Role of Human Resource Management in Business Process Re-Engineering: An Empirical Study

1 Sindhura.K
Research Scholar, Department of Management Studies, University of Madras

2 K. Imran Basha
Assistant Professor, Department of Corporate Secretaryship, The Quaide Milleth College for Men, Chennai -100

3 Mr.G.Chinna Pullaiah,
Assistant Professor in CSE,, Srinivasa Ramanujan Institute of Technology, Ananthapuramu,, Andhra Pradesh, India:515701

4 Dr Subha B
Assistant Professor, Department of Management, Kristu Jayanti College
Bangalore

Abstract
Presently, competition is becoming more intense, and with the development of new rivals from diverse business organisations with varied objectives, the firm is seeking new forms of competitive advantages that are unusual, difficult to copy, and can be utilized indefinitely. The purpose of the above research is to look atthe impact of Human Resource Management as well as Information Technology in the deployment of methods of Business Process Re-engineering targeted at enhancing the performance of business organisations. The study employs a method of reviewing the literature, with a synopsis of the hypothesis, findings, as well as other research information obtained from relevant sources in order to sustain as the cornerstone for research activities. A number of assertions about human resource management are taken from the literature as well as tested by conducting interviews with key executives in organisations whose business process re-engineering initiatives either have been finished or are currently ongoing. According to the study's findings, business process re-engineering techniques mix Human Resource Management as well as Information Technology to create as well as improve firm efficiency. A sample of 153 respondents was collected from a "standard questionnaire," created on a five-point interval scale.

Keywords: Human Resource Management, Business Re-Engineering, Information Technology, Substantial Productivity Gain, Beneficial Management Techniques.

Introduction
Business organizations are entering a new age, as evidenced by advances in science as well as knowledge, global marketplaces, the growing involvement of consumers in innovation, and the importance of information technology in business operations. Rapid developments in corporate globalization have created substantial hurdles for firms seeking to preserve innovation and long-term growth. Corporations have been urged to reorganize as well as concentrate on change management as a result of competitiveness as well as globalization. As a result, corporate organizations must improve their ability to learn patterns, new values, as well as work techniques so that these aspects may be turned into an organizational life that is better prepared to respond to any organizational crisis.

The contemporary environment is marked by increased levels of competitiveness. In the face of fierce competition, the corporation attempts to obtain market share in the global economy. Quality, client happiness, as well as profitability are the top priorities for every business. Companies that wish to grow their market share or increase their profitability must adapt to changes in their business environment. Changes in economic situations heightened the company's interest in employing BPR solutions to ensure the long-term success of business organizations. To deal with technological change, Business Process Re-Engineering has been advocated as a beneficial strategy for management.

Business Process Re-engineering (BPR) is a business transformation method that stresses customer-focused business management techniques via the use of Information Technology. By assuring the deployment of the

selected strategy, information technology and human resources play a critical part in the company's capacity to function successfully. The notion of business process re-engineering alters traditional perceptions of corporate activity. This is since it employs resources, particularly human resources and information technology, in all sectors of the company organization. Figure 1 shows the various dimensions of BPR.
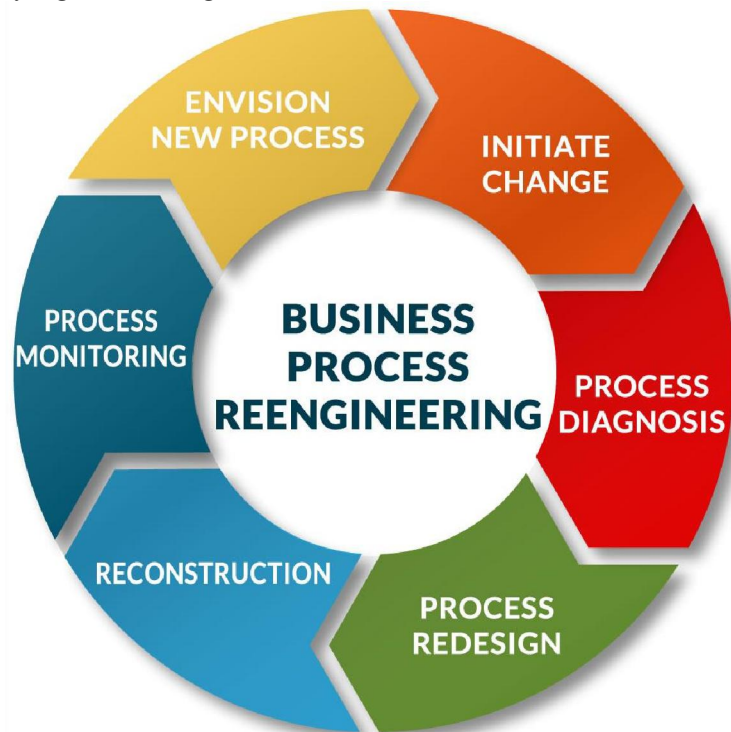

Figure 1 Dimensions of Business Processing Reengineering

According to **Willmott (1994)**, Business Process Re-Engineering (BPR) is a comprehensive restructuring of business operations that demand the usage of Human Resource Management as well as Information Technology (IT). Furthermore, Business Process Re-Engineering is a profound and revolutionary rethinking of business procedures to accomplish substantial improvements in key and futuristic effectivenesss indicators such as expenses, quality of service, as well as speed. Moreover, Business Process Re-Engineering (BPR) is more than just a program to enhance business operations; it is a program to improve the whole business process operations.

Literature Review

Business process reengineering (BPR) has been advocated as a beneficial management technique for assessing and revamping internal and external workflows and processes. **Newman, et al. (1998)** reinforce this viewpoint by stating that they are reinventing their organisations, altering the way they operate, and generating dramatic gains by leveraging human resources as well as information technology as facilitators. As a result, a strategy for information technology management is necessary. Some traditional organisational response approaches do not operate in information-technology-enabled workplaces. The technology planning process tends to improve over time.

Zucchi & Edwards (1999) examined and asserted that current competition is tightening, in conjunction with the resurgence of new rivals coming from different corporate organisations with different approaches, so the firm is now on the lookout for additional sources of competitive benefit, that are unique, hard to emulate, as well as can be used continuously. To prosper in a competitive business climate, corporate organisations are always looking for new methods to function. Many firms use management methodologies such as Business Process Reengineering (BPR) to achieve high business performance. Many researchers on the other hand, argue that many firms are applying Business Process Reengineering to address key problems, enhance efficiency, quality, and cut costs in order to achieve success or be noteworthy.

Azhar, et al. (2013) examined and concluded that because business reengineering entails a plethora of human resource difficulties, it presents the human resources department with a wonderful chance to stamp its authority on a company. "It is up to human resources to take the effort and define its position," says Janet Caldow, a senior analyst at IBM. "During most re-engineering projects, things aren't precisely specified. Those who take the first step are given the opportunity to pave the way." Various experts believe that HR executives may give vital assistance as well as guidance to any program as it progresses.

Zucchi & Edwards (2000) presented a study on the resemblances that surfaced with respect to Human Resource Management practices as a "typical" sequence to scrutinize the resemblance of human resource management techniques in re-engineered organisations, and a "vertical analysis" was performed to evaluate the individual organisations studied with this trend. They investigated the importance of imagination in corporate advancement concepts. The goal of their study was to look at the function of creativity in business process improvement paradigms in Japanese as well as American enterprises. According to the study's findings, US firms want rapid change to boost performance.

Roy, et al. (1998) investigated and asserted the link between business process reengineering (BPR) as well as Human Resource Management. A variety of hypotheses about human resource management are taken from the research as well as tested by interrogating top executives in UK corporations whose business process reengineering initiatives had been either finished or were still in the process. The claims are examined under somewhat four primary headings: structure as well as culture, managers' roles, teamwork, and the compensation system. The result is that the Business Process Re-Engineering fundamentals on human resource management presented in the literature appear to be fully applied in the majority of the organisations evaluated.

According to **Launonen & Kess (2002)**, Business Process Re-Engineering (BPR) is a renowned, if somewhat criticised, change management strategy. It is a customer-driven and information technology (IT)-based strategy to organisational transformation done to allow improved performance, such as cost savings, shorter cycle time, greater quality of products, as well as enhanced customer happiness. Although there is a vast body of literature on re-engineering ideas and possibilities, there is little actual evidence on the accomplishment or disappointment of BPR activities. This is especially true for small and medium-sized businesses (SMEs), where the potential for BPR advantages may differ dramatically from those of bigger equivalents. Although this has not been validated, the research asserts that SMEs have as good a chance of effectively re-engineering as their bigger counterparts. SMEs, on the other hand, may find it difficult to re-engineer due to limited resources, such as IT and BPR skills, and budgetary restrictions. This study examines the function of BPR in SMEs and proposes a methodology for evaluating its deployment capability. As the foundation for empirical testing, factors that assist and hinder BPR performance are discovered and analysed. A collection of hypotheses is constructed that allows the paradigm to be operationalized. The eventual objective is to provide a methodology as well as tool set to help SMEs who want to reengineer their business processes.

Buchananl (1997) investigated and stated that one of the most lauded, but also hotly discussed, issues in contemporary management is the redesign of business processes. The focus appears to have been on its actual application and the significant benefits made by applying it, rather than on the development of theories as well as models. Many of the techniques as well as resources were adapted from production as well as service operations, logistics and delivery, and product development. There have been few structural categories offered, such as in manufacturing and service processes. Similarly, developments in information technology have aided in the creation of corporate procedures. The tactical influence of a BPR initiative appears to be exceedingly difficult to quantify. As in the scenario mentioned, the deployment of BPR might become a multi-year undertaking. Although the effectiveness or inefficiencies of a specific process is not always straightforward to illustrate, changes in procedures are quantifiable. Nevertheless, shifts in the strategic roles may go unreported. If being a low-cost manufacturer is not the desired approach, be wary of single-mindedly improving operational efficiency. This frequently results in a strategic blunder by capturing undesirable and unproductive consumer categories.

Sadat Safavi, et al. (2014) examined and concluded that numerous organisations have achieved major improvements in recent times through Business Process Re-Engineering (BPR). In the majority of situations, these adjustments were required to fulfil the demands as a result of a more intense as well as globalized marketplace. Rather of focusing on these economic goals, the study illustrates how numerous organisational reforms considered human elements. Some essential principles for incorporating human aspects into design considerations may be found in the literature on information technology adoption and organisational change. Furthermore, it demonstrates that the technical, technological, as well as human elements must all be maximised in tandem to get the greatest substantial productivity gains. Given the importance of the changes brought about by BPR, one may expect people who will have to live with them to be heavily involved in their design and implementation.

Abubakar & Palisuri (2019) researched and discovered that Business Process Re-Engineering (BPR) has become a widespread prescription for management. The basic idea of BPR is that considerable performance gains may be realised by redesigning business processes. While BPR's theory of revolutionary performance enhancement is a compelling message, experiences have been varied, as well as the study indicates that in order to surmount some of the challenges, the notion may ought to be reconsidered. The vacation stage is ended, and early hypotheses are giving way to emergent study findings, reality is dispelling misconceptions, and practise and increased knowledge are pushing the boundaries. The study claims that BPR is widening its reach beyond

its initial confined, internal, as well as analytic emphasis through an evaluation of the scientific literature and the creator's own research. This study emphasises how the notion is expanding and gives a variety of topics that appear to best encapsulate the growing conception.

Mertins et al. (1997) investigated and concluded that Business Process Reengineering (BPR) advocates the fundamental examination as well as remodel of business procedures, acknowledging that the legacy of modern management has resulted in the excessive fragmentation of work practises in organisations today. This is represented in the hierarchical organisational structure of functional departments, with individual as well as departmental goals substituting general organisational goals. The research describes the creation of a BPR-specific technique. The practical use of this technique in an actual BPR initiative in one organisation is explained, as are some of the project's results as well as lessons gained.

Padayachee & Shano (2019) demonstrated that the strategic process of HRM and BPR activities and functions, as well as the full elements of human resource management and BPR, when integrated result in a cohesive sequence of tasks to make the business proficient. **Padayachee & Shano (2019)** highlighted HRM activities such as training, development, as well as hiring skilled employees as well as lowering the cost of delivering products and services, fostering innovation, research advancement, and developing efficient communication should be combined with BPR procedures (process plans, gap analysis, timeliness, issue resolution processes, training and development, and communication strategies). According to the researchers, the findings of the combination give the architecture for efficient business operations, which strategically as well as competitively position the firm in the market for their strategic capabilities. Based on the model features that characterise HRM and BPR activities, they demonstrated that HRM activities significantly improve BPR activities in many sectors of business organisations. Those elements, according to **Padayachee & Shano (2019)**, include enhanced performance, cost containment, cost-effectiveness, creative thinking, interaction, legitimacy, constant implementation, as well as employee commitment and motivation to convey products and services to achieve organisational aspirations as well as priorities.

Sidorova & Isik (2010) investigated and stated that the research focuses on business process reengineering (BPR), which consists in drastically changing organisational processes through the efficient use of Information Technology (IT) to achieve important advancements in terms of reliability, effectiveness, as well as profitability. An overview of Business Process Re-Engineering (BPR) was conducted in three French groups as well as their Tunisian subsidiaries. The acquired data were systematically examined in an endeavour to assess the primary indications of a Business Process Re-Engineering project's effectiveness and compare the value of these indicators in the context of France vs Tunisia. The study confirms that adhering to the basic principles of business process reengineering (BPR) and diversifying the human resources participating in the project may result in increased productivity, higher quality products and/or services, and cheaper costs. Furthermore, our findings reflect the extent to which respect for values and variety of resources are more significant in French enterprises than in their Tunisian counterparts.

Objective of the Study
1. Measuring the role of HRM in Business process re-engineering.
2. To ascertain how Human Resource Management help in re-engineering of business process.

Methodology
The study is empirical in nature. Number of respondents who participated in the study was 153. A structured questionnaire was prepared for the collection of data from respondents. Mean and t-test was applied to identify the result of the research. The method of sampling was convenience sampling.

Study's Outcome
Table 1 displays Respondent's gender, males are 54.90%, and females are 45.10%. With reference to the age group, 22 to28 years are 34.64%, respondents between 28 to 35 years were 26.80%, respondents who were 35 years and above are 38.56%. About Work experience, 0 – 3 years are 25.49%, 3 – 6 years are 39.87%, and More than 6 years are 34.64%. Regarding Industry, Banking / Insurance Industry is 30.72%, Manufacturing Industry is 33.33%, and Tourism Industry is 35.95%.

Table1. Respondent's Demographic Details

Variable	Number of respondents	%
Gender		
Male	84	54.90%
Female	69	45.10%
Total	**153**	**100 %**
Age		
22 to 28 years	53	34.64%
28 to 35 years	41	26.80%
35 years & above	59	38.56%
Total	**153**	**100 %**
Work Experience		
0 – 3 years	39	25.49%
3 – 6 years	61	39.87%
More than 6 years	53	34.64%
Total	**153**	**100%**
Industry		
Banking / Insurance Industry	47	30.72%
Manufacturing Industry	51	33.33%
Tourism Industry	55	35.95%
Total	**153**	**100%**

Table2Role and Actions of HRM in Business Process Re-engineering

Sr. No.	Statements	Mean Value	t-Value	Sig.
1.	Human Resource Management shape up the process to make it successful	4.23	15.482	0.000

2.	HRM creates job descriptions and statements displaying new corporate orders	4.19	15.073	0.000
3.	Human Resource Management helps in training the new workforce	3.17	2.188	0.015
4.	Vital role is played by HRM in moulding the new corporate culture	4.09	13.743	0.000
5.	HRM must discuss with employees to know their opinion before business process re-engineering	3.15	1.922	0.028
6.	HRM must prepare revised employee performance management plan and clarify new targets	4.29	16.254	0.000
7.	HR department must have proper coordination with IT department before re-engineering of the process	4.30	16.534	0.000
8.	HRM must streamline the work among employee to increase their productivity	3.19	2.427	0.008
9.	Human Resource Management must act proactively and promote healthy work culture	4.27	16.029	0.000
10.	HRM must re-train employees on periodic basis to improve skills related to IT and Business process re-engineering program	4.19	15.282	0.000

Table and Figure 2 shows mean values of the "Role and Actions of HRM in Business Process Re-engineering" the first statements of T-test are about shaping up of the business process, "Human Resource Management shape up the process to make it successful" the mean value is 4.23, next statement is "HRM creates job descriptions and statements displaying new corporate orders" with the mean value of 4.19. Third statement is about training of new employees "Human Resource Management helps in training the new workforce" the mean value is 3.17, next statement is "Vital role is played by HRM in moulding the new corporate culture" having the mean value of 4.09. Fifth statement "HRM must discuss with employees to know their opinion before business process re-engineering" have scored the mean value of 3.15.
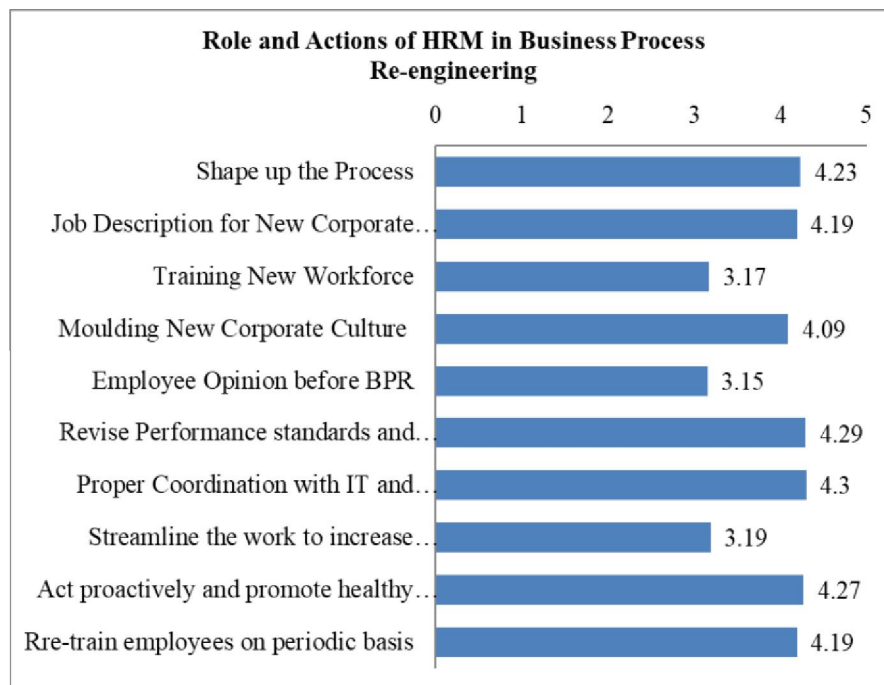

Figure 2 Role and Actions of HRM in Business Process Re-engineering

Next statement" HRM must prepare revised employee performance management plan and clarify new targets" attained the mean value of 4.29. Seventh statement is regarding coordination with IT department "HR department must have proper coordination with IT department before re-engineering of the process" the mean value is 4.30, next statement "HRM must streamline the work among employee to increase their productivity" the mean score is 3.19, ninth statement is regarding the promotion of healthy work culture "Human Resource Management must act proactively and promote healthy work culture" the mean value is 4.27. The last statement is "HRM must re-train employees on periodic basis to improve skills related to IT and Business process re-engineering program" the mean score is 4.19. T-value of each statement of survey regarding the "Role and Actions of HRM in Business Process Re-engineering" is found to be significant as the t-value of each statement are positive and significance value is found to be less than 0.05.

Conclusion

In today's world of strong competition and rapid transformation, effective organisations are those that can adapt to change. Organizations that refuse to evolve and remain stagnant will perish. As a result, managers must develop the main transformation sequence in order for business organisations to survive as well as become responsive to the changing world around them. Business process re-engineering is an influential management strategy for changing organisations by implementing Business Process Re-Engineering facing challenges without the assistance of human resources as well as information technology to accommodate the deployment of business process re-engineering in the organization. Human Resource Management serves as Information Technology users and information technology serves as a lubricant. More and more employees are developing stronger relationships with their jobs, and on the other hand, the more entrepreneurs have confidence in their subordinates and the proper delegation of authority, the more the individual will be engaged, and thus their potential will boost, as well as the company will move toward progress and expansion. Several elements must be considered while reengineering effective business processes. Because the hazards and shortcomings involved with adopting business processes are quite high, it is critical to explore the causes of failure using a methodical and interdisciplinary approach. T-test was applied to identify the result of the study, as the significant value for all statements is less than 0.05 it will be considered as significant.

Reference

1. Abubakar, H., & Palisuri, P. (2019). The Role of Human Resources and Information Technology on Implementation of Business Process Reengineering Strategy. In *2018 International Conference on Islamic Economics and Business (ICONIES 2018)* (pp. 46-49). Atlantis Press.
2. Ahmed, P. K., & Simintiras, A. C. (1996). Conceptualizing business process re-engineering. *Business Process Re-engineering & Management Journal*.
3. Azhar, Z., Nawaz, M., & Gul, A. (2013). Role of human resources management in the effectiveness of business process reengineering. *Journal of Resources Development and Management-An Open Access International Journal*, 1.
4. Bhasin, S., & Dhami, S. S. (2018). Business Process Reengineering–The Role of Human Resource Function: A Comprehensive Review of Literature. *Int. J. Bus. Manag. Res*, *8036*, 1-18.
5. Bradley, P., Browne, J., Jackson, S., & Jagdev, H. (1995). Business process re-engineering (BPR)—a study of the software tools currently available. *Computers in Industry*, *25*(3), 309-330.
6. Buchananl, D. A. (1997). The limitations and opportunities of business process re-engineering in a politicized organizational climate. *Human relations*, *50*(1), 51-72.
7. Evans, R. (1994). The Human side of business process re-engineering. *Management Development Review*.
8. FarajAllah, A., El Talla, S. A., Abu-Naser, S. S., & Al Shobaki, M. J. (2018). The impact of technological and human requirements for re-engineering processes in improving productivity.
9. Launonen, M., & Kess, P. (2002). Team roles in business process re-engineering. *International Journal of Production Economics*, *77*(3), 205-218.
10. Mcadam, R., & Leonard, D. (1999). The contribution of learning organization principles to large-scale business process re-engineering. *Knowledge and Process Management*, *6*(3), 176-183.
11. Mertins, K., Heisig, P., & Krause, O. (1997). Integrating business-process re-engineering with human-resource development for continuous improvement. *International Journal of Technology Management*, *14*(1), 39-49.
12. Newman, K., Cowling, A., & Leigh, S. (1998). Case study: service quality, business process re-engineering and human resources: a case in point?. *International Journal of Bank Marketing*.
13. Padayachee, I., & Shano, R. M. (2019). Factors influencing it-business strategic alignment in the context of business process re-engineering. *Journal of Contemporary Management*, *16*(2), 621-652.

14. Roy, M. C., Roy, K., & Bouchard, L. (1998). Human factors in business process re-engineering. *Human Systems Management*, *17*(3), 193-204.
15. Sadat Safavi, N., Zakaria, N. H., & Amini, M. (2014). The risk analysis of system selection and business process re-engineering towards the success of enterprise resource planning project for small and medium enterprise. *World Applied Sciences Journal (WASJ)*, *31*(9), 1669-1676.
16. Sidorova, A., & Isik, O. (2010). Business process research: a cross-disciplinary review. *Business Process Management Journal*.
17. Talwar, R. (1993). Business re-engineering—A strategy-driven approach. *Long range planning*, *26*(6), 22-40.
18. Willmott, H. (1994). Business process re-engineering and human resource management. *Personnel Review*.
19. Zucchi, F., & Edwards, J. S. (1999). Human resource management aspects of business process reengineering: a survey. *Business process management Journal*.
20. Zucchi, F., & Edwards, J. S. (2000). How similar are human resource management practices in re-engineered organisations?. *Business Process Management Journal*.