KEY REENGINEERING ROLES FOR THE SUCCESSFUL IMPLEMENTATION OF BUSINESS PROCESS REENGINEERING PROJECTS IN SRI LANKA

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ABSTRACT

To be highly competitive in present globalised economy, there is a decisive need for organisations to rethink and transform the prevailing business processes for improved quality and efficiency, reduced costs, and increased profitability. This leads to the introduction and evolvement of Business Process Reengineering (BPR) projects in various organisations over the past decades. Since BPR facilitates the organisations to enhance the performance of their business processes, despite the complexity and riskiness of BPR projects, it has spanned numerous industries. Regardless of the extensive adoption, in many instances efforts of BPR implementation has proved unsuccessful. BPR projects often tend to be large with long durations and tend to involve numerous stakeholders. It has been asserted that the selection and organisation of the people, who really do the reengineering, is key to the success of the endeavour. Accordingly, there is a necessity to identify the key stakeholders who should get involved in BPR projects to assure their success. Since the key stakeholders involved in each reengineering project may differ based upon the process being selected for reengineering, this study is aimed investigating the key reengineering roles for the successful implementation of BPR projects.

Altogether, four (4) BPR projects implemented within the last two years in four different organisations in the Western Province of Sri Lanka were selected as case studies to investigate the BPR roles. Findings revealed eight (8) reengineering roles that is needed to facilitate successful implementation of BPR projects in the Sri Lankan context. The functions to be performed by each role during the pre-implementation, implementation and post-implementation phases of BPR projects were also identified. The study revealed two reengineering roles: i.e. 'initiator' and 'reengineering facilitators'; not identified in literature, but were recognised as important in BPR implementation in the Sri Lankan context. In doing so, the paper brings forwards the findings with respect to the key reengineering roles to be involved throughout the BPR projects in the Sri Lankan context.

Keywords: Business Process Reengineering (BPR); Key Reengineering Roles; Key Stakeholders; Sri Lanka.

1. INTRODUCTION

Regardless of the industry that they belong to, modern organisations must change themselves to close competitive gaps, achieve high performance standards and survive in a dynamic world (Atkin and Bjork, 2007; Redlein, 2005). In most instances, Business Process Reengineering (BPR) is used to achieve such alterations and optimisations within the processes (Redlein, 2005). Organisations that have enforced reengineering successfully have disclosed that the benefits obtained included quality and productivity enhancement, production cycle time reduction, higher profits, improved customer satisfaction, sales and marketing improvements, machine resources (Tennant and Wu, 2005). Conversely, for many organisations, the consequences of BPR has created a plethora of problems: i.e. low morale, declining unit performance, inconsistency in performance, and threats to main competences and competitiveness (Drago and Geisler, 1997). Since the outcomes of BPR may result in causing either positive or adverse impacts to the organisations (Tennant and Wu, 2005), organisations should attempt to implement the BPR projects meticulously (Schniederjans and Kim, 2003).

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As there are certain key roles that emerge during the implementation of BPR (Bradley, 1994; Hammer and Champy, 1993), selection and organisation of the people who really do the reengineering is vital to assure the project success (Hammer and Champy, 1993). Supporting this view, Khodambashi (2013) stated that since BPR is a top down approach, involvement of the right people in the redesign process is vital and considered to be one of the best practices. Review of literature further revealed that to ensure success, BPR projects must be executed by people within the organisation (Campbell and Kleiner, 2001), they must be involved openly and actively (Jackson, 1997) and should be consulted at all steps on the process. This implies that the reengineering roles can significantly impact the BPR project success. Involvement of several precise players who have vital roles to play throughout the project is essential to avoid issues in BPR implementation and thereby to assure the success. The aim of this paper is to investigate the key reengineering roles, which are essential to ensure the success of BPR projects and the functions to be performed by each reengineering role at different phases of the project.

2. BPR AND ITS APPLICATION

BPR is a management technique which has emerged from the quality movement (Ryan and Hurley, 2004) in the latter part of the 20th century (Alas *et al*., 2012). Review of literature made evident that the concept of BPR as it is known today was first introduced by Hammer in 1990 as a concept of obtaining radical improvements and enhanced business results.

Like other matured disciplines, the definitions of BPR domain also tend to vary, and substantial differences of views exist in relation to what precisely constitutes BPR (Ahmed and Simintiras, 1996). Among the numerous definitions of BPR, the definition provided by Hammer and Champy (1993) is found to be promising since it best encompasses the ideas of key constructs of BPR i.e. process, business process and reengineering. Hammer and Champy (1993, p32) defines BPR as *"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"*. In line with that, Teng *et al*., (1994) describes BPR as a technique for critical analysis and radical redesign of prevailing business processes to obtain great improvements in performance measures. Similarly, Patwardhan A., and Patwardhan (2008) has viewed BPR as discrete initiatives undertaken to drastically redesign and improve the work processes within a specific period. Thus, it is clear that the main intention of BPR is to entirely reinvent the business processes to achieve greater improvements. However, through the literature, three different forms of BPR can be identified: namely process improvement (i.e. use conservative approaches to make incremental improvements); evolutionary BPR (i.e. use incremental approaches to attain radical improvements); and revolutionary BPR (i.e. use clean slate approach to achieve radical and dramatic business improvements) (Lu and Yeh, 1998).

Since reengineering is all about organizing work, it can be applied to any organisation in which work is performed, whether it is a multi-billion company or a small company, and whether it belongs to public or private sector (Hammer and Champy, 1993). As per Redlein (2005), BPR can be used for any process: i.e. both core and/ or non-core processes; within every industry extending from production processes to office automation. Zygiaris (2000) revealed that BPR could be implemented in any organisation which consists of minimum twenty employees and possesses a strong management commitment to new ways of working, and a well-formed IT infrastructure. In recent past, BPR projects have become the driving forces of organisational change within the service sector, both in private and public organisations, to address and meet new challenges, particularly those related to the service quality (Jetu and Reidl, 2013). Similarly, Currie (1999) declared that several companies in the developed countries which were about to collapse have managed to sustain themselves in the market by means of adopting BPR.

3. IMPLEMENTATION PROCESS OF BPR PROJECTS

Since the real success of BPR depends on implementation (Clegg, 2000), organisations should be highly concerned with the approaches for implementing BPR projects and process for implementing BPR projects. Review of literature disclosed that, though the reengineering efforts can be executed entirely by the in-house teams, most of the BPR efforts had external assistance from the consultants (Crowe *et al*., 2002). Akhavan *et al*., (2006) has further emphasised it by stating that the use of outside consulting firms for reengineering is one of the most popular trends.

Various structured-based methodologies have been suggested for BPR implementation by different authors (Hammer and Champy, 1993; Hesson *et al*., 2007). However, a review of these different BPR approaches and methodologies revealed that, most pursue a path which is almost similar with recurring themes in main areas (Vakola *et al*., 2000). A typical BPR procedure can be seen to comprise typically of five steps: namely, preparing for reengineering; mapping and analysing the AS IS process (i.e. current process); design the TO BE process (i.e. new redesigned process); implement the reengineered process; and improving continuously (Hammer and Champy, 1993; Muthu *et al*., 2006). Via careful analysis, it is possible to categorize and organize the above stated steps into three BPR implementation phases i.e. Pre-BPR implementation phase, BPR implementation phase, and Post-BPR implementation phase, as identified by Radhakrishnan and Balasubramanian (2008).

Pre-BPR implementation phase of BPR projects covers envisioning (planning), initiating (establishing steering teams, select projects and teams), and diagnosing (mapping and analysing existing processes) (Emerie-Kassahun and Molla, 2013). Thus, this phase accommodates BPR implementation steps such as 'preparing for reengineering' and 'mapping and analysing the AS IS processes'. Based upon the mapping of AS IS processes, the critical process to be investigated and redesigned needs to be identified (Rinaldi, *et al*., 2015).

As per Emerie-Kassahun and Molla (2013), BPR implementation phase include redesigning processes, prototyping, implementing and managing the redesigned processes. Hence it can be realized that the main steps coming under this phase are 'design of the TO BE processes' and 'implement the reengineered processes'. Emerie-Kassahun and Molla (2013) has further stated that the post-BPR implementation phase involves on-going activity of process adaptation, acceptance, routinization, alignment of IS with the information needs of the redesigned processes, and management support system. This, makes it clear that 'improving continuously' is the step coming under post-BPR implementation phase.

Hence, it is clear that the BPR implementation process is a consecutive process with five key steps which should be performed properly to ensure the project success. In order to ensure the successful performance of such key steps in a BPR process, certain key reengineering roles need to be present.

4. KEY REENGINEERING ROLES FOR SUCCESSFUL IMPLEMENTATION OF BPR PROJECTS

Since reengineering projects tend to be larger, longer, and more exacting, than initially anticipated, there will be numerous stakeholders behind these projects (Ulbrich, 2006). There are certain roles that emerge during the implementation of BPR such as leader, process owner, reengineering team, team captain, steering committee, and reengineering czar (Bradley, 1994; Hammer and Champy, 1993). Each role has certain functions to be performed throughout the reengineering project and those roles have been identified by Hammer and Champy (1993). Table 1 summarises these key reengineering roles which are essential for successful BPR implementation together with their functions.

Table 1: Reengineering Roles and their Key Functions for the Successful Implementation of BPR Projects

Reengineering roles	Key functions
Leader	Act as visionary and motivator Appoints senior managers as owners of business processes Create an environment conductive to reengineering i.e. supporting others to perform Have authority over the resources involved in performing processes
Process owner	Responsible for reengineering a specific process Ensure that the BPR results are achieved Assemble a BPR team and do whatever required to enable the team to do its job Motivate, inspire and advise BPR teams Act as the teams' critic, spokesperson, monitor and liaison Creates and maintains strategic relationships with the Project Board and key stakeholder groups
Reengineering team	Reinvent the business i.e. produce the ideas and plans and turn them into reality Act as key change agents when new process is going to be put in place (Insiders) Act as imaginative thinkers i.e. envisioning a concept and making it happen (Outsiders) Should go through an interactive learning process to invent a new way of performing work
Team captain	Act as a team member and enable the team members to do their work

Reengineering roles	Key functions
	Establish agenda for team meetings and help team to stick to it
	Mediate conflicts between team members
Steering committee	Decides the order of priority among all the competing reengineering projects
	Make decisions with respect to resource allocation
	Hear and resolve conflicts among process owners
Reengineering czar	Serves as the leader's chief of staff for reengineering
	Enabling and supporting each individual process owner and reengineering team
	Coordinating all ongoing BPR activities
	Help select insiders for the team and identify and provide appropriate outsiders
	Advise new process owners on the issues and problems that are likely to encounter
	Keeps a watchful eye on the process owners to keep them on track
	Convene and moderate some discussions among the process owners
	Make sure the coordination among the process owners
	Concern with developing the infrastructure for reengineering
	Anticipate infrastructural needs and meet them even before they arise

Source: (Adapted from Hammer and Champy, 1993)

From the review of literature, it was clear that only a few authors have focus on identifying reengineering roles and that there is a general lack of literature related to this area. Moreover, no attempt has been made so far to look at the reengineering roles that should be involved in different phases of BPR projects. Thus, a relative void in literature exists with respect to key reengineering roles which needs to be addressed. This further reinforces the vitality of this study.

5.   RESEARCH METHODOLOGY

The aim of this research is to identify the key reengineering roles for the successful implementation of BPR projects. Thus, a qualitative research approach was adopted as it facilitates to achieve the aim by providing a deeper understanding of the area being investigated. Among the available qualitative research strategies, 'case study' approach was selected for this study as it allows the investigation of a modern phenomenon within its real-life context (Yin, 2009) and thus helping to gain an in-depth understanding of the problem being investigated (Morris and Wood, 1991).

Four cases were selected to conduct an in-depth analysis within the limited time frame. Due to difficulties in collecting data, selection of cases was limited to organisations in the Western province of Sri Lanka. Further, this study was intended to acquire responses from well reputed organisations who have good experience in the field of BPR so that the best practices in the industry could be well captured. Figure 1 depicts the criteria used for selection of cases.
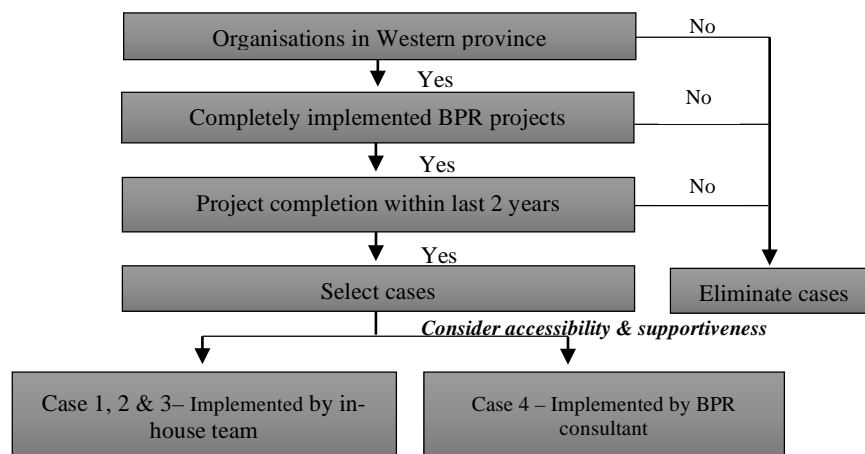

Figure 1: Criteria for Case Selection

As depicted in Figure 1, the selected reengineering projects from all the four cases have been undertaken within last two years and have reached full implementation by the time of study. Organisations can reengineer their business processes either with the assistance of in-house BPR team or with the assistance of BPR consultants (Refer section 3). Therefore, in order to replicate this true nature of BPR implementation within the data

collection process, it was decided to select both types of cases. In addition, in case selection concern was given towards selecting cases to represent both core and non-core process related reengineering efforts as discussed in section 2. Table 2 provides a brief description of the selected cases.

Table 2: Case Description

Case	Reengineered by	Reengineered process	Business sector	Selected reengineering process	Form of BPR	Duration (months)
A	In-house BPR team	Core process	Apparel industry	One of the production lines was reengineered by introducing automatic machines to reduce the process delays	Process improvement	18
B	In-house BPR team	Core process	Apparel industry	A production process was reengineered by isolating certain components from the process along with introducing automated machines to attain greater improvements	Revolutionary BPR	8
C	In-house BPR team	Core and non-core process	Telecommunication sector	All the processes relating to a particular product was reengineered via incremental steps to achieve radical improvements	Evolutionary BPR	6
D	BPR consultant	Core and non-core process	Manufacturing sector	All the processes in the factory was reengineered completely to attain radical and dramatic improvements	Revolutionary BPR	7

In total fourteen (14) semi-structured interviews were carried out with the key stakeholders in the reengineering projects of the selected organisations for the purpose of collecting the relevant data. The content analysis has been used as data analysis technique in this study. Among the data analysis software to support the content analysis, this study has selected QSR. NVivo (2011) software to capture the findings from the interview transcripts and for effective interpretation of the data.

6. CASE STUDY FINDINGS

Since literature has failed to provide a path to identify the key reengineering roles which may get involved in different phases of the BPR project, in this study an attempt was made to identify the key reengineering roles that may get involved in all the three phases of a reengineering project. The reengineering roles get involved in different phases of the BPR project will be discussed in the following sections.

6.1. KEY REENGINEERING ROLES IN PRE-BPR IMPLEMENTATION PHASE

Through the case study analysis, a total of eight (8) reengineering roles, which are involved in Pre-BPR implementation phase have been ascertained together with their key functions. Respondents' responses on various reengineering roles involved in the Pre-BPR implementation phase along with their functions are shown in Table 3.

From Table 3 it is vivid that, among the reengineering roles involved in Pre-BPR implementation phase, the role of 'initiator' and 'reengineering facilitators' are not being specified by the respondents from Case C. When considering the key functions performed by each reengineering role in Pre-BPR implementation phase, 'Selection of appropriate insiders for the BPR project' is the key function to be performed in the Pre-BPR implementation phase and being highlighted by all the 14 respondents. In addition, 'assembling the reengineering team', 'make decisions with respect to resource allocation', 'predict required resources and

infrastructure for the project', 'coordinate all the reengineering activities' are being specified by most of the respondents from all the four cases as vital functions to be performed in this phase and emphasised by 13 out of 14 respondents.

Table 3: Responses on the Reengineering Roles Involved in Pre- BPR implementation Phase and their Functions

Reengineering roles	Key functions performed	Cases				Total
		A	B	C	D	
Pre-BPR implementation phase						
Initiator	Initiate the project	2/3	2/4		3/3	7/14
	Appoint a leader for the project	2/3				2/14
	Review the project status periodically	2/3				2/14
Leader	Appoint a senior manager as the process owner			4/4	2/3	6/14
	Assign the reengineering czar	2/3	2/4	2/4	2/3	8/14
	Create objectives for the BPR effort		3/4			3/14
	Approve the project proposal		4/4		1/3	5/14
	Induce others to translate the objectives into reality		2/4	2/4		4/14
	Review the project performance and status time to time			4/4		4/14
Process owner	Assemble the reengineering team and enable the team to do its job	3/3	3/4	4/4	3/3	13/14
	Motivate, inspire and advise the reengineering team	3/3	1/4	2/4	2/3	8/14
	Created and maintained strategic relationship with the key stakeholders	3/3	3/4	4/4	1/3	11/14
Reengineering team	Discover and evaluate reengineering opportunities				3/3	3/14
	Review and map the existing processes		4/4		3/3	7/14
	Identify the inefficiencies in the existing processes		3/4	1/4	3/3	7/14
	Evaluate the feasibility of each option	2/3	2/4	1/4		5/14
	Determine project scope				2/3	2/14
	Gather the requests made for reengineering			2/4		2/14
	Determine the tasks that can be automated			4/4		4/14
	Produce ideas for re-design	3/3	3/4	4/4	2/3	12/14
	Design the new process		2/4	4/4	2/3	8/14
	Develop the project proposal	2/3				2/14
	Prepare prototype		4/4			4/14
	Communicate the changes to the customers		3/4			3/14
	Define the methodology for the project				2/3	2/14
Team captain	Establish agenda for team meetings	3/3	1/4	3/4	3/3	10/14
	Mediate conflicts between the team members	2/3	1/4	1/4	3/3	7/14
	Enable the team members to do their works			4/4		4/14
Steering committee	Decide the order of priority among all the competing projects	3/3	4/4	1/4	3/3	11/14
	Make decisions with respect to resource allocation	3/3	4/4	3/4	3/3	13/14
Reengineering czar	Select insiders for the reengineering project	3/3	4/4	4/4	3/3	14/14
	Predict required resources and infrastructure for this project	2/3	4/4	4/4	3/3	13/14
	Coordinate all the reengineering activities in this phase	3/3	3/4	4/4	3/3	13/14

	Monitor the activities done by the process owner		3/4			3/14
	Advise the process owner on the issues that are likely to encounter		1/4		3/4	4/14
	Make the leader aware of the project status time to time				2/4	2/14
Reengineering facilitators	Identify the inefficiencies in the processes and raise the need for reengineering	3/3				3/14
	Approve the project proposals	2/3			3/3	5/14
	Assist to assess the operational requirement	3/3	1/4			4/14
	Upgrade the IT infrastructure for this project				3/4	3/14

Moreover, since the 'reengineering team' has many key functions to be performed in the Pre-BPR implementation phase, 'assembling the reengineering team and enable the team to do its job' and 'selecting appropriate insiders for reengineering project' can be concerned as crucial functions to be performed in Pre-BPR implementation phase. This is almost in line with the respondents' responses on the vital key functions to be performed in this phase.

6.2. KEY REENGINEERING ROLES IN BPR IMPLEMENTATION PHASE

Outcomes of the interview revealed in total seven (7) key reengineering roles involved in the BPR implementation phase together with their key functions. Among such key functions, nine (9) functions are mentioned by the respondents from all the four cases and thereby insist the cruciality of the performance of such functions in the BPR implementation phase. Table 4 depicts the respondents' responses with respect to the key reengineering roles to be involved in BPR implementation phase along with their key functions.

Table 4: Responses on the Reengineering Roles Involved in BPR Implementation Phase and their Functions

Reengineering roles	Key functions performed	Cases				Total
		A	B	C	D	
BPR implementation phase						
Leader	Create an environment conductive to reengineering	3/3	4/4	3/4	3/3	13/14
Process owner	Motivate, inspire and advice BPR team	2/3	1/4	1/4	3/3	7/14
	Enable the team to do its job				2/3	2/14
	Maintain strategic relationship with the key stakeholder groups	2/3	3/4	1/4	3/3	9/14
	Make the steering committee aware of the project status			2/4		2/14
Reengineering team	Test the prototype	1/3				1/14
	Implement the reengineered process	3/3	4/4	3/4	3/3	13/14
	Communicate changes to the stakeholders and convince them	3/3	4/4	4/4	2/3	13/14
	Determine the impact caused by the project to the way of work		1/4	3/4		4/14
	Managing change	2/3	2/4	4/4	1/3	9/14
Team captain	Establish agenda for team meetings	2/3	1/4	3/4	2/3	8/14
	Mediate conflicts between team members	2/3	1/4	4/4	2/3	9/14
	Enable the team members to do their works		3/4		1/3	4/14
Steering committee	Make decisions with respect to resource allocation		4/4	1/4	3/3	8/14
Reengineering czar	Coordinate all the reengineering activities in this phase	3/3	4/4	4/4	3/3	14/14

	Monitor the activities done by the process owner				3/3	3/14
	Convene and moderate some discussions with the process owner	2/3	3/4			5/14
	Advise the process owners on the issues or problems that are likely to encounter	3/3	4/4		2/3	9/14
	Enable and support the process owners and reengineering team		4/4	2/4	1/3	7/14
	Make the leader or steering committee aware of the project status time to time				3/3	3/14
	Ensure the availability of needed infrastructure facilities when needed			1/4		1/14
Reengineering facilitators	Released the project stakeholders from their functional roles	1/3	4/4		3/3	8/14
	Provide IT support for the new process			1/4		1/14
	Assisted in recruiting new employees	2/3	4/4			6/14
	Facilitate in successful implementation of new process	3/3		1/4		4/14

In this phase, all the respondents from all the four cases have declared that 'coordinating all the reengineering activities' is the decisive task to be performed. Additionally, 'creating an environment conductive to reengineering', 'implementing the reengineered process properly' and 'communicating the changes to the stakeholders and convincing them' are also being disclosed by the respondents from all the four cases as critical functions to be performed and highlighted by 13 out of 14 respondents. Hence, proper performance of these key functions by the respective stakeholders can be concerned as the major step towards the project success.

6.3. KEY REENGINEERING ROLES IN POST-BPR IMPLEMENTATION PHASE

Through case study analysis, altogether five (5) reengineering roles were identified to be involved in Post-BPR implementation phase. Among such roles, the role of 'team captain' is specified only by the respondents from Case C. Conversely, the role of 'steering committee' and 'reengineering czar' were disclosed by all the three cases except Case C. Table 5 exhibits the respondents' responses on reengineering roles and their functions in Post-BPR implementation phase.

Table 5: Responses on the Reengineering Roles Involved in Post- BPR Implementation Phase and their Functions

Reengineering roles	Key functions performed	Cases				Total
		A	B	C	D	
Post-BPR implementation phase						
Process owner	Ensure that the BPR results are achieved	2/3	3/4	2/4		7/14
	Continuously improve the reengineering process by monitoring and measuring the reengineered process		4/4	4/4	2/3	10/14
	Maintain strategic relationship with the key stakeholder group		3/4	4/4	2/3	9/14
	Communicate the project status time to time to the steering committee			3/4		3/14
Team captain	Conduct awareness programmes			4/4		4/14
Steering committee	Make decisions with respect to resource allocation	2/3	2/4		2/3	6/14
Reengineering czar	Advise the process owners on the issues or problems that are likely to encounter	2/3	3/4		1/3	6/14
	Monitor the activities done by the process owner		1/4			1/14

Reengineering facilitators	Contribute in successfully operating the reengineered process	3/3		1/4		4/14
	Establish a new reward system	2/3	4/4		3/3	9/14
	Identify the inefficiencies in the new process	3/3	3/4	1/4	3/3	10/14
	Make requests to improve the new process		3/4		3/3	6/14
	Measure and evaluate the effectiveness of changes			4/4		4/14
	Check the effectiveness of IT infrastructure periodically			4/4		4/14

Among the functions to be performed in this phase, 'identifying the inefficiencies in the new process' and 'continuously improving the reengineering process by monitoring and measuring the reengineered process' were the key functions emphasised by 10 out of 14 respondents. However, 'identifying the inefficiencies in the new process' was divulged from all the four cases whereas 'continuously improving the reengineering process by monitoring and measuring the reengineered process' was specified by the respondents from only three cases i.e. Cases B, C, and D. In addition, 'maintaining strategic relationship with the key stakeholder group' and 'establishing a new reward system' were also being mentioned by the respondents as vital functions to be performed in this phase.

7. DISCUSSION

Overall, in addition to the reengineering roles identified from the literature, from the case studies two more roles named as 'initiator' and 'reengineering facilitators' were identified. From the selected cases, the role of initiator is mainly being highlighted in Case A. In Case A, the persons who performed the roles of initiator and leader were different whereas in the Cases B and D, the same person has performed the roles of initiator and leader. However, in Case C no single person played the role of initiator, and their Governance Board (i.e. steering committee), only made decisions with respect to the initiation of BPR projects based upon the suggestions made by the business users or customers.

When considering the key functions identified through the literature review and case studies, some of the functions are in line with the literature whereas some are truly elicited from the case studies. Among the key functions to be performed by the leader, 'assign the reengineering czar', 'approve the project proposal', and 'review the project performance and status time to time' are the functions purely identified through the case studies. Similarly, among the functions to be performed by the process owner 'make the steering committee aware of the project status' and 'communicate the project status time to time' are ascertained through respondents' responses and were not disclosed from the existing literature. Conversely, Hammer and Champy (1993) has identified 'acting as a team's critic, spokesperson, monitor and liaison' as one of the functions to be performed by the process owner, but it was not disclosed from the case study findings.

Among the functions of the reengineering team elicited through the case studies, most of the functions are purely discovered through case studies i.e. 'discover and evaluate reengineering opportunities', 'review and map the existing processes', 'identify the inefficiencies in the existing processes', 'evaluate the feasibility of each option', 'determine project scope', 'gather the requests made for reengineering', 'determine the tasks that can be automated' 'develop the project proposal', 'prepare prototype', 'define the methodology for the project', 'test the prototype', and 'determine the impact caused by the project to the way of work'. Comparably, when referring to the functions of the team captain, 'conducting awareness programmes' is the one only function ascertained in addition to the literature findings. Conversely, the functions of the steering committee identified through case studies are in line with the literature findings. However, in addition to the functions of the reengineering czar identified through literature, case study analysis revealed an added function i.e. 'make the leader or steering committee aware of the project status time to time'.

Further, based upon the respondents' responses it has been ascertained that reengineering roles involved in Pre-BPR implementation phase and BPR implementation phase are almost same except the role of initiator. However, the functions being performed by each role is different from phase to phase. Moreover, from the case studies an immense knowledge is gained on reengineering roles and relationship among each role based upon which the following diagram is being developed. Figure 1 illustrate the interactions among the reengineering roles.
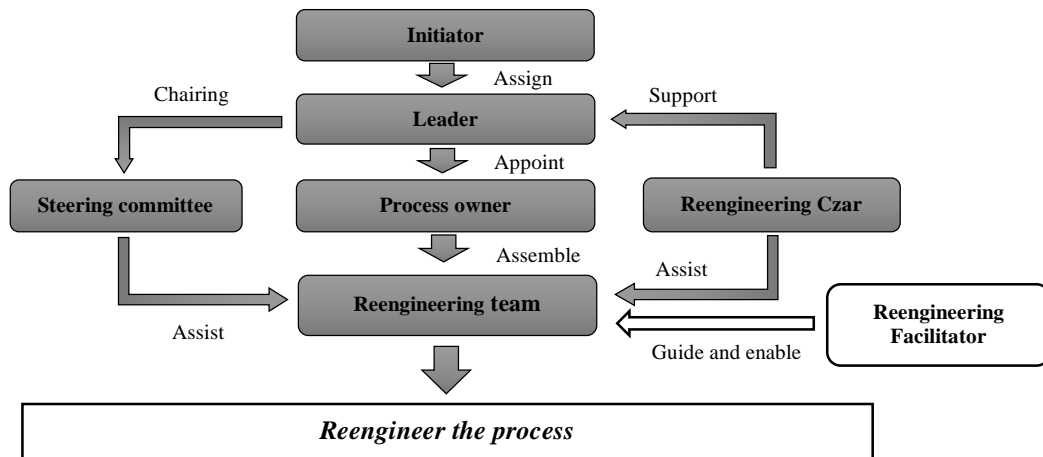
Figure 1: Interaction Among the Reengineering Roles

As shown in Figure 1, in each case the reengineering team was responsible for reengineering the selected process, whereas other stakeholders provided their assistance and support to the reengineering team members to successfully proceed with the project. The reengineering facilitator is most probably an independent resource within the organisation who enable and support the reengineering team to perform its duties properly whereas the rest of the stakeholders are part of the BPR project.

8.   CONCLUSIONS

BPR is about radical redesign of business processes to achieve tremendous improvements in certain critical areas. Though BPR offers many benefits to the organisation, in most instances efforts of BPR has proved abortive. Reviewing of literature related to BPR has revealed that only few authors have given sufficient concern towards identifying the key reengineering roles to be involved throughout the BPR projects. Moreover, no any directions were provided in literature to identify the reengineering roles to be involved in each phase together with their key functions. Thus, in this study an attempt was made to identify the reengineering roles to be involved in each phase of the BPR projects together with their functions.

A qualitative research approach was adopted in this study, in which case study was selected as the research strategy. In total four (4) case studies were conducted among the organisations in the Western Province of Sri Lanka who have completely implemented BPR projects within last two years.

Through the case study findings in total eight (8) reengineering roles (i.e. initiator, leader, process owner, reengineering team, team captain, steering committee, and reengineering czar) were discovered along with their functions. Among the identified roles, the role of 'initiator' and 'reengineering facilitators' were truly elicited from the case studies and not disclosed via the existing literature, whereas rest of the six roles are in line with the roles identified by Hammer and Champy (1993). Further, the analysis revealed that there are substantial differences between the key functions of each reengineering role identified through the literature and case studies (refer section 7). Moreover, via the case studies reengineering roles and interaction among such roles has also been ascertained. As a whole, it is expected that the findings of this paper with respect to the key reengineering roles that should be involved in each phase of BPR projects along with their functions will help organisations to assure the successful implementation of BPR projects.

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