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THE EFFECT OF DEALING STRATEGIES WITH RETURNED PRODUCTS ON PERFORMANCE: A STUDY CASE OF SAJA PHARMACEUTICAL CO., JEDDAH, SAUDI ARABIA

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ABSTRACT

The study aimed to determine effect of returned products strategies on firm's performance. SAJA Pharmaceutical Company is used as case study to identify the type of strategies which are used to handle returned products and determine the effect of these strategies on firm's performance in order to minimize the operational and financial impact. This study used qualitative approaches such as literature review, interviews and questionnaire. The study sample was 64 respondents from SAJA Pharmaceutical Company. The questionnaire is used to determine dispositions strategies on organizational performance and helped in understanding employees' perspective on returned product strategies of company's operational and financial performance. The data collected from the questionnaire were analysed using SPSS software. A model was suggested to determine the relationship between two variables such as returns strategies on organizational performance. The result showed that returned product strategies had positive effect toward organizational performance. Hence, each strategy was proven to improve the company's performance.

INTRODUCTION

Reverse logistic is defined as planning, implementation and efficiently control process of raw materials flow, in-process inventory, finished goods and related information from consumption point to origin point with recovering the primary value or dispose properly [1, 2]. Besides, reverse logistics also defined as backward movement of component, products, equipment and technical systems [3]. The reverse logistic is material or product movement

taking pace in opposite direction of supply chain with recapturing goal or generating value or for appropriate disposal [4]. Therefore, reverse logistics included returned products process due to seasonal inventory, damage, excess inventory, salvage recalls, restock, equipment disposition, hazardous material programs, recycling programs and asset recovery.

Disposition options are product or industry-specific and depend on the product characteristics such as product shelf life, price/value, and transport cost included market demand patterns [5]. All disposition strategies can be utilized as tools for achieving sustainability and attaining competitive advantage. Product disposition resulted in profit maximization and enables the firm to become environmentally responsible through effective waste management practices [6]. The disposition strategy type to be used relies on key decision such as recovery value and cost, product market value and product sophistication level.

Organizational performance is organization's external efficacy measures in three main areas such as financial performance, sale and market performance and equity return. The selected strategy has an effect on the organization's effectiveness and performance. Disposition strategies for the returned products depend on dimension number. The companies have measured the logistics performance to enhance revenue growth, reduce operation cost and improve the shareholder. Organizational reverse logistics activities proactive nature enables organization to attain superior value, hence important for the firm to focus on reverse logistic systems that bring about flexibility. Implementing the return process effectively enables the firm to manage reverse product flow efficiently but also to recognize the opportunities for reducing undesirable returns included to control recyclable assets such as the containers.

Company resources included knowledge, organizational process, capabilities, assets, information and organizational characteristics. Allocating sufficient personnel and financial resources are among the barriers for developing an effective reverse logistics program [7]. Very few organizations had succeeded in automating information systems in the returning products whereas allocated resources in system are stressed to the limit and inaccessible for utilization of reverse logistics [8].

SAJA Pharmaceutical Company is a joint venture between premium Saudi healthcare company, Tamer and two leading Japanese pharmaceutical companies, Daiichi Sankyo Co., Ltd. and Astellas Pharma In as partners. Both companies are major players in Japanese healthcare sector. This study aimed to determine effect of returned products strategies on firm performance. In addition, the company should have good strategies to deal with returned products in order to reduce the cost and improve company performance.

METHODOLOGY

Primary research data referred to collected and used for specific data research. In this study, the questionnaire was filled by SAJA Pharmaceutical Company. The data collected from this questionnaire were analyzed using SPSS

software. A model was suggested to determine the relationship between two variables such as returns strategies on organizational performance.

The secondary data referred to were the data selected from the previous study. The secondary data for current research included book, peer reviewed journals and published articles. The study sample was 64 respondents from SAJA Pharmaceutical Company.

The first-hand information was collected by distributing questionnaire to 64 employees in SAJA Pharmaceutical Company through employee emails. The questionnaire is used to determine the dispositions strategies on organizational performance and helped in understanding employees' perspective on returned product strategies towards company's operational and financial performance.

RESULT AND DISCUSSION

Based on Table 1, the result showed variable “disposition strategies” had good reliability level (Cronbach Alpha > 0.8). Meanwhile, “recycling strategy” variable had good reliability level (Cronbach Alpha > 0.9). Also, “recondition strategy” had good reliability level.

In addition, “remanufacturing strategy” had good reliability level (Cronbach Alpha > 0.9) as tabulated in Table 1. Meanwhile, “repair strategy” was found to have acceptance reliability level (Cronbach Alpha > 0.7). “Environmental outcomes” had good reliability level (Cronbach Alpha > 0.9). In addition, “profitability” had good reliability level (Cronbach Alpha > 0.9). In “sales growth”, this variable had good reliability level (Cronbach Alpha > 0.9).

Table 1: Reliability Test For Variables

Variable	Cronbach Alpha
Disposal strategy	0.818
Recycling strategy	0.950
Recondition strategy	0.913
Remanufacturing strategy	0.923
Repair strategy	0.752
Environment outcomes	0.904
Profitability	0.904
Sales growth	0.904

All variable had Cronbach Alpha score above 0.65 which meant the questionnaire is reliable. Meanwhile, a simple linear model is fitted between independent variable (disposal strategy) and dependent variable (organizational performance: Environment outcomes, Profitability, and Sales growth).

The result found model coefficient of determination (R square) equals to 8.8% which meant that the model explained 8.8% of variance in organizational performance (Environment outcomes) or 9% of variation in the latter variable is explained due to variation in disposal strategy. The statistical significance

showed that the model was significant with $p\text{-value} = 0.000$ ($p\text{-value} < 0.05$) as shown in Table 2.

Table 2 showed the model coefficient of determination (R square) equal to 11.1% which meant that the model explained 11.1% of variance in organizational performance (Profitability) and the variation in disposal strategy. The statistical significance showed that the model is significant with $p\text{-value} = 0.000$ ($p\text{-value} < 0.05$).

Also, Table 2 indicates the model coefficient of determination (R square) was 3.4% which meant that the model explained 3.4% of the variance in organizational performance (Sales growth), or 3.4% of the variation in the latter variable is explained due to disposal strategy. Meanwhile, the statistical significance revealed that model was significant with $p\text{-value} = 0.000$ ($p\text{-value} < 0.05$).

Table 2: Model Summary for Variable Disposal Strategy

Variable	Dependent variable (organizational performance)	R2	Beta coefficient	Significant
Disposal strategy	Environment outcomes	0.088	0.297	0.018
	Profitability	0.111	0.333	0.008
	Sales growth	0.034	0.185	0.146

A simple linear model is fitted between recycling strategy and organizational performance (Environment outcomes) as shown in Table 3. The model coefficient of determination (R square) was 56.4% which meant that model explained 56.4% of organizational performance or 56.4% of the variation in the latter variable is explained due to variation in recycling strategy. Overall, statistical significance revealed that the model was significant with $p\text{-value} = 0.000 < 0.05$.

Next, Table 3 showed model coefficient of determination (R square) was 45.3% which meant that the model explained 45.3% of organizational performance (Profitability) or 45.3% of the variation in the latter variable is explained due to recycling strategy. The statistical significance showed that the model was significant with $p\text{-value} = 0.000 < 0.05$.

In Table 3, the model coefficient of determination (R square) was 33.5% which meant that the model explained 33.5% of the organizational performance (Sales growth) or 33.5% of the variation in the latter variable is explained due to recycling strategy. The statistical significance revealed that the model was significant with $p\text{-value} = 0.000 < 0.05$.

Table 3: Model Summary for Variable Recycling Strategy

Variable	Dependent variable (organizational	R2	Beta coefficient	Significant
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	performance)			
Recycling strategy	Environment outcomes	0.564	0.751	0.000
	Profitability	0.453	0.673	0.000
	Sales growth	0.335	0.579	0.000

In Table 4, model coefficient of determination (R square) was 57.3% which meant that the model explained 57.3% of the variance in organizational performance (Environment outcomes) or that 57.3% of the variation in the latter variable is explained due to recondition strategy. Overall, statistical significance showed that model was significant with p-value =0.000< 0.05.

With reference to Table 4, the R square value was 59.4% which meant that model explained 59.4% of organizational performance (Profitability) or that 59.4% of the variation in the latter variable is explained due to the variation in recondition strategy. The statistical significance revealed that model was significant with p-value = 0.000.

Table 4 found the model’s R square was 38.1% which meant that 38.1% of the variance in organizational performance (Sales growth) or 38.1% of the variation in the latter variable is explained due to the recondition strategy. The statistical significance of model was significant with p-value = 0.000.

Table 4: Model Summary for Variable Recondition Strategy

Variable	Dependent variable (organizational performance)	R2	Beta coefficient	Significant
Recondition strategy	Environment outcomes	0.573	0.757	0.000
	Profitability	0.594	0.771	0.000
	Sales growth	0.381	0.618	0.000

In Table 5, the model coefficient of determination R square was 53.2% which meant that model explained 53.2% in organizational performance (Environment outcomes) or that 53.2% of the variation in the latter variable is explained due to variation in remanufacturing strategy. Overall, statistical significance showed that the model was significant with p-value =0.000< 0.05.

Table 5 showed model coefficient of determination (R square) equalled to 50.9% which meant that model explained 50.9% of the variance in organizational performance (Profitability) or that 50.9% of the variation in the latter variable is explained due to variation in remanufacturing strategy. Based on Table 5, the statistical significance showed that the model was significant with p-value =0.000.

Meanwhile, model coefficient of determination (R square) was 30.6% which meant that 30.6% of the variance in organizational performance (Sales growth) or that 30.6% of the variation in the latter variable is explained due to

the variation in remanufacturing strategy. In Table 5, statistical significance of the model revealed that model was significance with $p\text{-value} = 0.000 < 0.05$.

Table 5: Model Summary for Variable Remanufacturing Strategy

Variable	Dependent variable (organizational performance)	R2	Beta coefficient	Significant
Remanufacturing strategy	Environment outcomes	0.532	0.729	0.000
	Profitability	0.509	0.714	0.000
	Sales growth	0.306	0.553	0.000

In Table 6, the R square equaled to 41.7% which meant that the model explained 41.7% of variance in organizational performance (Environment outcomes) or 41.7% of the variation in the latter variable is explained due to the variation in repair strategy. The statistical significance of the model revealed that model was significant with $p\text{-value} = 0.000 < 0.05$.

Table 6 represented model coefficient of determination (R square) was 31.2% which explained 31.2% of variance in organizational performance (Profitability) or that 31.2% of variation of the variation in the latter variable is explained due to repair strategy. The statistical significance of model revealed that model was significant with $p\text{-value} = 0.000 < 0.05$.

Also, Table 6 found the model coefficient of determination (R square) equal to 13.1% which meant the model explained 13.1% of the variance in organizational performance (Sales growth) or 13.1% of the variation in the latter variable is explained due to the variation in repair strategy. The statistical significance of the model showed that the model was significant with $p\text{-value} = 0.000 < 0.05$.

Table 6: Model Summary for Variable Repair Strategy

Variable	Dependent variable (organizational performance)	R2	Beta coefficient	Significant
Repair strategy	Environment outcomes	0.417	0.646	0.000
	Profitability	0.312	0.558	0.000
	Sales growth	0.131	0.363	0.003

The study showed that disposition strategies had positive effect on organizational performance to reduce company's budget of SAJA Pharmaceutical Company cost which was \$1,700,729.70 in year 2015. The variable such as disposal strategy, recycling strategy, recondition strategy, remanufacturing strategy and repair strategy had direct and significant effect on organizational performance. The returned product handling was an activity correlated with reverse logistics and every disposition strategy had an effect toward company performance, included environment [9]. All strategies were

utilized as tools to achieve sustainability and attain competitive advantage which each strategy had direct impact on the organizational performance.

CONCLUSION

In conclusion, the study found disposal strategy, recycling strategy, recondition strategy, remanufacturing strategy and repair strategy had positive impact toward company performance. Hence, the positive effect of each strategy performance, eventually will improve the company's performance. Besides, the data collection from successful companies also helps in implementing disposition strategies to minimize costs.

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