td>Concentrated - ‘all eggs in one basket’</td>
<td>Spread - many projects simultaneously</td>
</tr>
<tr>
<td><strong>Practical requirements</strong></td>
<td>Requires large investment but little effort to maintain it</td>
<td>Requires little investment but great effort to maintain it</td>
</tr>
<tr>
<td><strong>Effort orientation</strong></td>
<td>Technology</td>
<td>People</td>
</tr>
<tr>
<td><strong>Evaluation Criteria</strong></td>
<td>Results for profit</td>
<td>Process and efforts for better results</td>
</tr>
</tbody>
</table>

Typical examples of Breakthrough improvement programmes are Business Process Reengineering; Business Process Redesign and Business Process Improvement. Examples of Continuous Improvement include: Lean; Six Sigma; Lean Six Sigma; Benchmarking. It is important to note that the methodologies described as Continuous Improvement are typically considered as incremental improvement methodologies; however when such methodologies are applied with the right levels of focus or broad enough scope, they can also fit the criteria for classification of breakthrough improvement and have a significant impact on organisations as noted by George [6].

### 2.2 Performance Measurement

To determine whether Process Improvement programmes have been successful, the changes to the firm’s performance can be examined. Performance can be measured from a variety of perspectives. Neely [7] notes some of the common measurement perspectives used by organisations are:

- the *accounting* perspective e.g. Return on Equity (ROE) or Economic Value Added (EVA)
- the *marketing* perspective e.g. Customer satisfaction
- the *operations* perspective e.g. Cost, quality, speed

In addition to the above perspectives, Amaratunga [8] refers to a very common measurement framework that is adopted by organisations, i.e. Kaplan and Norton’s Balanced Scorecard [13].

### 2.3 Frameworks and Critical Success Factors in the Improvement Context

The quest to understand organisational factors that affect performance and determine the set of critical success factors for organisational change is by no means a new one. Leavitt [9] notes as early as 1967, that, organisations are multi-dimensional systems in which a number of factors can be altered to achieve changes in performance. Many subsequent authors have formulated frameworks, theories and relationships linking organisational variables and outcomes. In more recent decades frameworks to understand Process Improvement programmes have been developed. Chang and Powell [2], Liu and Seddon [10], Lok et al. [3] all present frameworks related to Process Improvement. When comparing frameworks that have been developed, there are a number of common elements across these models: support from senior management, organisation strategic alignment, people enablement, access to the right resources and IT enablement. These salient factors over the years have also often been described as Critical Success Factors for improvement programmes.
As Business Process Reengineering (BPR) has evolved, many researchers have explored what the Critical Success Factors (CSFs) are for improvement programmes. Much like the numerous frameworks that have been formulated, many CSFs have been identified by a number of authors with underlying similarities.

3 RESEARCH HYPOTHESES AND FRAMEWORK

Using the Process Improvement classification of Slack and Lewis [5] and the framework Lok et al. [3] as the premise of this research, the study aims to answer the following research questions:

• What factors affect the outcome of Process Improvement programmes in South African firms?

3.1 Hypotheses

The literature review resulted in the following hypotheses being formulated which were to be verified through the study towards answering the main research question:

• Hypothesis 1 - Process Improvement programmes contribute positively towards organisation performance.

• Hypothesis 2 - The following factors, based on Lok et al.’s [3] framework, contribute to the outcome of Process Improvement programmes:
  o Strategic alignment;
  o Structural alignment;
  o IT alignment;
  o Executive commitment; and
  o Employee empowerment.

• Hypothesis 3 - There are other factors that influence Process Improvement programmes in South African organisations.

• Hypothesis 4 - Breakthrough improvement programmes have different success factors compared to Incremental (Continuous) improvement programmes.

• Hypothesis 5 - Organisations will continue with Process Improvement programmes where there has been a positive experience.

The relationships among the hypotheses are illustrated in Figure 1 below. The dotted arrows and boxes are investigated in this research, while the solid arrows and boxes show the relationships that have already been established by previous research by Lok et al. [3].
4 RESEARCH METHODOLOGY

This study was influenced by the initial research conducted by Lok et al. [3], so the aptness of the methodology applied in Lok’s et al.’s [3] study was evaluated. A notable disadvantage in the quantitative study performed was that there was a limitation in the richness of empirical data generated. Therefore, it was decided that a qualitative study would be conducted to further explore the factors that had previously been tested using a quantitative method. For the purpose of addressing the research problem and related hypotheses, an empirical study generating primary data was selected. The data collection was performed through interviews and data analysis through the summary of interview transcripts and thematic analysis. This would allow for the generation of content rich data from which to confirm the proposed factors and identify additional factors.

4.1 Research Population, Sample Size and Selection

The population investigated is organisations in South Africa that have executed Process Improvement programmes. Using purposive sampling, a set of companies that met the criteria of having undergone Process Improvement programmes in the past 0-5 years was determined. Firms were selected based on the researcher’s knowledge that they had experience of Breakthrough and Incremental Process Improvement programmes. An initial set of participants was identified by the researcher. In some cases the initial set of participants referred further participants, which resulted in the snowball sampling technique being applied as well. A total of 20 individuals were interviewed. Based on the guidelines for the qualitative research derived from Collins et al. [11], and the general rule cited by Collins et al. [11], a sample size of 18-20 units of analysis is determined as sufficient to generate empirical data to obtain data saturation.

4.2 Data Collection

The empirical data for this study was collected through a series of semi-structured interviews. A pilot study was performed with an individual who had experience in Process Improvement programmes. The aim of the pilot study was to test the questions for clarity. Minor wording changes were made post the pilot study. Interviews were conducted either face-to-face or telephonically. Interviews were digitally recorded and then transcribed.
4.3 Data Quality

The criteria widely used to assess the quality of data have been those used in quantitative methods: reliability and validity. However due to the nature of differences between quantitative methods and qualitative methods, there are alternate criteria used to evaluate the quality of qualitative research: credibility, dependability, confirmability and transferability as Ulin et al. [12] describe. The four factors together evaluate the trustworthiness of data.

4.3.1 Credibility

The process followed to preserve the accuracy of the data collected was that the interviews were recorded and subsequently transcribed. The detailed interview transcripts allowed the researcher to accurately utilise the original narrative data in summarising findings, thereby ensuring credibility of the findings.

4.3.2 Dependability

As there was only one researcher conducting the interviews, data collection was consistent. With regards to the responses and data collected and consistency over time, since the nature of Process Improvements does evolve over time and has a dependence on business and market context, the data was anticipated to be predominantly consistent over time with minor differences based on the natural evolution in the field of Process Improvement practices and changing business contexts.

4.3.3 Confirmability

The questions in the semi-structured questionnaire made use of open-ended questions as far as possible. The questionnaire was used to guide all the interviews to limit bias. It is assumed that the participants provided open, honest responses. As building rapport with respondents is required in the interview method, there was a level of co-participation required by the researcher. Co-participation other than asking questions was limited to acknowledging responses, and demonstrating understanding of the responses by paraphrasing, and in some cases relating to examples from the researcher’s own experience.

4.3.4 Transferability

The research sample covered respondents who had experience across a range of industry sectors; therefore, it is assumed that the results are transferable to organisations with similarities to the research sample. However, it must be noted that the not all industry sectors within South Africa were covered. Another limitation of the transferability is that the sample had a geographical bias (Gauteng province) and was a relatively small sample of the population. Therefore the results may not be applicable to all South African firms who execute Process Improvement programmes.

4.4 Data Analysis

The data collected during the research process yielded a large volume of textual data in the form of the interview transcripts. In conducting the analysis, both vertical and horizontal analyses [14] were performed. This was necessary given the volume of information gathered during the interview process. During the vertical analysis of content, the volume of content was reduced by summarising text, paraphrasing or transforming data from text to tables.

Once all the interviews were summarised within themselves, the cross comparison of interviews (horizontal analysis) was performed. The comparison was an iterative one, as a horizontal analysis was conducted for each hypothesis.

Frequencies and counts of responses were also done as part of the analysis to gauge the significance of responses generated within individual interviews when compared to the
research hypotheses. For the purpose of being able to generate counts, some of the text-rich responses were transformed by the researcher to a summarised “Yes”, “Neutral”, “No” response when evaluating responses against hypotheses.

Thematic content analysis of the summarised interview texts was also performed to identify recurring themes that were noteworthy (this was applicable mostly to Hypothesis 3).

For some hypotheses, a comparison of the findings against available literature was also done to determine the relevance of the findings.

4.5 Sources of Bias

To determine potential sources of bias, the demographic information collected in the interview questionnaire was examined. Potential sources of bias included:

- **Respondent’s position within the company** - there is an uneven spread of respondent positions. The number of respondents at the Line function level is low compared to the other levels; therefore findings may not be representative of employees at the line function level within an organisation.
- **Industry sector** - potential exists for response bias based on industry sector, as there are a higher number of respondents who commented on the Manufacturing, Mining and Utilities industries.
- **Company size** (based on annual revenues) - All of the respondents commented relative to large organisations (>ZAR 1 billion in revenue). Therefore, company size is considered to have a potential bias in the responses. Findings may not be representative of all company sizes.

4.6 Quality of the Research Method

The overall applicability of the research to the total population is limited due to the purposive sampling technique applied which implied that the sample was non-random and that in itself creates a bias; and the sources of bias discussed above.

5 RESULTS AND DISCUSSION

The results are discussed in relation to the research hypotheses.

5.1 Hypothesis 1

*Process Improvement programmes contribute positively towards organisation performance*

![Figure 2: Summary of responses indicating whether Process Improvement programmes contribute positively to organisation performance in relation to Hypothesis 1](image)

The majority of respondents indicated that they had experienced some level of improvement as a result of the Process Improvement initiatives that had been implemented.
When respondents were asked to comment on whether contributions to improvements in performance differed based on the type of improvement; the general observation was that it is important to make these observations relative to time. The general observation was that Breakthrough programmes had more importance and visibility placed on them and may be perceived as having a greater impact. However, there was acknowledgement that Incremental (Continuous) improvement programmes were more sustainable in nature and over time may add more value to an organisation than Breakthrough programmes.

Comparing the responses obtained from this study against Lok et al.’s [3] study, it is noted that the sustainability of the changes is a dimension that should be further explored in evaluating whether the different types of improvement programmes contribute differently to organisational performance changes.

5.2 Hypothesis 2

The following factors, based on Lok et al.’s [3] framework, contribute to the outcome of Process Improvement programmes: Strategic alignment; Structural alignment; IT alignment; Executive commitment; and Employee empowerment.

During the interview, participants were asked to comment on the above factors and describe the extent to which they had observed the factors within their organisations.

![Hypothesis 2. The following factors, based on Lok et al.’s (2005) framework, contribute to the outcome of Process Improvement programmes.](image)

Figure 3: Distribution of responses relating to the level of importance of factors noted in Hypothesis 2 and the extent to which they are observed in

Overall, the observations indicated that all the factors were perceived to be important in the outcome of Process Improvement programmes (i.e. responses that were tallied under “Important-Yes”) (Figure 3). However, when viewing the extent to which these factors were practised or visible (i.e. tallied under “Extent-Yes”), only two of the factors came out as noteworthy: strategic alignment and executive commitment. Only a moderate level of visible structural alignment, IT alignment and employee empowerment are noted.

- **Strategic alignment** - in the cases where strategic alignment was fairly well observed there seemed to be more emphasis placed on formal strategic alignment, e.g. through the use of project selection criteria, alignment of the changes to Key
Performance Indicators (KPI’s) etc. In the cases, where a lesser extent of strategic alignment was noted, the observation was that there were competing priorities at the department level.

- **Structural alignment** - of all the factors, structural alignment had the lowest number responses (17) interpreted as positively indicating that it was an important factor. Structural alignment was also the factor that the responses indicated the strongest negative extent to which the factor is observed (11 responses). Respondents from five separate organisations noted that often organisation structure design is performed independently of process design, thereby creating situations where the processes are retrofitted to the structure that is created and this inherently detracts from process orientation within organisations. A number of the respondents cited programmes that are either currently underway or imminent that aimed to reorganise structures to transition to a more process-orientated organisation.

- **IT alignment** - Although there was the general understanding that the role of IT is to enable business processes, there were a significant number of responses (10) that were interpreted as “Extent - Neutral”. Half of the “Extent - Neutral” responses were attributed to the general comments on the time it takes to receive support from the IT teams.

- **Executive commitment** - All respondents indicated that executive commitment is considered an important factor. When examining the extent to which executive commitment is observed, the majority (13) indicated that they have experienced positive demonstration of executive commitment in their organisations. The responses that were interpreted as neutral or negative were based on respondents who had experienced a mix of positive and negative demonstration of executive commitment. The main disconnect observed was often the actions did not match the verbal commitments made.

- **Employee empowerment** - The majority of respondents (19) indicated that employee empowerment was an important factor. On examining the extent to which respondents considered employees to be empowered; only six (6) respondents felt that employees had a suitable level of empowerment. Six (6) of the respondents drew a definite distinction in the levels of empowerment by Process Improvement type (Breakthrough vs. Incremental). With Breakthrough programmes, the core project team are often considered to be more empowered compared to the total group of people impacted by the change. With Incremental (Continuous) improvement programmes, the affected employees typically initiated the improvement ideas and were more empowered.

5.3 **Hypothesis 3**

There are other factors that influence Process Improvement programmes in South African organisations.

A number of additional factors were identified by the respondents as factors that contribute or impede the success of Process Improvement programmes. However, only those recurring across three or more interviews are discussed.

5.3.1 **Additional factor 1 - Value and Clarity of the Proposed Changes**

Eleven (11) respondents discussed the importance of the clarity of the change. The vision, objectives and benefits associated with the Improvement programme have to be clearly articulated in a manner suitable for different stakeholder groups to ensure everyone has a clear understanding of the change required of them. The value to be derived from the Process Improvement has to be quantified, made visible, tracked and communicated over the course of the programme.
5.3.2 Additional factor 2 - Pace of the Change

Five (5) respondents indicated the pace of change as a contributing factor to the outcome of Process Improvement programmes. During the course of an improvement programme, a key to ensuring that the momentum of the programme is maintained is the importance of demonstrating benefits as early on as possible and showing success. The rationalisation was that, if changes are visible, and people can see the benefits of the change, they are more likely to support and adopt the change.

5.3.3 Additional factor 3 - Inherent Culture of an Organisation

Four respondents highlighted that identifying the inherent culture of an organisation, taking into consideration the history and current state of an organisation and adapting Improvement Programmes to an organisation’s culture influences the success of an Improvement programme. Failing to tailor project approaches to an environment with specific dynamics may result in resistance to change and lower adoption rates of the change from the impacted employees.

5.3.4 Additional factor 4 - Sustainability of the Change

Ensuring the sustainability of the change is something that has to be planned for during an Improvement programme - this was noted by ten (10) respondents. Sustainability can be driven through a number of mechanisms: training on the changes; inclusion into company KPI’s; linking to individual performance contracts, introducing monitoring and control systems; ensuring ease of adopting the changes; not linking initiatives to people but to organisational benefits to prevent programmes collapsing when people move; or teams conducting post implementation checks. Sustainability has to be built in to avoid people reverting to old ways of working.

5.3.5 Additional factor 5 - Skills

Half (10) the respondents cited having the suitable skills as an important factor for both implementation and sustainability of the changes as part of Process Improvement programmes. The skills factor applies both to the project team and recipients of the change. Five respondents specifically mentioned the skill levels in South Africa as being a challenge faced within the country. The literacy and numeracy levels of employees impact the ability to fully leverage the more technical improvement methodologies, such as Six Sigma, that have strong analytical and statistical elements.

5.4 Hypothesis 4

Breakthrough improvement programmes have different success factors compared to Incremental (Continuous) improvement programmes.

The majority of respondents (12) did not distinguish CSF’s by Process Improvement type. However, eight (8) respondents did highlight that there were slightly different CSFs. Only the factors that were mentioned across more than one interview will be discussed. The tally marks indicate which category the factor was mentioned under (Breakthrough, Incremental or Common factor) (Table 2).

Table 2: Tally of Recurring Critical Success Factors by Improvement programme Type

<table>
<thead>
<tr>
<th>No.</th>
<th>Factor</th>
<th>Breakthrough</th>
<th>Incremental</th>
<th>Common</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Measurement and control</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Change management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Factor</td>
<td>Breakthrough</td>
<td>Incremental</td>
<td>Common</td>
<td>Total</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------------</td>
<td>--------------</td>
<td>-------------</td>
<td>--------</td>
<td>-------</td>
</tr>
<tr>
<td>3</td>
<td>Buy-in</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Clarity on objectives and benefits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Sponsorship, leadership commitment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Right resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Alignment to strategy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Rewards and recognition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There was clear overlap in terms of where respondents categorised the factors. The only factor that stands out as being mentioned more for a specific type of Improvement type is “Right resources”. Having the right resources dedicated to the project team was seen to be more important for Breakthrough type projects. The remaining factors had marginal differences.

5.5 Hypothesis 5

Organisations will continue with Process Improvement programmes where there has been a positive experience.

Respondents’ experience is plotted along the x-axis; likelihood to continue with Process Improvement programmes plotted along the y-axis. The size of the bubble indicates the number of responses. Responses marked as neutral were where respondents indicated a mixed response of both positive and negative experiences. Figure 4 below shows the summary of the results.

![Hypothesis 5 diagram](image-url)
Figure 4: Likelihood of continuing with Process Improvement programmes based on prior in relation to Hypothesis 5

Of the 13 respondents who had positive experiences, 11 indicated that the organisations they commented on were likely to continue with Process Improvement programmes. In addition, of the six respondents who had neutral experiences, five of them indicated that the organisations they commented on were also likely to continue with Process Improvement programmes.

The outcome of the analysis against the five research hypotheses is presented in the Table 3 below.

Table 3: Summary of Conclusions of Research Hypotheses

<table>
<thead>
<tr>
<th>No.</th>
<th>Hypothesis Statement</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Process Improvement programmes contribute positively towards organisation performance.</td>
<td>Accepted</td>
</tr>
</tbody>
</table>
| 2   | The following factors, based on Lok et al.’s [3] framework, contribute to the outcome of Process Improvement programmes:  
  • Strategic alignment;  
  • Structural alignment;  
  • IT alignment;  
  • Executive commitment; and  
  • Employee empowerment. | Accepted   |
| 3   | There are other factors that influence Process Improvement programmes in South African organisations. | Accepted   |
| 4   | Breakthrough improvement programmes have different success factors compared to Incremental (Continuous) improvement programmes. | Rejected   |
| 5   | Organisations will continue with Process Improvement programmes where there has been a positive experience. | Accepted   |

6 CONCLUSION

The study has confirmed that the factors as identified by Lok et al. [3] are considered important factors that influence the outcome of Process Improvement programmes in South
A noteworthy point on structural alignment was that a number of respondents cited programmes that are either currently underway or imminent that planned to reorganise structures to transition to a more process-orientated organisation. It is anticipated that the extent of structural alignment would improve over time in the organisations sampled.

A further set of five factors were identified in the study that were of significance and were critical to the success of Process Improvement programmes: (i) Value and clarity of the proposed changes; (ii) Pace of the change; (iii) Inherent culture of an organisation; (iv) Sustainability of the change; and (v) Skills. Factors (i) to (iv) are considered to be applicable irrespective of geographical location, however factor (v) was specifically noted as a factor more pertinent to South Africa (and possibly other emerging nations) and perhaps not as relevant to countries considered to be first world.

In conclusion, the factors as confirmed and identified by this study are considered by select South African firms undertaking Process Improvement programmes as being important in ensuring a successful outcome of Process Improvement programmes.

7 RECOMMENDATIONS FOR FUTURE RESEARCH

Recommendations for further research are influenced by the limitations of the study as well as research findings and are presented below.

- Improve the transferability of the results and extend the study to companies outside the Gauteng provincial boundary, and also across a broader spectrum of industry sectors to gauge applicability across the country and across industry sectors;
- Further investigate the factors that were identified to be important but not perceived to be adequate, i.e. structural alignment, IT alignment and employee empowerment;
- Further test the applicability of the additional five factors identified in this study across organisations;
- Conduct further quantitative research on the additional factors identified in the study to establish the relative importance of the factors and how they influence the outcome of Process Improvement programmes;
- As there was a perception that the “Skills” factor was a South African specific factor, it is recommended that the impact of skill levels, and skills availability on Performance Improvement programmes be further investigated across developed and developing countries; and
- There is a perception that the Financial Services industry is not as efficiency orientated as other industries and therefore does not apply the same levels of rigour in Process Improvement initiatives (linked to being as a result of the South African context where Financial Services organisations typically do not face the same cost pressure challenges as other industries that may be heavily linked to commodity prices). A study comparing the Financial Services industry against a Manufacturing/Mining sector is recommended to further explore this perception.

8 REFERENCES


