Effects of Business Process Reengineering on Organizational Performance: Organizational Transformation of Tour and Travel Business

Herminawaty Abubakar

University of Bosowa
Makassar, Indonesia
Email: herminawaty.abubakar [AT] yahoo.co.id

ABSTRACT---- This study aimed to analyze business process reengineering as an organizational transformation strategy and examine the relationship between business process reengineering and organizational performance in tour and travel business in Makassar city. Business process reengineering is a process of redesigning workflows and business processes within an organization to achieve improved company performance in the form of cost efficiency, improved quality, service, and speed. The method used in this study was of Partial Least Square (PLS) analysis obtained from questionnaire. The respondents were players of tour and travel business in Makassar city as many as 140 employers. The results show that business process reengineering is a strategy used in the organizational transformation. It is also found that there is a positive relationship between business process reengineering and organizational performance in tour and travel business.

Keywords--- Tour and Travel; Organizational Transformation; Business Processes Reengineering; and Organizational Performance

1. INTRODUCTION

Various effects of the changes require organizations to open up themselves to the demands of change and seek to develop strategies and policies in line with the changing business environment and rely on the organization's ability to adapt to environmental changes. Attempts to change have become a necessity in an organization to develop its capacity to learn the patterns, values and work strategy so that these elements can be transformed into the organization life better able to answer the challenges of the business environment.

Business strategy talks about the relationship between organization and its environment, both internal and external environments. Organization environments recently do not only increasingly experience turbulent changes, but they are also more closely interconnected. It requires organizations to think strategically, be able to translate input into an effective strategy, and to develop the necessary grounds to lay the foundation for the implementation of the strategy. All are expected to be able to give instructions on how to face and cope with the changes that occur in the environment, even to provide guidance for the management to be able to control the changes that occur in the environment, and not just be reacting to them.

In addition, the strategy is a competitive tool that needs to be owned by the company of which the application requires planning, coordinating, monitoring and evaluating which are strong and accurate so as to create a competitive advantage for the company. Changes in the business environment have a strong influence on the organization. Any changes that occur will always carry implications for every aspect of the organization. Implementation of the strategy in a changing business environment is essential tasks for the management in achieving the organization's success. Managerial duties in implementing and executing this strategy require an assessment that will develop the capability needs of the organization and the achievement of targeted objectives (David and Thomas, 2001).

The tour and travel business in Makassar city has increased greatly from year to year. It was apparent from the tour and travel business in 2011, as many as 116 businesses increased in 2012 to 162 tour and travel business and in 2013, tour and travel business in Makassar increased to 219 businesses (Department of Tourism and Creative Economy of Makassar, 2014). Along with the increase in tour and travel business in Makassar city and consumer demands for quality of service, the tour and travel business is encountered to high competition level, so it takes strategic planning in managing the business.

Accordingly, the phenomenon found in travel services business in Makassar city based on the observation empirically is consumer demand for service quality getting increased and tour and travel business have not implemented a corporate strategy that is capable of improvising to the changes and turbulence that at any time can change and need
treatment through more advanced information technology. On the other tour and travel business industry faces an increasingly complex business activities such as handling large amounts of data involved in daily operations, and relationships among other relevant institutions, that become a challenge that requires ability and skill. This makes tour and travel business very difficult to compete in the touring and traveling business world. Facing these conditions, each organization is required to immediately change or implement transformation and adapt to changes in the competitive environment through business process reengineering strategy.

Hypothesis 1: business process reengineering as an organizational transformation strategy.

Business process reengineering is a new innovation paradigm through fundamental rethinking and radical redesign on organization business processes that brings the organization to achieve dramatic improvement in business performance (Elitist, 2008). It is not enough for business process reengineering to only change the process but the more important thing is to change management, empower human resources, foster creativity and human skill, so that members of the organization are not resistant to change and have a commitment to the organization. To achieve this the company is required to provide an approach about the concepts and techniques of reengineering, communicate the vision and mission, articulate the company's competitive situation and instill a deep understanding on the culture, the values of the organization, and organizational issues. Business process reengineering is carried out through the process of creation and innovation to design the organization to achieve improvements in cost, quality, efficiency and speed. Therefore, it can be hypothesized that

Hypothesis 2: Business process reengineering has positive effect on company performance.

2. LITERATURE REVIEW

Business Process Reengineering in Organizational Transformation

Every company competing in the business environment will have the same goal, namely how to win business competition through the company's competitive advantage. Efforts to achieve a competitive advantage can be performed if the company is flexible in responding to changes and development of the existing business environment through organizational transformation. Approaches used include: reengineering, rethinking, restructuring on the organizational design which has been developed in the literature of new management.

Efforts to support the process of organizational transformation is made through Business Process Reengineering processes (BPR), that is to redesign the business processes to achieve improvements in the performance such as cost, quality, service, and speed (Guoli, 2010). Reengineering process can be seen as a cycle, as each phase is built on the success of others. Janson (in Javed Iqbal, 2012), identifies those three phases: (1) Rethinking (paradigm, vision and critical success factors), (2) Redesign (process analysis, all work and service), and (3) retooled (empowering people, distributed access and user design).

Business process reengineering is the process of analyzing and redesigning workflows and business processes within an organization. Business process is a set of tasks logically related and performed to achieve the business results set. Business processes reengineering is one of the latest development in the field of management. Cross-functional teams, for example, have become popular due to management's desire to collaborate on a variety of different functional tasks into complete multifunction process.

Hammer and Champy (1996), mention that the Business Process Reengineering (BPR) is defined as an effort of fundamental improvement and radical redesign of business processes to achieve the increase in efficiency of critical measures such as cost, quality, service, and speed. This opinion is in line with the opinion of Herbkersons (in Elithan, 2006), that reengineering is drastically change how the organization's members resolve their way of working. Reengineering can also be interpreted as an innovation process or planning of new strategic vision and competitive strategy and development of new business processes that support the vision.

Business Process Reengineering (BPR) is the analysis and redesign of workflow within the company. BPR is a method promoting changes and introducing new process and new style in working. BPR introduces different elements for a change. These elements are known as enabler and can be defined as an element which acts as a vehicle for the process of changing (Gunasekaran & Kobu, 2002).

This Pettigrew, et al model can be applied in which the management wants to assess changes in economic, business and condition of the company, identify and attempt to implement a new strategy in order to improve the competitive performance of the company. The model offered by Pettigrew et al is called "Pettigrew Contextual Change Model", namely: Context, Content and Process. This Pettigrew Contextual Change Model is studied also by Arviansyah, et al (2014) and Iqbal (2012).

Context provides an understanding of the change conditions required, how the company is developed both internally and externally from time to time that may hamper competitiveness. Content provides components of strategy criteria, objectives, and measurements of success. Process integrates content with management action to make changes in the field.
The purpose of this Pettigrew Contextual Change Model is to understand the changes through a perspective strategy for strategic change starts at the top level and the support of top management is a key factor in the success of modern change initiatives. By implementing a change management strategy, it can be applied radical strategies for long-term interests of the organization concerned.

Organizational Performance

Organizational performance is an indicator of appraisal of performance achieved by an organization in a given period. Performance appraisal of an organization is said to have good performance, if the results achieved show an increase in achievement of the previous period. Furthermore, the performance appraisal can be viewed from two aspects of appraisal, namely the objective and subjective aspects. Appraisal based on an objective aspect is the appraisal on the basis of achievement of progress in meeting the targets, such as in financial, production, marketing and other operational activities oriented to the level of profitability. Meanwhile, subjective aspect emphasizes the value of the result achievement through the actions of individuals and groups in carrying out their activities exceeding the measure of company appraisal or work standard oriented to work quality.

Wibowo (2013), explains that performance appraisal is based on objective aspect or profitability that can be measured using financial ratios. While Hanif (2013), mentions three types used in assessing performance, namely: (1) appraisal based on character, like a pleasant personality, initiative, or creative, courteous, and aggressiveness, (2) appraisal based on behavior, such behaviors shown by employees as subordinates who freely give suggestions or ideas to solve problems related to work, refused to disclose the secret to others, and (3) appraisal based on the results, such as sales or number of production, number of errors made when typing letters, and production quality. This opinion is not much different from the previous opinion. Xiaoming & Junchen (2012), state that corporate performance appraisal uses four categories, namely: (1) Accounting performance, (2) Nonfinancial, such as employee satisfaction, customer satisfaction, average turnover, product quality and some other variables in organizational aspects, (3) added value of intangible factors, such as management and the government, and (4) long-run development and strength of the competition. All of those three use Financial and non-financial approaches, the difference is that in this appraisal it is not included conformity element between behavior and the existing provisions.

The performance appraisal is not always oriented to the achievement of profit or financial approach based on objective assessment, but also non-financial approach which is based on a subjective appraisal. Furthermore, whether it is used profit or non-profit approaches, performance appraisal can be performed by comparing the results obtained now and the past. In line with the statement of Noe (in Ayesha, 2011), it is asserted that some approaches that can be used to measure performance are, namely: (1) the comparative approach, that is: performance appraisal by comparing the performance of individuals with others; (2) the attribute approach, that is: performance appraisal focusing on individual attributes (character); and (3) the behavioral approach, that is: performance appraisal based on the behavior of individuals in work; (4) the result approach, that is performance appraisal based on the achievement of objectives and results achieved by individual or work group; (5) the quality approach, that is: performance appraisal oriented on market and avoiding mistakes.

Based on the opinion of some experts, business performance indicators used in this study is a measure of employees success that can affect the performance of the business carried on, namely: level of ability in solving business problems related to financial aspects, marketing, and production. Referring to Kaplan & Norton (2000) and Mulyadi (2014), that in order to develop the benchmarks the company's success is based on the concept of Balanced Scorecard (BSC), aiming to measure the success from financial perspective, including: increased market share, increase revenues through sales of products or services, and cost efficiency. Furthermore, from marketing perspective include the appraisal of, namely: market coverage (market coverage), identification of customer needs, and distribution channels of product or services. Production perspective includes several dimensions, namely: type of products offered, quantity of products produced, and timeliness of production.
Balanced Scorecard (BSC) is a strategic planning tool developed by Kaplan and Norton (2000), as a response to the assumption that an organization exists only to satisfy shareholders. It is based on a four-dimensional framework, in which each dimension is different stakeholders: Learning and Growth; Internal Business Processes; Customer; and Finance (Kaplan and Norton, 2000). BSC is based on the notion that skilled employees will improve the quality of the process and cycle time, thereby causing timely shipment and delivery of customer loyalty. At the end of improvement chain, these organizations are very likely to achieve a higher return on investment and, consequently, the satisfaction of shareholders (Kaplan and Norton, 2000). In other words, the BSC is a performance management framework that contributes to increase the number of interested parties in the process (Ricardo, 2009).

Balanced Scorecard completes a set of financial measure of past performance with measure of drivers of future performance. Balanced scorecard objectives and measures are derived from vision and strategy. Balanced Scorecard develops a set of business unit objectives beyond the summary of financial measure. Balanced Scorecard indicates that organizational performance can be seen from four main perspectives: financial, customer, internal business processes, and learning and growth. The four perspectives are associated with the organization's strategy and creating a holistic model of strategies that allow all employees to see how they can contribute to the success of the organization. Through four perspectives in balanced scorecard, the management is capable of interpreting the impact of changing complex business environment trends on vision, mission and strategy of the company in the short term and in the long term. Balance Scorecard is quite comprehensive to motivate executives in achieving performance in the four perspectives, so that the financial success is sustainable.

3. RESEARCH METHODS

Research design

The design was grouped into quantitative analysis to illustrate the data distribution on various variable indicators associated with the phenomenon. The research was conducted on a number of tour and travel businesses in Makassar City having legal entity and becoming members of association of tour and travel (ASITA) of South Sulawesi province. The method used in this study was survey, that was the method used to reveal the facts of a phenomenon by using a questionnaire as a means of collecting primary data so that it could be evaluated based on theoretical reviews as well as previous studies.

Population and Sample

The populations in this study were tour and travel business in Makassar city as many as 219 tour and travel business (Department of Tourism and Creative Economy of Makassar, 2014). The populations in this study were heterogeneous with some characteristic divided into two subpopulations (strata), namely Tour and Travel Bevendorf (Biro Perjalanan Wisata/BPW) Tour and Travel Agency (Agen Perjalanan Wisata/APW). The sampling techniques in this study used stratified proportional random sampling. By using Slovin formula proposed by Sangadji, et.al. (2010), the minimum sample size was set at 140 tour and travel businesses in Makassar city, consisting of BPW by 53 businesses and APW by 87 businesses. As for the respondents in this study were the owner/director/head of tour and travel business. The sampling for the purpose of interview was conducted by convenience random sampling, that was the sampling technique by chance, population members met by the researcher and willing to become respondents were made samples for the purpose of interview as many as 40 samples.

Measurement

This research used deductive approach aiming to test the hypothesis. Furthermore, it was analyzed by using Partial Least Square (PLS) which aimed to explain the causal relationship among the variables and test the hypothesis. Variables observed were construct variable and manifest variable. The number of construct variables observed in this study were two variables, consisting of: (1) business process reengineering, and (2) organization performance. There were five manifest variables, namely (1) context, (2) the content, (3) process, (4) financial perspective, and (5) non-financial perspective.

4. RESULTS AND DISCUSSION

Sample Characteristics

Characteristics of the sample were as follows: old business (4.5% under 1 year, 9.1% 1-2 years, 21.8% 2-3 years, 24.5% 3-4 years, and 40.0% 5 years and above), education (43.6% Senior High School and 56.4% Bachelor Degree), age (65.5% 20-30 years old, 24.5% 31-40 years old, 7.3% 41-50 years old, 2.7% 51-60 years old), business reasons (2.7% due to the potential of natural resources, 49.1% due to market opportunities, 7.3% due to urgency, and 40.9% due to experience and skills).

Instrument test validity used Pearson's Product correlation program's in SPSS version 22 for each statement item with total test scores. The instrument used in this study had test results showing that the value of Sig.correlation <α (5%), meaning that in general the variables used in the research instrument were valid. Reliability testing used SPSS version 22...
for all items or statements used in this study with regard to Cronbach Alpha formula, in which the value of its Cronbach's alpha> 0.6 meaning that in general the instruments used were considered to be reliable.

Statistical test

Analysis of Partial Least Square (PLS) was used to analyze the variants-based structural equation that simultaneously could perform measurement model testing as well as structural model testing. In addition to be used as confirmation of the theory, PLS than can also be used as predictive technique. PLS model evaluation was performed by evaluating the outer model and inner model (Yamin and Kurniawan, 2011, Jogiyanto and Abdillah Willy, 2002).

Outer model evaluation was a measurement model to assess the model validity and reliability. Through a process of algorithm iteration, measurement model parameters (convergent validity, discriminant validity, composite reliability and Cronbach's alpha) were obtained, including the value of $R^2$ as the parameter of prediction model accuracy.

Validity Test

Validity test was conducted to determine the ability of research instruments in measuring what should be measured, Cooper, et al, (in Jogiyanto, 2011). An indicator was declared valid if it had loading factor above 0.5 on construct targeted.

Table 1. Result For Outer Loading

<table>
<thead>
<tr>
<th></th>
<th>BPR</th>
<th>KO</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPR1</td>
<td>0.7086</td>
<td></td>
</tr>
<tr>
<td>BPR2</td>
<td>0.7055</td>
<td></td>
</tr>
<tr>
<td>BPR3</td>
<td>0.7856</td>
<td></td>
</tr>
<tr>
<td>KO1</td>
<td></td>
<td>0.8805</td>
</tr>
<tr>
<td>KO2</td>
<td></td>
<td>0.8929</td>
</tr>
</tbody>
</table>

Table 1 above shows that the loading factor provides value above the recommended value, that is 0.5. It means that the indicators used in this study are valid or have met the convergent validity.

Once the examination is performed on convergent validity, it is followed by an examination on the discriminant validity by looking at the value of cross loading, as seen in Table 4 below.

Table 2. Result For Cross Loading

<table>
<thead>
<tr>
<th></th>
<th>BPR</th>
<th>KO</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPR1</td>
<td>0.709</td>
<td>0.402</td>
</tr>
<tr>
<td>BPR2</td>
<td>0.706</td>
<td>0.333</td>
</tr>
<tr>
<td>BPR3</td>
<td>0.786</td>
<td>0.483</td>
</tr>
<tr>
<td>KO1</td>
<td>0.493</td>
<td>0.881</td>
</tr>
<tr>
<td>KO2</td>
<td>0.504</td>
<td>0.893</td>
</tr>
</tbody>
</table>

An indicator is declared valid if it has the highest loading factor to the construct targeted compared to loading factor to other constructs. Table 2 above shows that the loading factor for BPR indicator (BPR1 to BPR4) has a loading factor to BPR construct higher than with KO construct. It is also seen on the KO indicators (KO1 and KO2) that have loading factor to KO construct higher than with BPR constructs. This shows that the indicators have good discriminant validity.

Another method to see the discriminant validity is by comparing the value of the root square root of average variance extracted (AVE) of each construct with the correlation between the constructs and other constructs in the model. The value of discriminant validity is good, if the AVE value is above 0.5. Here is the AVE value in this study:

Table 3. Average Variance Extracted (AVE)

<table>
<thead>
<tr>
<th></th>
<th>AVE</th>
<th>AVE Root</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPR</td>
<td>0.539103</td>
<td>0.73424</td>
</tr>
<tr>
<td>KO</td>
<td>0.786364</td>
<td>0.88676</td>
</tr>
</tbody>
</table>

Based on Table 3 above, the value of average variance extracted (AVE) to BPR is 0.539103 and KO is 0.786364 above the standardized value (0.5), it indicates that the construct has good discriminant validity value.

Reliability Test

Reliability of a measure shows the stability and consistency of an instrument to measure a concept or a variable (Cooper, et al., Hair, et al in Jogiyanto, 2011). Composite reliability value must be higher than 0.7, Cronbach's alpha value should be higher than 0.6, and Communality value is higher than 0.5.
Table 4. Composite Reliability, Cronbach’s Alpha, Communality

<table>
<thead>
<tr>
<th></th>
<th>Composite Reliability</th>
<th>Cronbach’s Alpha</th>
<th>Communality</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPR</td>
<td>0.777783</td>
<td>0.677730</td>
<td>0.539103</td>
</tr>
<tr>
<td>KO</td>
<td>0.880402</td>
<td>0.728492</td>
<td>0.786364</td>
</tr>
</tbody>
</table>

Table 4 above, shows that the composite reliability to constructs of BPR and KO > 0.7, Cronbach’s alpha values of constructs of BPR and KO > 0.6, and the value of communality in constructs of BPR and KO > 0.5 showing that all constructs in the model estimated in this study are reliable.

Structural model (inner model) in PLS is evaluated using $R^2$ for dependent variable and the path coefficient ($\beta$) value for the independent variable after which the significance is based on the value of t-statistics for each path.

To assess the significance of predictive models in testing the structural model (inner model), it can be seen from the value of T-statistic between independent variables to dependent variable in path coefficient table on the output SmartPLS in the following Table 5.

Table 5. Path Coefficient (Mean, STDEV, T-Values)

<table>
<thead>
<tr>
<th></th>
<th>Original Sample (O)</th>
<th>Sample Mean (M)</th>
<th>Standard Deviation (STDEV)</th>
<th>Standard Error (STERR)</th>
<th>T-Statistics (</th>
<th>O/STERR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPR → KO</td>
<td>0.557693</td>
<td>0.562858</td>
<td>0.069727</td>
<td>0.069727</td>
<td>7.998193</td>
<td></td>
</tr>
</tbody>
</table>

Based on the value of path ($\beta$) above, in the test results for the hypothesis, there is a direct effect of business process reengineering on organizational performance, as follows:

Figure 2. Business Process Reengineering coefficient on Organizational Performance

Figure 3. Effect of Transformational Leadership on Organizational Performance
The results showed that the value of t-statistic of 7.998 > 1.96. This shows that business process reengineering partial has partial effect on organizational performance. Determination coefficient shows R² of 0.319; it indicates that the organization's performance can be explained by the business processes reengineering by 31.9%, while the rest is explained by other variables not examined in this equation. The value of original sample estimate is positive by 0.5576, this indicates that there is a positive relationship between business process reengineering and organizational performance.

The results of this study are in line with BPR characterized as business processes radical redesign aimed at cost reduction, quality, customer satisfaction, innovation and shareholder value. Zehir, et al (2008) and Altinkemem, et al (2011) define reengineering as to recognize and reject some of the old rules and then find new ways that is imaginative to complete the work, in which new ways may appear with the hope to achieve quantum improvement in performance.

This study supports the research conducted by David and Chang, (2009), showing that the success of BPR is powered by innovation, employees empowerment, top management commitment and strategic direction, customer relations, involvement of information systems and sources of financial information. Similarly, Gunasekaran & Kobu, (2002), state that innovation and rationalization are modeling and analysis of business processes on business strategy in implying BPR. Likewise, the results of research conducted by Irene and Devie (2013), stating that the changes in business environment cause the companies competing to create more values, so it is needed business process reengineering as the strategy used for the company.

This study supports the results of respondents interview stating that the factors of human resources, culture, structure and information technology determine the success of business process reengineering. The success of business process reengineering will improve the company's performance dramatically. This study is also in line with the results of the other respondents interview stating that the company is currently faced with changes in an increasingly competitive external factors mainly changes in information technology. This situation requires the company to adapt to changes in the information technology so that it is needed a leader who is able to manage the company's management effectively and efficiently.

5. CONCLUSION

The study finds that business process reengineering has positive effect on organizational performance, this describes that business process reengineering aims at cost efficiency, improving customer service, increasing quality, and improving the speed which can encourage increased organizational performance. Business process reengineering requires fundamental, radical, and revolutionary changes.

These fundamental, radical and revolutionary changes are top down, burdensome for employees who have worked in a long time, in the culture and system of work which are very understandable. Meanwhile, the company's success is also determined by the readiness of employees to make changes and the availability of infrastructure that guarantees the success of the business process reengineering.

6. RECOMMENDATIONS

After the above study, the researcher proposes several recommendations:

1. A change in the organization is not an easy thing to do, there are many obstacles that might block change programs so that it would need further study on the obstacles encountered in the business process reengineering.
2. Further studies are needed to determine the effect of leaders support on the success of business process reengineering.

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