

Accomplishing Organizational Performance through Business Process Re-Engineering: Evidence from Selected Supermarkets in Mombasa City County, Kenya

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ABSTRACT

The aim of this study was to establish the impact of business process re-engineering (BPR) on the performance of supermarkets in Mombasa City County, Kenya. Specific focus of the study was the measurement of Business Process Reengineering through process redesign. Additionally, performance was measured through profitability, efficiency, customer satisfaction, and cost optimization. The study was anchored on the BPR theory. The study adopted a descriptive research design in the collection, analysis, and presentation of data. The target population was all supermarket outlets operating in Mombasa City County, Kenya. The main research instrument was a structured questionnaire mixed with open-ended questions administered through a face-to-face interview with the respondents comprising one manager, one supervisor, one shop floor staff and two customers from each outlet selected randomly to each supermarket outlet. The presentation of data for this research was done through frequencies, means, percentages, and standard deviations. Statistical Packages for Social Sciences software (SPSS) was applied in the analysis of data. Study results indicated that there was significant correlation between process redesign and performance, $r = 0.236$. Additionally, beta coefficients indicated that for every unit of performance, there was an influence of process re-design, $\beta = 0.302$ ($p < .05$). This led to the conclusion that indeed business process redesign influenced performance of supermarkets in the county of Mombasa, Kenya. It was therefore recommended that supermarkets should do feasibility studies and consultations when setting up a new supermarket with all business processes considered.

Key Words: Business process re-engineering, process redesign, performance, supermarkets, Mombasa, Kenya

INTRODUCTION

Despite varied growth, the supermarket business all over the world has found itself with increased competition and a difficult operating environment due to varying customer needs and technological advancement, especially with the advent of online shopping. Changing government taxation policies on so-called unhealthy products has not been favorable to consumers. The leading superstores in the United Kingdom (UK) are Tesco Plc and J Sainsbury Plc. The report further states that in the same period, a major increase in competitive forces like online shopping platforms leads to supermarkets reviewing their supply chain capabilities and processes to both meet their consumer tastes and, at the same time, improve internal efficiencies (Shahul et al. 2022).

The news that well known South African store known as Game was lined up for closure not only shook the retail industry but also reminded many of the South African Shoprite, Uchumi, and Nakumatt from Kenya, who at different times decided to shut down their operations in Tanzania. Much as many shoppers might

view these exits as normal exits, as the government is known to put in place investment policies aimed at attracting investment, one needs to go further and think not only critically but strategically about what these exits mean to emerging entrepreneurs who might want to invest in the supermarket sector (Nkomo, & Marnewick, 2021). In Uganda, the growth of the retail industry and, in particular, the supermarkets can be due to the speedy increase in urban centres and the rise in middle and high-income earners coupled with a conducive investment environment. The young with higher levels of education have been seen to be the major traffic experienced in the supermarkets in Uganda, accompanied by their younger families (Bako & Banmeke 2019).

The concept of BPR has been with us for the last three decades and has contributed to major transformations in the way organizations are run, and improvements in production and meeting consumer needs have been attributed to it (Zaini & Saad, 2019). Furthermore, Hashem (2020) defined BPR as a fundamental rethinking and radical changes in design of business processes aimed at achieving basic improvements in all performance sections, such as cost, quality, service, and speed. Andrea and Santoso (2020) defined BPR as methods for changing an organization's internal operations of a business processes in response to requirements by the environment, adding that BPR was a great redesign of processes of operations in order to obtain great improvement in cost, service quality to consumers, which include customer relationship management (CRM) for fulfilment and from the organization's assembly lines to logistics services.

According to this current study process re-design leads to a significant relook of the organization's value chain critical processes leading to a sudden and significant improvement in business outcomes, (Huang, 2017). Process redesign can be done for the whole or part of the process in order to improve or to reduce the number of steps to complete a task or re-arranging component activities for workflow rejuvenation and to avoid repeat work. Centralizing, on the other hand, is the grouping of common activities into functional units to create synergy in resource utilization to achieve economies of scale as compared to de-centralizing, which distributes process activities to create quicker responsiveness and flexibility. Finally, balancing is the adjustment of throughput and capacity (Sujová et al., 2019).

Recent trends characterizing Mombasa City County's supermarket sector indicate that the supermarket industry is on its deathbed. Although the sector has posted some growth in other areas, evidence is everywhere that the industry is facing serious downturns (Madhani, 2021). The problems facing the supermarket chains have left many business analysts needing answers due to the seemingly heavy investment done by the mainstream supermarkets and growing market space due to the increase in urban population and urbanization. It is clear that supermarkets must rethink their operational and expansion strategies if they have to survive in the retail industry in Mombasa (Kivuva, (2018). Business consultants of the retail sector have reported that poor decision strategic decisions, poor implementation of strategies, internal sourcing, mismanagement, internal losses, and many other factors have been the underlying conditions for the retail industry downfall in Kenya as a whole (Naglaa et al., 2017).

1.1 Process Redesign

A reliable measure for BPR is process re-design which leads to a significant relook of the organization's value chain critical processes leading to a sudden and significant improvement in business outcomes (Hayes, 2021). Process redesign can be done for the whole or part of the process in order to improve or to reduce the number of steps to complete a task or re-arranging component activities for workflow rejuvenation and to avoid repeat work. Centralizing, on the other hand, is the grouping of common activities into functional units to create synergy in resource utilization to achieve economies of scale as compared to de-centralizing, which distributes process activities to create quicker responsiveness and flexibility hence has a direct effect on performance. Finally, balancing is the adjustment of throughput and capacity that has yet another direct influence on the performance of firms (Hayes, 2021). It is from the preceding studies that a gap on business

process redesign was identified to be filled by carrying out the current study

THEORETICAL LITERATURE REVIEW

Business Process Re-engineering Theory

Business process re-engineering theory is the main theory anchoring this study. Hammer and Champy (1993) introduced the term Business Process Reengineering to the business fraternity. They defined Business process re-engineering is the basic rethinking and radical rebuilding of business processes with the goal of achieving significant improvements in current essential performance criteria including cost, quality, service, and speed. (Davenport, 1993). BPR has been seen in recent times as a major driver of positive change in organizational performance. Although BPR has not been successful in some organizations, the overall outcome of BPR has opened new spheres and opportunities for growth and improved performance in many organizations (Sturdy, 2010). The relevance of this theory to this study is when business process reengineering is implemented, and all its processes followed; it facilitates cross-functional teams to work closely and create synergies on selected areas of improvement, to create operational efficiencies.

Change Management Model

We cannot talk about business process re-engineering without talking about the Change Management Model developed by Kurt Lewin (1947) which is also anchors this study. This theory by Lewin was meant to help organizational leaders to conduct change in their organizations in three simple and manageable stages. The first stage is called “unfreezing”. It was considered to be a psychological stage as it involved the dismantling of the current state of mind of the players as a preparatory stage to move them to the next stage. In this stage, the change agent must create the agency for change so that everyone’s mind is conditioned and set to anticipate the change. It is here that resistance from the players will be experienced due to the uncertainty by the players of what that change means to them and their comfort zones. Moving into stage two of the change process is again another drama because, at this, the real transformation and transition take shape. The third and final stage of this theory is the refreezing stage. In this stage change agents establish the change as the new habit so that it becomes the new standard operating procedure. Without this final stage, it can be easy for the organization to go back to the old habits. This third and final stage of this theory is very critical because it is here that the objectives and outcomes of the change management process can be seen and felt.

EMPIRICAL LITERATURE REVIEW

Studies carried out in other countries like Australia in the hospital industry concluded that delivery of care services improved greatly after some process redesign approaches were implemented (Leggat et al., 2015). The review suggested that if the process redesign approaches were properly articulated and put into practice, then a significant harmony between medical, clinical, and managerial functions was realized. Methodologies and approaches to Process redesign can also be considered powerful drivers of change in dismantling the status quo in hospitals where the HRM function has yet to be considered critical in the running of the hospitals. (Leggat, et al, 2015). This study focused on public sector hospitality management, whose challenges are totally different from the business industry, which is the subject of this study. Therefore, the research gap identified here is the context of the study.

Ogada (2017) carried out descriptive research on BPR and the organizational Performance of state corporations in Kenya and observed that the BPR methodology of process redesign by Hammer and Champy had a significant impact on the organizational performance of state corporations. In conclusion, Ogada (2017) asserts that commercial corporations in Kenya benefitted greatly from the implementation of BPR methodologies and approaches employed through greater performance. Process redesign has been

credited for the desirable impact on organizational performance. The study further suggested that each organization is unique, and the process redesign approaches must be relevant to that particular organization. The research gap identified in this research is that the researcher, though correctly used the independent variable process redesign, context focused on state corporations in Kenya, while this current study is focusing on Supermarkets in Mombasa City County.

Bako and Banmeke (2019), in a case study, 'Business Process Reengineering as a tool at KCB Bank,' observed and summarized the findings that there is no doubt BPR has a significant desirable impact on the outcome of organizational goals and has brought inefficiencies in work processes. The study further found that BPR and change management approaches are one and the same, and none can be applied in isolation and succeed. Process redesign has also been instrumental in creating stronger bonds between organizations and their customers, as well as making sense in aligning organizational strategy and shareholder value. The study gaps compared to this study are basically on methodology as the researcher carried out a survey study as opposed to descriptive methodology as adopted by this study.

RESEARCH METHODOLOGY

This study adopted a descriptive research design to establish the relationship between various Business Process Re-engineering measures as drivers of the Performance of supermarkets. This research design facilitates the assessment of the link of the respective variables. The target population for this study was all supermarket outlets operating in Mombasa City County. The research questions were a mixture of closed-ended questions measured on a 5-point Likert scale and open-ended questions based on the research questions. The Likert scale was simpler to understand and easier to respond to in order to simplify the data analysis process.

RESULTS AND DISCUSSION

The results of this study are presented in tables and figures with the accompanying discussions to interpret them.

Response Rate

Return rate, also known as completion rate is basically the respondents who completed and returned filled questionnaires expressed in the form of a ratio of the total number of respondents picked as a sample (Creswell, 2016). Of the 110 questionnaires administered, 95 were filled and returned. This translated into an 86.3% return rate and this is acceptable to this study (Ogada, 2017). Table 1 outlines a summary of respondents who took part in this study. This summary of the return rate explains that of the 110 questionnaires issued to the respondents from the 22 Supermarket outlets, 95 were successfully returned and 15 were not returned. This translates into an 86.3% return rate. This desirable return rate was due to constant follow up and efficiency attributed to the research assistants.

Table 1: Questionnaire Response Rate

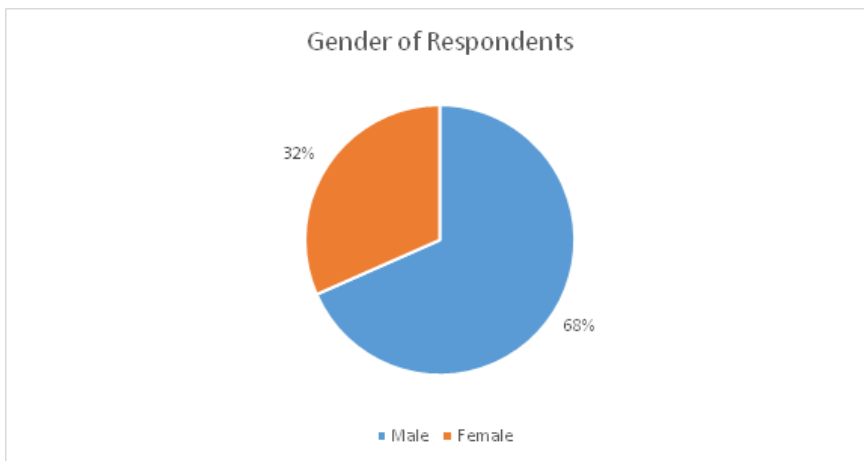
Response Type	Frequency	Percentage (%)
Responded	95	86.3
Not Responded	15	13.7
Total	110	100

Source: Research data, (2023)

Gender of Respondents

Of the 95(100%) of those who returned their questionnaires, analysis showed that 65(68.4%) were males against 30(31.6%) females. The Criteria for choosing the respondents was based on their seniority in the outlets and clear understanding of the operations of the supermarket business and the study variables. The results of the gender analysis as shown in Figure 1 indicates that the supermarket mid and senior management positions are dominated by males at 68.4% who are involved in the day today activities of the supermarket and implementation of the business improvement initiatives in the form of BPR. While only 31.6% females are involved in the same

Figure 1: Gender of Respondents



Source: Research data, (2023)

Descriptive Statistics

The descriptive statistics for business process redesign was measured by applying the 5-point Likert scale of 1 and 5 (1-5) where, in this case-1- strongly disagree, and 2-Disagree, 3 –do not know, 4 – agree, and 5 – strongly agree.

Guided by the questionnaire, the respondents involved were invited to indicate their degree of agreement to the stated indicators of process redesign that to a great extent relate to the performance of supermarkets in Mombasa City County. This information was translated and tabulated into Means and Standard deviations as relevant descriptive statistics to measure dispersion and central tendency with regard to the research data. Table 2, summarizes the findings as presented.

The results from the Table 2 with respect to process redesign, respondents agreed that redesign of the workflows and procedures had improved efficiency and turn-around time leading to greater productivity by the supermarket as shown by a mean of 3.895. Further, the respondents averred that process automation in the value chain has improved efficiency and accountability leading to low stock-outs, thus enhancing customer satisfaction as shown by a mean of 4.193. Responses also showed that key performance indicators had also improved time management and focus on productivity resulting into higher turnover by the supermarkets as shown by a mean of 3.840. Product redesign was also noted by the respondents as having improved the cost of production of goods and led to higher productivity by the supermarket as noted by a mean of 3.930. Respondents also agreed that process audits had improved the Performance of the supermarket through time-saving and quality of goods by waste reduction as shown by a mean of 3.530. On aggregate, the respondents agreed that process redesign as an aspect of BPR has had significant improvement in the supermarkets performance as shown by an overall aggregate mean score of 3.878. These

findings were corroborated by those of Nadeem & Ahmad, (2016), in their study on impact of BPR and commercial banks in Pakistan concluded that process re-design is the major driver BPR and that process redesign has enhanced efficiency and performance of Commercial banks in Pakistan.

Table 2: Descriptive Statistics for Process Redesign

Question Statements on Process Redesign	Mean	Std. Deviation
Re-design of the workflows and procedures has improved efficiency and turn-around time, hence greater productivity by the supermarket.	3.895	0.495
Process automation in the value chain has improved efficiency and accountability hence low stock-outs, thus improving customer satisfaction.	4.193	0.548
Key performance Indicators have improved time management and focus on productivity hence higher turnover by the supermarkets.	3.840	0.488
Product re-design has improved the cost of production of goods and led to higher productivity by the supermarket	3.930	0.501
Process audits have improved the Performance of the supermarket through time-saving and quality of goods by waste reduction.	3.530	0.447
Aggregate Scores	3.878	0.496

Source: Research Data, (2023)

Qualitative Data Analysis for Process Redesign and Performance of Supermarkets

There was also a qualitative approach to the field in which respondents were asked to give their views on whether redesigning of work flows, procedures and use of technology had a bearing on the performance of supermarkets in Mombasa City County. The views of the respondents were varied in nature. Varied in the sense that a few were of the opinion that use of technology is good and makes work easier but lack of training on the part of the staff was inhibiting full use of the technology leading to that technology rest in the hands of selected few. However, many of those who responded felt that technology and change of work flows and processes were good for the supermarkets because new and better methods of doing work were being adopted by the supermarkets leading to reduction in repeat work and costs.

Very few were of the view that process redesign, change of work flows and use of technology is adverse to the supermarket as it causes confusion and loss of jobs as people are being replaced by technology and machines. This study concludes that the popular view by the respondents is that process redesign, change of work flows and use of technology has a positive impact on the supermarkets performance. The findings here are corroborated Nkomo and Marnewick (2021), in their study business process reengineering and organizational performance of selected firms in Nigeria, who also found that process redesign has a significant incremental improvement on organizational performance when implemented by an organization as a companywide approach and culture.

Correlation Analysis

From the results in Table 3, there was a correlation coefficient $r = .236$ between the process redesign and performance of supermarkets ($p < .05$). This was a show of significant influence by the process redesign on the performance of supermarkets. The implication was that for every unit of performance at the supermarkets, there was some input of .236 from the process redesign with other unexplored factors contributing to the rest of performance.

The results conform to similar research finding by Leggat et al., (2015) as well as Ogada (2017) in which

they established a high positive correlation between process redesign and performance of organizations.

Table 3: Correlation

		Supermarket Performance	Process Redesign
Supermarket Performance	Pearson Correlation	1	.236(**)
	Sig. (2-tailed)	.002	.008
	N	95	95

Source: Research Data, (2023)

CONCLUSION AND RECOMMENDATIONS

This study established that there was a positive influence of business process re-engineering on the supermarkets on their performance. Consequently, the study concluded that an increase in units of business process re-engineering had positive influence on the performance of supermarkets in Mombasa City, Kenya. The study conducted recommends that supermarkets should do consultations whenever they are setting up a new supermarket with all business processes considered. This has the implication that not just supermarkets but the stakeholders in the supermarket industry have to be widely consulted. It is also recommended that supermarkets should move away from the lazy strategic practice of always cutting down on staff whenever their businesses are facing economic hard times but focus on business improvement strategy practices as seen in this study. There should also be adequate feasibility studies conducted to bring out all the possible scenarios for business processes involved in any given supermarket opening or expansion.

REFERENCES

1. Abd Ellatif, M, Farhan, M. S, & Naglaa, S.S. (2017); Overcoming business process Reengineering Obstacles using ontology-based knowledge map methodology. Production and Hosting by Elsevier. Future Computing and informatics Journal, 1(22). <https://doi.org/10.1016/j.fcij.2017.10.006>.
2. Abubakar, H., & Palisuri, P. (2019, October). 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.
3. Andrea, G., & Santoso, S. (2020). Improving Economy of the Community Based on Sustainable Tourism and Creative Economy through Business Process Re-Engineering (BPR) With Geopark Development in Lebak Regency Banten Province. International Journal of Innovative Science and Research Technology, 5(1), 472-482.
4. Bako, Y. A., & Banmeke, M. B. (2019). The impact of business process re-engineering on organizational performance (A study of commercial banks and micro-finance banks in Ilaro). Journal of Management and Technology [JORMATECH, 5(1), 1-14.
5. Creswell, J. W. (2016). Research design. Qualitative and Quantitative Approach. Thousand Oaks: Sage Publications., New York,
6. Hair, J.F., Sarstedt, M. & Ringle, C.M. (2019). Rethinking some of the rethinking of partial least squares and Oil marketing. European Journal of Marketing, Forthcoming.
7. Hammer, M., & Champy, J. (1993). Re-engineering the corporation: a manifesto for business Revolution. New York.
8. Hashem, G. (2020). Organizational enablers of business process reengineering implementation: An empirical study on the service sector. International Journal of Productivity and Performance Management, 69(2), 321-343.
9. Huang, A. (2017). A framework and metrics for sustainable manufacturing performance evaluation at the production line, plant and enterprise levels. Thesis and Dissertation, Mechanical engineering 97 https://uknowledge.uky.edu/me_etds/97

10. Joksch, J. (2005), Business Process re-engineering and the important role of Change Management (grin.com)
11. Kivuva, B.B. (2018); Effects of Outsourcing on Organizational Performance, KCA University.
12. Kruger, D. (2017), Application of Business Process Re-engineering as a process improvement Tool, a case study conference paper, July 2017,
13. Madhani, P. M. (2021), Retail Supply Chain Management: Building a customer-focused approach with competitive priorities: The IUP Journal of Supply Chain Management, Vol.18.
14. Njuguna, A. W., & Wanjohi, P. (2021). Effect of business process re-engineering on performance of agro-processing firms in Nairobi City County. *The Strategic Journal of Business & Change Management*, 8(4), 33-54.
15. Nkomo, A., & Marnewick, C. (2021). Improving the success rate of business process re-engineering projects: A business process re-engineering framework. *South African Journal of Information Management*, 23(1), 1-11.
16. Ogada, G.O. (2017), Business Process Outsourcing and organizational Performance of Commercial state corporations in Kenya. The University of Nairobi.
17. Shahul-Hameed, N. S., Salamzadeh, Y., Abdul Rahim, N. F., & Salamzadeh, A. (2022). The impact of business process reengineering on organizational performance during the coronavirus pandemic: moderating role of strategic thinking. *Foresight*, 24(5), 637-655.
18. Sujová, A., Simanová, L., & Marcinek, K. (2019). Reengineering of production processes and its impact on the financial situation and business performance of the company. *Engineering Management in Production and Services*, 11(3), 106-116.
19. Zaini, Z., & Saad, A. (2019). Business process reengineering as the current best methodology for improving the business process. *Journal of ICT in Education*, 6, 66-85.