A Study on Reengineering Process at Hero Motor Corp Ltd.

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Abstract

Hero Moto Corp Ltd. (Formerly Hero Honda Motors Ltd.) is the world's largest manufacturer of two-wheelers, based in India. In 2001, the company achieved the coveted position of being the largest two-wheeler manufacturing company in India and also, the 'World No.1' two-wheeler company in terms of unit volume sales in a calendar year. Hero MotoCorp Ltd. continues to maintain this position till date. The present scenario is totally consumer oriented. Every company faces stiff competition from its competitors, each provides the best product at competitive rates. As a result customers have lot of choices to get the best with the least cost. The goal of business process re-engineering is to redesign and change the existing business practices or process to achieve dramatic improvement in organisational performance. Organizational development is a continuous process but the pace of change has increased in manifolds. In a volatile global world, organizations enhance competitive advantage through Business Process Re-engineering (BPR) by radically redesigning selected processes. The objective of this paper is to assess the impact of reengineering on organizational performance and to determine how Business Reengineering Process (BPR) can affect the Quality management, to determine how Reengineering can affect IT infrastructure, to determine how Reengineering can affect technology. The data for this current investigation were obtained from primary source. The paper concludes that business process reengineering has become useful weapon for any corporate organisations that is seeking for improvement in their current organizational performance. Most of the aim of reengineering a business performance is to redesign the existence of a business practices in order to achieve improvement in performance. From the analysis, it is discovered that reengineering a business has a significant positive effect. One general conclusion that can be drawn from this paper is that many findings from literature which hold the general conception that Business Process reengineering entails the critical analysis and radical redesign of existing process to achieve breakthrough improvements in organizational performance cannot be doubted. Interestingly, the paper shows that business process reengineering requires technology, IT Infrastructure, culture and Organizational management change, in order to be successful.

Keywords: Reengineering, Technology, Organization, Performance, Customer.

Introduction

"Reengineering is 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. BPR advocates that enterprises go back to the basics and re examine their very roots. It doesn't believe in small improvements. Rather it aims at total reinvention. As for results: BPR is clearly not for companies who want a 10% improvement. It is for the ones that need a ten-fold increase. According to Hammer and Champy, the last but the most important of the four key words is the word- process.' BPR focuses on processes and not on tasks, jobs or people. It endeavors to redesign the strategic and value added processes that transcend organizational boundaries. Business process re-engineering (BPR) began as a private sector technique to help organizations fundamentally rethink how they do their work in order to dramatically improve customer service, cut operational costs, and become world-class competitors. Business Process Re-engineering (BPR) is basically the fundamental re-thinking and radical re-design, made to an organization's existing resources. It is more than just business improvising. It is an approach for redesigning the way work is done to better support the organization's mission and reduce costs. Reengineering starts with a high-level assessment of the organization's mission, strategic goals, and customer needs. Within the framework of this basic assessment of mission and goals, re-engineering focuses on the organization's business processes-the steps and procedures that govern how resources are used to create products and services that meet the needs of particular customers or markets. Reengineering recognizes that an organization's business processes are usually fragmented into sub processes and tasks that are carried out by several specialized functional areas within the organization.

Organization Wide Commitment: There is no doubt that major changes to business processes have a direct impact on processes, technology, job roles, and workplace culture. Significant changes to even one of those areas require resources, money, and leadership. Like any large and complex undertaking, implementing reengineering requires the talents and energies of a broad spectrum of experts. Since BPR can involve multiple areas within the organization, it is extremely important to get support from all affected departments. Getting enterprise wide commitment involves the following: top management sponsorship, bottom-up buy-in from process users, dedicated BPR team, and budget allocation for the total solution with measures to demonstrate value. Reengineering efforts can by no means be exercised without a company-wide commitment to the goals to be achieved. Top management must recognize the need for change, develop a complete understanding of what is BPR.

Introduction to Automobile Industry

History of two wheelers: The motors on mini-bikes, scooters, and mopeds, or motorized velocipedes, are usually air-cooled and range from 25 to 250 cubic cm (1.5 to 15 cubic inches) in displacement; the multiple-cylinder motorcycles have displacements of more than 1,300 cubic cm. The automobile was the reply to the 19th-century dream of self-propelling the horse-drawn carriage. Similarly, the invention of the motorcycle created the self-propelled bicycle. The first commercial design was a three-wheeler built by Edward Butler in Great Britain in 1884. This employed a horizontal single-cylinder gasoline engine mounted between two steer able front wheels and connected by a drive chain to the rear wheel. The 1900s saw the conversion of many bicycles, or pedal cycles by adding small, centrally mounted spark ignition engines. There was then felt the need for reliable constructions. This led to road trial tests and competition between manufacturers.

Brief History of Hero Motocorp Ltd

The success of the Hero Group lies in the determination and foresight of the Munjal brothers, who shared their vision with their workers and led the Group to a position where its name has become synonymous with top-quality two wheelers. The flame kindled by the Munjal brothers in 1956 with the flagship company Hero Cycles; Mr. Satyanand Munjal, Mr. Brijmohan Lall Munjal and Mr. O. P. Munjal continue to carry the torch and are actively involved in the day-to-

day operations of the Hero Group. The saga is being continued with the same zeal by the second and third generations of the family and by the large working force of the Hero Group. The Hero Group is a thriving example of three generations of a family working and striving together to ensure quality, satisfaction and extensive growth. Hero MotoCorp Ltd. (Formerly Hero Honda Motors Ltd.) is the world's largest manufacturer of two-wheelers, based in India.

Review of Literature

A study on assessing readiness for business process reengineering by Abdolvand et al., (2008) reported readiness indicators in six categories the first five categories, egalitarian leadership, collaborative working environment, top management commitment, supportive management, and use of information technology are positive indicators. The sixth category, resistance to change has a negative role. Eierman & Schultz, (1995) described Business Process Reengineering (BPR) is the radical, cross-functional redesign of the standard operating practices used by organizations to produce or achieve certain outcomes. Research on critical success factor of BPR by Ahmad et al., (2007) revealed that seven factors were found to be critical to BPR implementation success. The factors are teamwork and quality culture, quality management system and satisfactory rewards, effective change management, less bureaucratic and participative, information technology/information system, effective paper management and adequate financial resources. According to Attaran & Wood, (1999) Business process reengineering is the hottest trend in management. Done well, it delivers extraordinary gains in speed, productivity, and profitability. But process redesign is not always successful and almost always accompanied by pain or at least unpleasant side effects. The contemporary business environment in which an organisation exists is becoming increasingly dynamic. The pressing need to improve the existing business processes in an organisation, results in the appearance of a new field called Business Process Reengineering Marjanovic, (2000).

A study on Coordination and transformation in business processes by *Goldkuhl & Lind*, (2008) derives characteristics of the transformative as well as the coordinative view. These are used as the basis for pinpointing important characteristics of an integrative view.

A study on impact of reengineering by *Chan & Peel, (1998)* discussed a framework which views the causes and impact from two aspects, namely, external and internal dimensions. Reengineering is becoming an increasingly popular option for corporations seeking radical process change. Central to the success of reengineering is the coordination of information technology (IT) throughout the organization *Chan & Land, (1999)*. *Al-Mashari et al., (2001)* in their stud discussed that despite the widespread adoption of business process re-engineering (BPR), it has in many cases repeatedly failed to deliver its promised results. The lack of integrated implementation approach to exploiting BPR is seen as one of the important reasons amongst others, behind BPR failures. Yet, a relative void in the literature remains the scarcity of suitable models and frameworks that address the implementation issues surrounding BPR. According to *Aurand et al., (1996)* numerous definitions and lists of key components to successful reengineering have confused managers as to what reengineering is in theory and in practice.

Research Methodology

Need and Significance of the Study:

In a world of rapid flux, organisation must change their priorities from a traditionally popular focus on planning, control and managed growth, to emphasize speed, innovation, flexibility, quality service and cost. The study is limited to —reengineering for business excellencel with the advent of the internet and e-commerce, business is getting closer to the customers.

Scope of Study:

- This study focuses on how reengineering help in business excellence.
- The study also looked at the Problems faced by businesses in implementation of reengineering process.
- The study also looked at the success and failure factors of reengineering.

Objectives of Study

(i) To assess the impact of Business Reengineering Process (BPR) on organizational performance.

(ii) To determine how Business Reengineering Process (BPR) can affect the Quality management

(iii) To determine how Business Reengineering Process (BPR) can affect IT infrastructure.

(iv) To determine how Business Reengineering Process (BPR) can affect technology.

Hypothesis: Ho 1. There is no significant relationship between change of management & culture and reengineering.

 H_1 1. There is a significant relationship between change of management and culture and reengineering.

Ho 2. There is no significant effect of reengineering on IT Infrastructure.

 H_1 2. There is a significant effect of reengineering on IT Infrastructure.

Ho 3. There is no significant effect of reengineering on technology competence.

 H_1 3. There is a significant effect of reengineering on technology competence.

Ho 4. There is no significant effect of reengineering on Quality management.

 H_1 4. There is a significant effect of reengineering on Quality management.

Ho 5. There is no significant relationship between Business Reengineering Process and organisational performance.

 H_1 5. There is a significant relationship between Business Reengineering Process and organizational performance.

Research Design

The study design is descriptive in nature. Descriptive study is a fact-finding investigation with adequate interpretation. It is the simplest type of research and is more specific. Mainly designed to gather descriptive information and provides information for formulating more sophisticated studies.

Tools of Data Collection

The research instrument used in the study is a closed ended questionnaire and Field survey was carried out and the responses received were recorded.

Limitations of the Study

- The study is confined to a single industry. No comparison has been made with the other industry.
- There was a time constraint. Therefore, the sample taken was small.
- The research was dependent on the information provided by the respondents which may be insufficient and incomplete.

1. Gender

GENDER	RESPONDENTS
Male	86
Female	14
Total	100

Inferences: From the above data it was analyzed that there were 50 respondents in which most of the respondents are male.

2. Service Tenure

SERVICE TENURE	PERCENTAGE OF RESPONDENTS
<1 year	48
1-2 year	20
2-5 years	24
More than 5 years	8
Total	100

Inferences: From the above data it was analyzed that most of the respondent's service tenure are in between less than one year.

3. Departments

DEPARTMENTS	PERCENTAGE OF RESPONDENTS
Human Resources	14
Management	6
Engineering	34
Others	46
Total	100

Inferences: The above data shows the departmental distribution of the respondents and this varies significantly as can been seen from table 1above. 7, 3, 17, 25 respondents sampled were from Human Resources, Management, Engineering and others such as trainees etc.

4. Basic Features of Reengineering

BASIC FEATURES OF REENGINEERING	PERCENTAGE OF RESPONDENTS
Radical change	28
Rethink / control process	18
Lead to pragmatic result	20
All of the above	34
Total	100

Inferences: From the above data it was analyzed that most of the respondents said that Radical change, Rethink/control process, Lead to pragmatic result, all of them are the features of reengineering.

5. Reengineering Typically Affects

REENGINEERING TYPICALLY	RESPONDENTS
AFFECTS	
Technology	30
Organization activities	22
Structure and people	18

All of the above	30
Total	100

Inferences: From the above data it was analysed that out of 5 respondents 15 said that reengineering typically affects the technology, 11 said Organization activities, 9 Structure and people and 15 said all of them.

Ho 1. There is no significant relationship between change of management & culture and reengineering.

 H_1 1. There is a significant relationship between change of management and culture and reengineering.

Test applied- Coefficient of Correlation

$$\mathbf{r} = \frac{(\mathbf{X} \cdot \overline{\mathbf{X}})(\mathbf{Y} - \overline{\mathbf{Y}})}{\sqrt{\sum (\mathbf{X} \cdot \overline{\mathbf{X}})^2 \sqrt{\sum (\mathbf{Y} - \overline{\mathbf{Y}})^2}}}$$

Where r = Coefficient of Correlation, X = Reengineering, Y = change of management & culture

$$\overline{\mathbf{X}}_{= \text{Mean of X}}, \overline{\mathbf{Y}}_{= \text{Mean of Y}}$$

Interpretation: The observed value of coefficient of correlation i.e. r = 0.028036, which shows that there is a low positive relationship between change of management & culture and business performance.

Ho 2. There is no significant effect of reengineering on IT Infrastructure.

 H_1 2. There is a significant effect of reengineering on IT Infrastructure.

Test applied- Coefficient of Correlation

$$\mathbf{r} = \frac{(\mathbf{X} \cdot \overline{\mathbf{X}})(\mathbf{Y} - \overline{\mathbf{Y}})}{\sqrt{\sum (\mathbf{X} \cdot \overline{\mathbf{X}})^2 \sqrt{\sum (\mathbf{Y} - \overline{\mathbf{Y}})^2}}}$$

Where r = Coefficient of Correlation, X = Reengineering, Y = IT Infrastructure, $\overline{X} = \text{Mean of } X$, $\overline{Y} = \text{Mean of } Y$

Interpretation: The observed value of coefficient of correlation i.e. r = 0.023768, which shows that there is a significant effect of reengineering on IT Infrastructure.

Ho 3. There is no significant effect of reengineering on technology competence.

 H_1 3. There is a significant effect of reengineering on technology competence.

Test applied- Coefficient of Correlation

$$\mathbf{r} = \frac{(\mathbf{X} \cdot \overline{\mathbf{X}})(\mathbf{Y} - \overline{\mathbf{Y}})}{\sqrt{\sum (\mathbf{X} \cdot \overline{\mathbf{X}})^2 \sqrt{\sum (\mathbf{Y} - \overline{\mathbf{Y}})^2}}}$$

Where r = Coefficient of Correlation, X = Reengineering Y = Technology Competence, $\overline{\mathbf{X}} = \text{Mean of } X$

 $\overline{\mathbf{Y}}$ = Mean of Y

Interpretation: The observed value of coefficient of correlation i.e. r = 0.293079, which shows that there is a significant effect of reengineering on technology competence.

Ho 4. There is no significant effect of reengineering on Quality management.

 H_1 4. There is a significant effect of reengineering on Quality management.

Test applied- Coefficient of Correlation

$$\mathbf{r} = \frac{(\mathbf{X} \cdot \overline{\mathbf{X}})(\mathbf{Y} - \mathbf{Y})}{\sqrt{\sum (\mathbf{X} \cdot \overline{\mathbf{X}})^2 \sqrt{\sum (\mathbf{Y} - \overline{\mathbf{Y}})^2}}}$$

Where r = Coefficient of Correlation, X = Reengineering, Y = Quality management, $\overline{X} = \text{Mean}$ of X, $\overline{Y} = \text{Mean of Y}$

Interpretation: The observed value of coefficient of correlation i.e. 0.161637124 which shows that there is a significant effect of reengineering on Quality management.

Ho 5. There is no significant relationship between Business Reengineering Process and organisational performance.

Ha 5. There is a significant relationship between Business Reengineering Process and organizational performance.

Test applied- Coefficient of Correlation

$$\mathbf{r} = \frac{(\mathbf{X} - \mathbf{X})(\mathbf{Y} - \mathbf{Y})}{\sqrt{\sum (\mathbf{X} - \overline{\mathbf{X}})^2 \sqrt{\sum (\mathbf{Y} - \overline{\mathbf{Y}})^2}}}$$

Where r = Coefficient of Correlation, X = Reengineering, Y = Organizational Performance

$$\overline{\mathbf{X}}$$
 = Mean of X, $\overline{\mathbf{Y}}$ = Mean of Y

Interpretation: The observed value of coefficient of correlation i.e. r = 0.230048, which shows that there is significant relationship between Business Reengineering Process and organisational performance.

Findings

- Value of coefficient of correlation i.e. r = 0.028036, which shows that there is a positive relationship between change of management & culture and business performance.
- Value of coefficient of correlation i.e. r = 0.023768, which shows that there is a

significant effect of reengineering on IT Infrastructure.

- Observed value of coefficient of correlation i.e. r = 0.293079, which shows that there is a significant effect of reengineering on technology competence.
- Value of coefficient of correlation i.e. 0.161637124, which shows that there is a significant effect of reengineering on Quality management.
- Value of coefficient of correlation i.e. r = 0.230048, which shows that there is significant relationship between Business Reengineering Process and organizational performance.

Conclusion

This paper concludes that business process reengineering has become useful weapon for any corporate organisations that is seeking for improvement in their current organizational performance. Business Reengineering Process will only be successful if the activities in which the processes are based are directly related to the needs and objectives of the business. Business Reengineering Process has helped in the achievement of the organization over-all objectives. Reengineering is not just a matter of fundamental and radical improvements in performance, but is also an approach to analyzing and transforming the nature of businesses and industries. Reengineering which is a situation when a business organization is transforming processes that together form a component of a larger system aimed at enabling organization to empower themselves with contemporary technologies business solution and innovations. In the context of changing customer expectations, technological discontinuities, increasing environmental uncertainties, business managers have a big challenge of making the right strategic choice and setting their strategic priorities in order to allocate their resources to different functions in an efficient manner for business success. The present scenario is totally consumer oriented. Every company faces stiff competition from its competitors, each provides the best product at competitive rates. As a result reengineering gives a competitive advantage over the other competitors.

Recommendations

From the findings of the study, organizations should not be apprehensive or scared to implement radical changes such as BPR which is actually lead to competitive advantage. The key areas of improvements can be achieved in process quality and customer service. It is possible to also achieve improvements in process cost and production efficiency. In order to undertake BPR, the most important factor to ensure success is to undertaken an analysis of the current situation. If there is a good case to undertake the changes, the top management must support the change and drive it through to success.

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