QUALITATIVE RESEARCH APPROACH OF CRITICAL FACTORS FOR SUCCESSFUL BUSINESS PROCESS REENGINEERING IMPLEMENTATION

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Abstract: This paper demonstrates the use of qualitative research methods to analyse business process reengineering (BPR) implementation in Private Higher Education Institutions (PHEIs) in Malaysia. We embarked on a case study to explore in-depth three organisations’ experiences with radical process change, namely BPR for the purpose of discovering how they achieved success. The factors are teamwork and quality culture, quality management system and satisfactory rewards, change management, less bureaucratic and participative, IT/IS, project management and adequate financial resources. This paper highlights that the choice of research approach depends on the particular research setting and context, which is appropriate for the researcher to answer research questions and to deal with research problems. The qualitative research approach refers to how data are collected and analysed, and the type of generalisation derived from the data. Data is the basis for the construction of reality data, and are the basic ingredients for building knowledge. The qualitative interviews generated the data, which enabled us to establish the critical success factors of BPR by using the Decision Explorer software. The qualitative research approach will guide the reader through the process of data collection and analysis as intended here.

Keywords: business process reengineering, critical success factors, qualitative, Decision Explorer.

1. INTRODUCTION

Radical process change initiatives have been called by various names such as process innovation, business process redesign, business process management, business process benchmarking, and core process redesign (Davenport, 1993a); however, they have different characteristics in terms of the degree of change (radical or incremental), the scope of exercise (internal or external), and the potential risks and benefits (Childe, Maull, & Bennett, 1994; Homa, 1995; Towill, 2001). It could be noticed that this approach is different from other business practices like TQM, continuous improvement, organisational learning or organisational development. It is found that the obvious point on which BPR differs from other approaches, is its ‘radical’ nature.

A commonly known definition of BPR is given by Hammer & Champy (1993), as “…the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance such as cost, quality, service and speed”. Many studies, (such as Ascari, Rock, & Dutta, 1995; Bhatt, 2000; Childe et al., 1994; Homa, 1995), have used this definition in their work. Based on it, BPR practice is a process-focused and radical approach which is connected to the organisational strategy. This process-focus, as stated by Homa (1995), is much related to continuous improvement, or kaizen in the Japanese approach. Kaizen is defined by Imai (1986) as a long-term and long-lasting improvement resulting from team efforts focused on processes. This approach calls for a total
organisation to work for constant and gradual improvement in every process. Stated simply, BPR re-examines the processes and finds a way to redesign them to make them parallel to organisational strategy.

BPR is also concerned to eliminate non-value added activities (Ascari et al., 1995; Khalil, 1997). This is similar to the work by Armistead, Harrison, & Rowlands (1995) who stated in a different way, but with the same meaning, that BPR is an approach to achieving radical improvements in performance by using resources in ways which maximise value added activities and minimise activities which only add cost, either at the level of the individual process or at the level of the whole organisation. Thus, the goals of BPR are to optimise the workflows and productivity in the organisation, particularly in doing a radical redesign of its key processes (Davenport, 1993a).

Therefore, we define BPR (or radical process change), as “a radical approach of re-evaluating, redesigning, and re-valuing the activities in the processes in order to improve the performance of the organisation”. The sub-sections on the BPR concept will elaborate more on three important aspects of BPR, including the radical approach, process-focus, and customer-orientation.

Previous studies focused on the CSFs of implementing BPR, which among the main success factors are support from top management (Daly, 2004; McAdam, 2003; Sadler, 2003), ambitious objectives, the deployment of a creative team in problem solving, and a process approach and integration of Electronic Data Processing (EDP). Davenport (1993b) stated that a successful change leader has a realistic and positive expectation about the outcome. The larger and more diverse an entity, the more difficult it is to effect and manage change. Ascari et al. (1995) have discussed four other elements leading to successful process change – a) culture (which is similar to Campbell & Kleiner, 2001; Mabin, Forgeson, & Green, 2001), b) processes, c) structure, and d) technology. The focus was also on identifying and improving core processes. However, the scope and maturity of the business process architectures and the nature of changes within processes vary within organisation. In addition, there must be significant changes in structure, especially with emphasis on cross-functional work teams. The various dimensions of the critical success factors for BPR have been highlighted, including change management, management competency and support, system structure, project planning and management, and IT infrastructure (Ascari et al., 1995; Bechtel & Squires, 2001; Smith, 2003). Smith (2003) highlighted that BPR aims to achieve performance breakthroughs by applying innovative ways of doing business. Among few things, he mentioned to manage radical change effectively includes communication is crucial to show support to the process change project and effective leadership to coordinate deployment of the resources to accomplish the strategic objectives.

We conclude that the major features for achieving success within an organisation are the definition of its mission and goals, an adequate analysis of current processes, and appropriate choice of processes for improvement. In addition, previous studies (Al-Mashari, Irani, & Zairi, 2001; Al-Mashari & Zairi, 1999; Vakola, Rezgui, & Wood-Harper, 2000) pointed out the importance of organisational strategy to be aligned with process change strategy to guide process change to achieve targets. While leadership factors stand on its own in this research context as a driver for successful implementation BPR, and which was discussed in our other paper. It should be reminded also that this paper focuses mainly on the qualitative research approach experienced by the researcher in conducting this research.

3. RESEARCH QUESTIONS AND PROPOSITIONS

The aim of this research is to investigate the factors for successful implementation of process change in PHEIs. This paper only focuses on one of the research objectives, which is: to determine the critical success factors of process change in PHEIs in Malaysia. The research question was, “What factors are critical to the success of process change in PHEIs?” The proposition considers whether a guided process change strategy will deliver organisational, tangible and strategic benefits. When pursued for process
change projects, various factors may lead to successful implementation. An organisation, which embarks on radical process change particularly, has to ensure it stresses the right factors. The factors including change management, culture, IT, project management, system, people, etc. (Al-Mashari, 1999; Al-Mashari & Zairi, 1999; Davenport, 1993a; Kim & Kim, 1998; Laiken, 2003; Mabin et al., 2001; Maull et al. 2003). Thus, the following proposition is put forward:

\[ P_1: \text{The emphasis on the CSFs of process change will improve the process performance.} \]

4. RESEARCH DESIGN PROCESS

4.1 Research Design Activities

Research design is about how the research is to be carried out with a basic plan or strategy, in order to draw general conclusions (Oppenheim 1999). Most authors, such as Miller (1991), Oppenheim (1999), and Easterby-Smith et al. (2002), stress the importance of research design to be effective in order to answer the research questions. Therefore, a researcher should integrate the research design to ensure that the study is relevant to the problem under investigation (Nachmias and Nachmias 1996; Sekaran 2000). Generally, the research design activities in this case consisted of three phases, which the literature review was carried out throughout the research process.

Phase 1. The Issues of Interests consisted of five major activities. First, the researcher reviewed the literature on change and transformation. After that, through this reading, the researcher then identified issues and variables that were discussed in the literature to find area of interest. Then followed a critical review of empirical surveys, capturing debates about various approaches of change and transformation. Together with this, the researcher also investigated in depth how change and transformation happened in organisations by focusing on published case studies. Finally, the resulted of these activities enabled the researcher to find the focus or scope of the study.

Phase 2. The Research Framework involved three major activities which were problem statement and research questions, propositions’ development, and research model. The identification of the problem statement and research questions was based on three main literature reviews of the key success factors for process change or BPR, approach and methodologies, and impact and related issues. The literature review focused more on the process change efforts, specifically on the BPR approach. Moreover, realising the issues of process performance in this phase moved the researcher to identify how to measure process change impact through a literature review, and continuing discussions of it. After that, an exhaustive critical review of these allowed the researcher to develop the research propositions. Consequently, the research model was developed as a guideline or roadmap for the implementation of process change.

Phase 3. The Data Collection and Analysis concerned five major activities, which started with the development of instruments for undertaking a preliminary survey. This development was based on the exhaustive literature review done. For example, the instrument development for a preliminary survey was mainly based on process change literature. After that, the analysis of candidates for case studies was done based on the responses obtained through the preliminary survey. This was followed by in-depth case studies, and after doing analysis, the findings were validated to enable appropriate conclusions.

4.2 Comparisons between Qualitative and Quantitative Approaches

It is useful to compare both approaches in order to know why the researcher conducted this research, and this is relates to the research question and goal of this research. The choice of research approach depends on the particular research setting and context which is appropriate for the researcher to answer research questions and to deal with research problems (Zikmund 1991; Sekaran 2000). Bryman (1993) stated that qualitative and quantitative studies are frequently depicted as mutually exclusive models of the research
Many studies have compared both qualitative and quantitative approaches by identifying their differences, and the advantages and disadvantages of using these two approaches (Bryman 1993; Cresswell 1994; Sekaran 2000), or even suggest their integration (Bryman 1993).

Layder (1993) stated that there are two types of qualitative studies: deduction (theory guiding data collection) and induction (theory emerging from data). The use of qualitative methods could offer facts, greater accuracy, deep understanding on the situation, and details in results. Furthermore, qualitative methods can capture depth of information, for example, to capture the richness and complexity of behaviour that occurs in natural settings from the participant’s perspective. Robson and Ballard (2000) found that the primary role of qualitative research in the higher education sector is of the same importance as in other market sectors. They stated that there is a particular need for qualitative research that can provide clear insight and understanding of the complex nature of diverse factors such as aspirations, hopes, motivations, and needs. Therefore, in order to get rich data Gummerson (2000) claimed that, in some cases, qualitative research needs to be informal and use in-depth interview. However, this method has disadvantages, such as being more complicated, slower, more expensive, more intuitive, and limited in answers.

Quantitative method on the other hand presents statistical results represented with numbers. Bryman (1993) stated also that in some case studies, the use of quantitative methods is important to meet the research objectives. With quantitative research, the researcher is independent of what is being researched, and the emphasis is on accuracy and precision. With this type of method, the researcher should aim to gather data from many investigation units, thus ensuring that results are statistically viable. Other obvious advantages of this method are claimed to be that it is cheap, straightforward, relatively quick, and results are easy to generalise. Quantitative method goes for breadth rather than depth of data. However, there are several disadvantages reported by authors, including the need for a higher level of interpretation skill, greater probability of bias, no details on explanation, and dependence on statistical accuracy. Therefore, Yin (1994) suggested ‘triangulation’ approach with the intention to reduce bias, in such a way that this approach uses multiple sources of evidence to essentially provide multiple measures of the same phenomenon hence reduce problems of construct validity and reliability. In this research we adopted a triangulation approach, which is a combination or integration of both qualitative and quantitative methods, and which also minimises disadvantages of one against the advantages of the other (Bryman 1993; Miles and Huberman 1994). Furthermore, it is believed this approach would provide the greatest insights and is suitable for this kind of case study based on its purpose and circumstances, which is in line with Easterby-Smith (1993) and Miles and Huberman (1994).

5. DATA COLLECTION

Generally, for the data collection method, firstly, a preliminary questionnaire survey was conducted to get insight into the process change undertaken by PHEIs, together with their profiles, and to obtain an answer to the major question of whether they actually implement BPR or any radical change of a similar nature to BPR. The returned questionnaires were then analysed to get a broad picture of the nature and characteristics of the implementation of process change in the respondent PHEIs. In consequence, this led to the selection of the case study PHEIs based on some decisive factors.

The analyses of the data and information obtained have guided this research towards identifying factors that critical for the successful implementation of radical process change or BPR, particularly for PHEIs, and generally for some other organisations. In order to ensure the accuracy of the findings, it needed to be tested and validated (Yin 1994). Figure 2 shows a summary of the data collection methods carried out in this research.
5.1 Preliminary Survey

Before doing the preliminary survey, most of the PHEIs were contacted by telephone and e-mail to establish a relationship and to build a good rapport. After that, a questionnaire survey was conducted to understand the implementation of process change by PHEIs, the nature and characteristics of process change, and their degree of successful implementation. In addition, information was collected about the profile of the PHEIs, including name of institution, address, year of establishment, number of students, number of staff, shareholders, and participant details. Questionnaires were mailed to the chief executive officers (CEO) of various PHEIs in Malaysia, and they were asked to answer the questions within 2 weeks and return it to the researcher using a self-addressed, stamped return envelope. For some cases, a reminder followed to ask the respondents to answer the questionnaires whether through electronic mail or post, and most of the time, the respondents were contacted by telephone. These techniques were used to increase the response rate among respondents (Zikmund 1991; Sekaran 2000).

5.2 Case Study Approach

Existing literature, for example Altman & Iles (1998), Francis & MacIntosh (1997), and Vakola et al. (2000), suggests that the assessment of BPR in organisations, also in HEIs, would benefit more by investigating in-depth the real experience of implemented BPR. Therefore, the research used identified established PHEIs which had embarked on radical process change for its detailed case study approach. The researcher had recognised that the data collection techniques should be varied in order to get rich data for this research and to scrutinise in detail all the important aspects related to it. Therefore, the researcher used interviews, secondary data and survey to get both breadth and depth information, and which is in line with suggestions in Miles and Huberman (1994) and Yin (1994). This paper focuses on the interviews, which the participants were selected through a process of joint discussion with the organisations concerned, particularly the chief executive officer and the representative executive. Table 1 lists the number of participants in each case.
Table 1: Case study interview participants

<table>
<thead>
<tr>
<th>Case/ participants</th>
<th>Top management (Set A Questions)</th>
<th>Team members (Set B Questions)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEI-A</td>
<td>4</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>HEI-B</td>
<td>5</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>HEI-C</td>
<td>5</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
<td><strong>18</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

A total of 32 interviews were conducted with the top management and team members in HEI-A, HEI-B, and HEI-C. For these interviews, the 14 interviews with the top management used Set A questions, and 18 with the process change team used Set B questions. Examples of the open-ended questions used in the interviews carried out are, “Please explain the factors that make the process change project succeed from your experience?” and “Please give your comments on how critical they were to your process change project success?” and which its’ approach considered suggestions by Rummel & Ballaine (1963) and Yin (1994) regarding effectiveness, reliability and validity issues.

Most of these interviews were tape-recorded and notes were taken, some were partially tape-recorded, and some cases were not tape-recorded due to some of them allowed the researcher just make notes. Considering what Rummel & Ballaine (1963) said about participants who object to having a recording made of what they are saying, the researcher tried to ensure the greatest accuracy in making notes during the interviews. Furthermore, each interview for top management lasted an average of 1 hour, and the interviews for process change team members took approximately 1.5 hours on average, some people being visited twice to get accurate information.

5.2 Issues in Case Studies
Generally, for the case studies, there were similar issues encountered, for example, time constraint, as most of the time the top management were as expected very busy. Therefore, the researcher had to convince the top persons to participate in the interviews by giving them a flexible time for this. It had very satisfactory results, because some of the appointments were made out of working hours, even during public holidays and weekends. It was a good lesson that the researcher realised the importance of making an appointment with them at least 2 weeks ahead, and just one day before the actual date, the researcher gave them a call to remind them about the appointment. Also, there are wide-ranging understandings of the concept of “business process reengineering”. Generally, this study used the term process change and briefly explained incremental and radical process change to overcome those barriers.

Specifically, in the conducting of the case studies, several issues arose in each approach the researcher used to answer research questions. The combination of several methods and sources, in other words triangulation, was used in this study in order to get reliable, accurate and sufficient information. Table 2 highlights major issues in this research.

Table 2 Issues during fieldwork

<table>
<thead>
<tr>
<th>Approach</th>
<th>Issues</th>
<th>Management of issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open-ended interviews with top management and process change team.</td>
<td>Actual experience related to process change.</td>
<td>Reminded about actual experience related to process change projects.</td>
</tr>
<tr>
<td></td>
<td>Identify how process change undertaken, step-by-step approach for process change.</td>
<td>Probed actual experiences related.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Asked for further details and examples on projects.</td>
</tr>
</tbody>
</table>
The data gathered from the formal interviews on the CSFs of process change, which was important for the researcher to be able to convince the top management to answer all the questions without feeling uncomfortable and insecure. Thus, as some of the answers were much related to ‘politics’, whether internal or external, the researcher had to be impartial and neutral at all times. Other common issues related to how the top management had to share their actual experience of leading the organisation in the process change. They had to be persuaded naturally to reveal the reality of leadership practised in their organisation. Another important issue was in gathering information from the process change teams. Their minds had to be refreshed on the actual radical process change projects that they were involved in. Furthermore, they had to identify when and what kind of radical process was redesigned. These investigations needed the researcher to help them to recall from time to time their actual experience. Furthermore, it took a lot of time and effort to ensure that the explanation was given on the right project and the right process. The questions on the CSFs of process change needed them to have really memorised what actually happened in reality last time. Therefore, for both groups of participants, the researcher needed to take several actions, such as giving relevant examples, using probing in the questions, and showing respect and impartiality. Most of the probing techniques used by the researcher were ‘straightforward’ and ‘usage probe’. These techniques were parallel to Vavra (1997) who explained in detail about both techniques.

6. DATA ANALYSIS AND FINDINGS

They were two major parts in this case study data analysis, qualitative and quantitative. This paper focuses on the qualitative part since it was dominant in this research design for identifying the CSFs.

6.1 Decision Explorer for Idea Mapping

The main software for the qualitative data analysis was Decision Explorer. A linkage diagram of participants’ ideas using the Decision Explorer software was developed, based on suggestions in Ahmad (2003), and Ahmad & Spicer (2002). The selection of this software was based on the suitability of its application for this kind of qualitative data. The authors identified the capability of this software to analyse the cognitive maps of research subjects, such as in terms of the amount of concepts involved, and their relationships.

Data were transferred onto Decision Explorer software prior to further analysis. In doing this, we referred to the notes taken and identified all the relevant factors discussed by interviewees, and after that keyed-in to the software to explain and interpret the meaning of actual practices in case studies. Table 3 shows major advantages and disadvantages of using this software.

Table 3 Advantages and disadvantages using Decision Explorer software

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Systematic in understanding situation and real issues</td>
<td>▪ Financial cost of software</td>
</tr>
<tr>
<td>▪ Idea mapping to show richness of data and decompose complexity</td>
<td>▪ No statistical output could be created</td>
</tr>
<tr>
<td>▪ Show linkages of factors</td>
<td>▪ No correlation could be established except for linkages only</td>
</tr>
<tr>
<td>▪ User-friendly</td>
<td></td>
</tr>
</tbody>
</table>

(adapted from Spicer 2002)
Among many things which Decision Explorer software, as stated by Spicer (2002), enables the researcher to do, three in particular were of interest and value to this researcher:

- to generate a map of ideas and pull them together into a coherent picture to help improve understanding of a situation,
- to discover the real issue behind the headline information using the advanced analysis facilities,
- to maintain the richness of data by managing its complexity, instead of having to use a weaker overview of the information to make effective presentation of reasoning through the structure of lines or arguments in a map.

These are true, and in this research it was found that by using Decision Explorer software the data were manageable in a systematic way, easily creating an idea map of very complex concepts and factors, and showing the actual linkages in it. The disadvantages of using this software seem to be on the cost side, which is quite expensive for the researcher. No statistical output could be created, and no correlation could be established using this software; however, it is adequate and suitable for these research purposes.

A mapping of the ideas was developed throughout the analysis based on transcription of interviews, summary card, memory card, and notes taken. The tape-recorded conversation was reviewed almost 4 to 5 times per person. The researcher jotted down missing points and compared them several times to proceed with analysis on those factors. The researcher tried hard to see and construct the linkages of all factors across all participants in each case study. Any repetition of the factors was fully marked, using a tally sheet. This step enabled the researcher to find out the most important factors and to get to know if the participants missed out some important points. Realising from Miles and Huberman (1994) that the data reduction or transforming process should continue after fieldwork until a final report is completed, the researcher followed this in order to get the real picture given by participants.

For the points raised by the participants that were not very clear, the researcher asked them for clarification, by phone and electronic mails. These were manageable, since the researcher has established a good rapport with almost all of the participants during attachment at their site.

6.2 Validation Approach

Similar with quantitative approach, validation is also important in any qualitative research approach (Yin 1994; Gummesson 2000; Marks 2000; Bomtaia 2002). For example, Yin (1994) stated that in a case study, to some extent it was found subjective and needed clarification. Therefore, two approaches to the findings validation were adopted: first, discussions with participants in the case organisations, and second, discussions with the panel experts who are the quality managers and consultants in the Public Universities in Malaysia. The results of these approaches to findings validation have led this research to a further refinement of factors which are discussed thoroughly in the following sections of the paper.

Examples to this validation process; in HEI-B, the CEO had clarified back the factors listed by the researcher, for example, he stated that in developing vision/ mission, the top management or leader has to be both innovative and creative. By having these, he believed that they will ensure success in any change efforts. The discussions with experts took about 1.5 hours and each were interviewed separately, where they were asked to examine the logic of the findings and then discuss it with the researcher. Basically, all of them agreed with the results, and additionally they only discussed some issues that had already been considered in this research. For example, the discussions also stressed the various roles of IT in radical process change - as driver, enabler, or component. It should be noted that in the CSFs, at first the researcher used the term ‘resources’ as one of the common factors across all cases. However, resulting from the discussions with the experts, we reconsidered the term used, since we realised that what was actually meant by resources in all cases referred to two major elements, namely money/ finance and people. Therefore, resulting from this, we had reconstructed the term as ‘financial resources’, which is
used in Figure 3. The argument is that all cases which mentioned financial allocation to their process change project thought it was important for success, where HEI-B and HEI-C named it ‘resources’ (including also people) and HEI-A used the direct term ‘financial allocation’. Furthermore, the researcher rearranged ‘people’ resources and included it in the change management factor, which was found to be more accurate.

6.2 Comparisons and Discussions on Findings

The benchmark taken was the University of Wisconsin-Stout (UW-Stout), the winner of the Malcolm Baldrige National Quality Award (MBNQA) in the education category in the Year 2001. This is thought to be appropriate because MBNQA is the standard for performance excellence. In fact, MBNQA was envisioned as a standard of excellence that would help organisations to achieve world-class quality.

The analysis across all three cases concentrates on the similarities and differences of the major factors and sub-factors. Figure 1 shows the similarities of the major CSFs and lists the ‘common CSFs’. Beside each box are listed the common factors which the researcher has compared against benchmark, the UW-Stout, by identifying the major practices for each factor.

The researcher has followed several steps in developing this figure. First, we have identified the factors that were mentioned by all or at least two of the case studies. After that, the researcher put them as common factors across cases. In some cases, the researcher realised that there were some factors which have different names but however have some similarities, therefore they were put together as one common factor. For example, ‘adequate financial resources’ in the common factors was identified through the findings of ‘financial allocation’ in Case 1, and ‘resources and IT’ in Case 2. Additionally, the UW-Stout examples were obtained from UW-Stout (2003).

![Figure 2: Common CSFs across case PHEIs](image-url)
It was found that many interesting issues came out from the factors highlighted by the cases. Although the factors derived from the interview sessions vary in terms of numbers and terms used, the coverage of all factors seems very similar across all three cases, as shown in Figure 1. The commonalities of CSFs include teamwork and quality culture, quality management system and satisfactory reward, change management, less bureaucratic and participative, IT/IS, project management, and adequate financial resources. Since radical process change promised the organisation a quick fix and short-term results, this does not necessarily imply merely a mechanistic approach or a hard side, without a focus on a soft side in terms of managing people and enabling a learning process (Ahmad 2004).

In this paper, since the focus is on the research design, and the objective is more on increasing readers understanding on the research method process, therefore further explanation about the findings will not proceed.

7. CONCLUSIONS

The research design described above is a rigorous way of obtaining research goals. Most participants of the case studies enjoy recounting the organisation practices. This paper specifies the method of using the Decision Explorer software for mapping the factors identified by the participants. This research design process enable the researcher to collect a wealth of data which can be used, after an exhaustive analysis procedure, to identify the CSFs of BPR implementation. The validation process is also important in this research in which the researcher had to rely on actual sources for verification. Therefore, we had to go back to the case organisations and needed their comments on the development of findings, particularly for their case. The discussions relied much on facts obtained through the case studies attachment, which need verification and validation. This was followed by the discussion with panel experts to refine the results obtained. This approach could be adopted to enable the researcher to reconceptualise, rearrange, modify and refine the respective factors to ensure its appropriateness. In conclusion, the findings have enabled us to suggest that a humanistic set of values is also important for the implementation of BPR.

REFERENCES


