# **Differentiation Strategy and Performance of Large Rice Milling Factories in Kenya**

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Abstract: Organizations must adapt themselves to the empowered customer by implementing strategies that can sustain them in this competitive environment. The strategies such as porter's generic competitive strategy model differentiation, cost leadership, diversification, and new product development could be used for sustainability. Differentiation is a business strategy where firms attempt to gain competitive advantage by increasing the perceived value of their products or services relative to the perceived value of other firm's products or services. The study aimed to establish the effect of differentiation on performance of rice milling factories in Kenya with focus on Kirinyaga County which is the highest rice growing county in Kenya. The sought to find out the effect of product differentiation, physical differentiation and service differentiation strategy affect performance of large rice milling factories. The study was anchored on three main theories of differentiation strategy which includes knowledge based theory, Profit Impact of Marketing Strategy Principles model and Resource Based Theory. The study population comprised of 40 rice milling factories. A sample of fifty three (53) respondents was determined from the population through stratified sampling where the population was arranged into three strata; factory managers, technical officers and employees. The study focused on primary data both qualitative and quantitative. The questionnaire was used as the major data collection instrument and they were self administered to the respondents in the sample size. A pilot study was undertaken to pretest the questionnaires for validity and reliability. Descriptive and analytical statistics were used to summarize and analyze the data. Results showed that product, physical and service differentiation had a positive influence to the performance of large rice milling factories. However, physical differentiation was not statistically significant (0.059 which is > 0.05). The study concluded that only product and service differentiation strategies are affecting performance of large rice milling. In addition, service differentiation seems to be a key player being significant at 95% level of significant. The study recommended that large rice milling factories to offer online shopping services to have a wider market share, brand their products by attractive packaging, add value to their product by sorting the rice and have variety of sales incentives like offering transport services to the customers which are key to the factories` performance.

Keywords: Product Differentiation, Service Differentiation, Physical Differentiation, Knowledge based Theory, Resource based Theory. \_\_\_\_\_

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# I. INTRODUCTION

Competition among firms is getting harder day by day due to many organizational and environmental reasons such as globalization, deregulation, increasing global and domestic competition, and new technologies. The concept of differentiation focuses on firms making products that appear different from their competitors. This is in order to make them earn a competitive advantage over others. According to the founder of the concept Porter(1990), differential advantage is created when a firms products or services differ from its competitors and are seen as better than a competitors products by customers. All these strategies come along with the concept of creating efficiency within an industry. Porter (1990)further acknowledges that as a result of globalization, the best indicator of a company's future success is the ability to be different from its peers. This therefore implies that rice companies must adopt differential strategies like change the nature of the product, through varying features such as the use varying colorations to make it more attractive on the market. The value added by the uniqueness of the product may allow the firm to charge a premium price for it. Because of the product's unique attributes, if suppliers increase their prices the firm may be able to pass along the costs to its customers who cannot find substitute products easily (Thomas & Ofobike, 2008).

Thompson and Martin (2005) successful differentiation has three aspects: command a premium price for its product, increase sales because of additional buyers are won over by the differentiating features and gain buyer loyalty to its brand. A product is differentiated if consumers perceive it to have properties, which make it distinct from rival products or services, and ideally unique in some particular way and difficult to emulate.

Hence competitors will distinguish their brand, product or service in some way, perhaps by size, quality or style, to give it greater appeal for certain customers.

Organizational performance in companies with the differentiation strategy is based on: (i) Innovation in marketing technology and methods; (ii) Fostering innovation and creativity; and (iii) Focus on building high market share. Differentiation strategies practices in the rice milling industry are limited. Nevertheless, we can apply the differentiation focus strategy of generic strategies and craft in means of maintaining reputation in capturing more markets. Rice is a widely traded basic commodity in the world; which implies that, if the sector is well managed, it can bring numerous returns to any country. However as a result of competition, competitive differentiation strategies must be crafted for rice milling competitiveness (Herbert, 2003).

The rice milling industries in Kenya have faced a lot of changes in the environment that they operate in such as increasing costs of operations, proliferation of cheap imported rice, high inflation rates, lower consumer spending power and decreasing product margins due to a push for market share through products with a mass market appeal. This may be an indication of inadequate innovation by local milling companies. This is costly for the country (while trying to protect the local industry) in terms of denial of import taxes and on quality of rice products produced locally. Akan *et al*, (2006) aver that differentiation can be successful if tailored to: (i).Extensive training of marketing personnel, providing outstanding customer service, providing specialty products and, services, developing a broad range of new products or services, (ii).Developing brand identification and extensive training of front-line personnel, (iii). Targeting a specific market (iv) Innovation in marketing (v) Technology and methods (vi) Utilizing advertising (vii) Building a positive relationship within the industry for technological leadership.

Despite the challenges the rice milling factories in Kirinyaga County are making enormous progress. There has been a lot of innovation in processes and new product development in an aim to set each company apart from the competitors. Awino *et al.*(2008) argues that the literature on differentiation strategies relates to: core competence, technology, leadership styles, markets, culture, people and environment. Rice milling factories have branded and positioned themselves by capitalizing on the superior value of the unique physical features, products and services and thus enjoy more profits differentiating them from rivals to improve sales performance. Cole (2008) posits that potential strategies for product or service differentiation include: product features and benefits, location(s), staff, operating procedures, price, customer incentive programs, guarantees and warranties, brand name recognition, goodwill, value-added products/services, extended growing/operating season, soils, buildings, location, and landscape, water, access to irrigation and wetlands, weather, plants and animals, organization and alliances, customer experience and quality. Cole further argues that a venture's most effective differentiation- the one that will bring the venture the most success-will likely come from just one or two strategies. Porter(1990) argues that it is important for a firm to differentiate itself among more than one dimension in order to reach the desired results.

Several studies done on differentiation and performance have failed to establish how differentiation strategy affects performance of rice milling factories in terms of concept, methodology and context. These include a study by Heiko, Anders and Lars(2011) on the relationship between differentiation strategy and business performance on 332 European-based manufacturing firms in which confirmatory factor analysis and structural equation models were used to analyze data. He found out that more complex customer needs may reduce the value of a once sustainable source of Competitive advantage for firms (Barney, 1991). The study focused on one empirical setting a European sample of manufacturing firms, although those companies are conducting business worldwide, the sample limits external validity. The empirical investigation was only able to introduce customer centricity and innovativeness embedded in the market orientation of the firm, other strategic orientations, such as technological and entrepreneurial orientation can be introduced.

A survey by Farshid and Amir (2012) on the influence of marketing strategy elements on market share of 95 polymer sheets manufacturing in Iran in which one-sample T- test was used in data analysis found out that in the competitive environment of the market share, it is very important for a firm to be looking forward to the determinants of market share. The research was carried out on sheets manufacturing firms operating in Iran only. Thus, the results cannot be generalized to fit all firms. Shafiwu and Mohamed (2013) case study on the effect of product differentiation on profitability in the petroleum industry of Ghana which employed correlation research model. The study concluded that despite the fact that the petroleum industry is not seen to have differentiated products relative to other industries, that is not to mean that the act of differentiation is not profitable in the industry but rather there may be other factors responsible for that. The study recommended further research should be conducted on fuel other factors such as cost of differentiation, industry attractiveness and consumer test to determine whether they are contributory factors to lack of differentiated product in the petroleum industry hence findings cannot be generalized.

Jelagat (2012) studied the Strategic Issue Management (SIM) practices by the 67 registered tea exporting companies in Kenya in which strategic management and business environment are the key concepts while the relationship between elements was investigated using Chi-square test which showed a significant

relationship between strategic issue management and ownership structure of the company as well as the company's external environment. Further, research established that the most preferred methods of scanning a company's environment for strategic issue management were market research, customer analysis, market intelligence and performance monitoring, The study recommended further research in this area with an extension of the geographical scope to include other tea handling organizations within the region thus limited generalization.

Anyim (2012) studied service differentiation among private hospitals in Nairobi. The study confined itself to private hospitals operating in Nairobi. This study therefore should be replicated in other sectors of the economy and the result be compared so as to establish whether organizations which practice service differentiation gains competitive advantage. Therefore, it failed to examine the effect of differentiation on performance; this study seeks to examine how rice milling factories in Kirinyaga County can use differentiation as a strategy to achieve competitive advantage In order to adapt changes in rising expectations of their customers. This could go a long way in enabling them to achieve business objectives. It is against this background that the researcher has chosen to carry out a study in this important sector.

# **II.** Theoretical Review

The study was anchored on three theories: knowledge-based theory, Profit Impact of Marketing Strategy (PIMS) principles and resource based theory. Knowledge-based theory of the firm considers knowledge as the most strategically significant resource of a firm. Its proponents argue that because knowledgebased Resources are usually difficult to imitate and socially complex, heterogeneous knowledge Bases and capabilities among firms are the major determinants of sustained competitive advantage and superior corporate performance. Although the resource-based view of the firm recognizes the important role of knowledge in firms that achieve a competitive advantage, proponents of the knowledge-based view argue that the resource-based perspective does not go far enough. Specifically, the RBV treats knowledge as a generic resource, rather than having special characteristics, it therefore, does not distinguish between different types of knowledge-based capabilities. Information technologies can play an important role in the knowledge-based view of the Firm in those information systems can be used to synthesize, enhance, and expedite large scale intra and inter-firm knowledge management (Maryam & Dorothy, 2011). The Profit Impact of Marketing Strategy (PIMS) concept is a financial model founded in 1980s (Yannopoulos, 1987) that relates business strategies to a firm's performance. It is built on the postulate that, "the quality of goods/services of a firm that is superior to the one of other firms' contributes to its performance". Bordes, Bottou and Gallinari (2009) argues that within the firm, differentiation-based sources of competitive advantage in value-adding activities can be built through a number of methods.

# **III. Research Methodology**

Descriptive Survey design was used in the study. the what, where and how of phenomena were observed and described without influencing them. The population consisted of 130 rice milling factories in Kirinyaga County (Millers Association, 2015). Rice milling factories use different sizes and quality of machinery this results to different production capacities (in volume) and rice quality differences. Therefore, the mills can be easily classified as large, medium and small. The classification is in terms of the number of sacks milled by machine because of its capacity. The large millers are those who can mill a minimum of 1 tonne of rice per day. They were found to be forty who met this criteria and they were the unit of analysis in this study. They were all located in one area called Wang'uru where majority of the rice in the county is grown. The forty formed the population of the study. A census on the forty was carried out. The workers were arranged into three strata; factory managers, technical officers and employees. From the same 35 employees, 9 factory managers and 9 Technical staff were randomly selected. A questionnaire that comprised of both open and close-ended questions was used for data collection. The data was analyzed using both qualitative and quantitative techniques. Descriptive and inferential statistics helped describe "What is" or "what happened" (Ngecu, 2006), (Mugenda & Mugenda, 2003), (Kothari, 2006).

# **IV. Research Findings**

The pilot testing results shows that the data was reliable as all independent variables had a value of 0.860 to 0.932 and this was above 0.7 which was the threshold (Zinbarg, 2005) and this indicates that the gathered data had relatively high internal consistency and could be generalized to reflect opinions of all respondents in the target population on differentiation strategy and performance of large rice milling factories in Kirinyaga County, Kenya. Validity was also confirmed with few corrections on the phrasing of the questions being put into consideration for the final questionnaire. The number of questionnaires that were administered to factory managers, factory technicians and factory employees was fifty three (53). A total of forty six (46) questionnaires were properly filled and returned. This represented an overall successful response rate of 86.8% which was very good according to Mugenda & Mugenda (2003).

# V. Descriptive Statistics

The study concentrated on three differentiation strategies: product, service and physical and their effect on performance of large rice milling factories in Kenya. Below are the findings and discussions of descriptive statistics for each variable. The overall regression model of the effect of differentiation strategy and performance of the large rice milling factories in Kenya will be discussed in the next section.

# 4.1 Product differentiation

From table 4.1 it was established that product differentiation is a key driver to performance with most of the respondents indicating it is either to very large extent or large extent. 45% of the respondents agree to a very large extent, 38% of the respondents agree to a large extent 9% of the respondents agree to a moderate extent, 3% of the respondents agree on a small extent while 5% of the respondents agree at no extent on product differentiation strategy. Customers are attracted more to products that they value as compared to their prices. This corroborate with findings from other scholars like Trout (2000); Horovitz (2000); and Lorentz, Häkkinen and Hilmola (2006) who advocates that performance is dependent on product and service differentiation.

| Table 4.1 Product Differentiation Strategy |            |           |          |         |         |       |
|--|------------|-----------|----------|---------|---------|-------|
|  | Very large | Large     | Moderate | Small   | No      | SD    |
|  | Extent     | Extent    | Extent   | Extent  | Extent  |       |
| Rice quality                               | 19(41.3%)  | 21(45.7%) | 4(8.7%)  | 0(0%)   | 2(4.3%) | 9.985 |
| Rice value addition                        | 22(47.8%)  | 15(32.6%) | 6(13%)   | 1(2.2%) | 2(4.3%) | 9.039 |
| Rice variety                               | 22(47.8%)  | 17(37%)   | 2(4.3%)  | 3(6.5%) | 2(4.3%) | 9.576 |
| Rice position                              | 19(41.3%)  | 16(34.8%) | 5(10.9%) | 2(4.3%) | 4(8.7%) | 7.727 |

Source: Field Data (2017)

In addition, the most of the respondents affirmed their factories were conscious and practicing product differentiation strategy. This is reflected on table 4.2 below:

| _  | Strongly  | Agree     | Moderate  | Disagree | Disagree | SD     |
|--|-----------|-----------|-----------|----------|----------|--------|
| Statement  | Agree     |           |           |          | Strongly |        |
| The factory ensures milling of high quality rice               | 35(76.1)  | 11(23.9)  | 0(0%)     | 0(0%)    | 0(0%)    | 11.798 |
| We exercise diligence in selecting suppliers of our machines   | 20(43.5%) | 24(52.2%) | 2(4.3%)   | 0(0%)    | 0(0%)    | 15.189 |
| Product selection is based on customer specification           | 25(54.3%) | 11(23.9%) | 10(21.7%) | 0(0%)    | 0(0%)    | 10.281 |
| Product selection is demand driven                             | 28(60.9%) | 12(26.1%) | 1(2.2%)   | 2(4.3%)  | 3(6.5%)  | 11.389 |
| Product assortment style is distinct from our competitors      | 26(56.5%) | 11(23.9%) | 6(13%)    | 3(6.5%)  | 0(0%)    | 10.232 |
| Rice products are well positioned for ease access by customers | 32(69.6%) | 9(19.6%)  | 2(4.3%)   | 2(4.3%)  | 1(2.2%)  | 13.142 |
| Add value to our products through packaging of rice            | 21(46.7)  | 10(21.7%) | 9(19.6%)  | 5(10.8%) | 1(2.2%)  | 7.497  |

Source: Field Data (2017)

## 1.2 Physical Differentiation Strategy

The study sought to establish the effect of physical differentiation strategy on performance of large milling factories in Kenya. From the findings on table 4.3, 36% of the respondents agree to a very large extent, 33% of the respondents agree to a large extent 21% of the respondents agree to a moderate extent, 7% of the respondents agree on a small extent while 3% of the respondents agree at no extent on physical differentiation strategy.

|                 | Very large | Large     | Moderate  | Small    | No      |
|-----------------|------------|-----------|-----------|----------|---------|
|                 | Extent     | Extent    | Extent    | Extent   | Extent  |
| Mill Location   | 20(43.5%)  | 14(30.4%) | 10(21.7%) | 0(0%)    | 2(4.3%) |
| Parking space   | 17(37%)    | 16(34.8%) | 8(17.4%)  | 4(8.7%)  | 1(2.2%) |
| Mill design and | 18(39.1%)  | 18(39.1%) | 6(13%)    | 4(8.7%)  | 0(0%)   |
| display/layout  |            |           |           |          |         |
| Mill atmosphere | 10(21.7%)  | 13(28.3%) | 15(32.6%) | 5(10.9%) | 3(6.5%) |

Source: Field Data (2017)

To confirm the above, most of the respondents agree to a large extent on the effect of physical differentiation to the performance of the large milling factories as shown on table 4.4. The environment is what gives organizations their means of survival and also a source of threats. This is supported by Johnson *et al* (2008) who concluded that it is vital that managers analyze their environments carefully in order to anticipate and if possible influence environmental change.

| Statement  | Strongly<br>Agree | Agree     | Moderate | Disagree | Disagree<br>Strongly | SD     |
|--|-------------------|-----------|----------|----------|----------------------|--------|
| Factories are strategically located                                      | 25(54.3%)         | 17(37%)   | 4(8.7%)  | 0(0%)    | 0(0%)                | 11.256 |
| Has adequate free parking space  | 24(52.2)          | 11(23.9%) | 8(17.4%) | 0(0%)    | 3(6.5%)              | 9.311  |
| Factory layout is strategically<br>placed to attract new<br>customers    | 34(73.9%)         | 6(13%)    | 1(2.2%)  | 2(4.3%)  | 3(6.5%)              | 13.989 |
| Stores are spacious for<br>customers storage                             | 30(65.2%)         | 9(19.6%)  | 1(2.2%)  | 1(2.2%)  | 5(10.9%)             | 12.091 |
| Factory environment is filled<br>with entertainment (visual and<br>audio | 13(28.3%)         | 7(15.2%)  | 9(19.6%) | 17(37%)  | 0(0%)                | 6.419  |

Source: Field Data (2017)

#### 1.3 Service Differentiation Strategy

Service differentiation strategy and its effect on performance on the large rice milling factories was investigated. From the findings and as shown on table 4.5, 40% of the respondents agree to a very large extent, 29% of the respondents agree to a large extent 23% of the respondents agree to a moderate extent, 4% of the respondents agree on a small extent while 3.2% of the respondents agree at no extent on service differentiation strategy. Customers are very specific on what they want. Customers are also impressed by good services.

|                   | Very large | Large     | Moderate  | Small   | No      | SD    |
|-------------------|------------|-----------|-----------|---------|---------|-------|
|                   | Extent     | Extent    | extent    | extent  | extent  |       |
| Advertising and   | 17(37%)    | 11(23.9)  | 15(32.6%) | 1(2.2%) | 1(2.2%) | 7.616 |
| Promotion         |            |           |           |         |         |       |
| Sales Incentives  | 15(32.6%)  | 14(30.4%) | 14(30.4%) | 2(4.3%) | 1(2.2%) | 7.050 |
| Core competencies | 18(39.1%)  | 15(32.6%) | 7(15.2%)  | 4(8.7%) | 2(4.3%) | 6.979 |
| Operating hours   | 23(50%)    | 14(30.4%) | 6(13%)    | 1(2.2%) | 2(4.3%) | 9.257 |

Source: Field Data (2017)

To confirm the above findings, the respondents as shown on table 4.6 confirmed the above findings. The sales revenue of a firm could be attributed to increased buyer value (Bordes, 2009). This might be as a result of reconfiguring or to improving other activities within the firm's value chain. The contributors of sales turnover include superior quality of goods/services (PIMS Principle); value-adding activities (Bordes, 2009) and uniquely blended products (Omari et al, 2014). These findings are in agreement with other findings such as that of (Grant, 2005) who stated that for strategy to be successful it must be consistent with the firm's goals and values, its external environment, its resources and capabilities, its organization and systems. Decision making capabilities are of interest to decision makers in organizations operating in turbulent environments where environmental change is frequently occurring and response to this change is a necessary component of maintaining a competitive market position or gaining an improved one (Heinriches & Lim, 2008).

Table 4.6 Effect of Service Differentiation Strategy

| Statement   | Strongly<br>Agree | Agree     | Moderate | Disagree | Disagree<br>Strongly | SD     |
|---|-------------------|-----------|----------|----------|----------------------|--------|
| Offers transport service to customers   | 10(21.7%)         | 17(37%)   | 4(8.7)   | 13(28.2) | 2(4.3%)              | 6.221  |
| Use posters for advisement and promotion of factory                             | 23(50%)           | 12(26.2)  | 6(13%)   | 3(6.5%)  | 2(4.3%)              | 9.450  |
| Offers online shopping services   | 6(13%)            | 15(32.6%) | 3(6.5%)  | 17(37%)  | 5(10.9%)             | 6.340  |
| Service delivery is fast in Factory   | 26(56.5%)         | 14(30.4%) | 5(10.9%) | 0(0%)    | 1(2.2%)              | 10.895 |
| There is promptness in handling customers complaints/inquiries                  | 24(52.2)          | 7(15.2%)  | 5(10.9%) | 5(10.9%) | 5(10.9%)             | 8.319  |
| Have skilled and experienced staff  | 20(43.5%)         | 19(41.3%) | 6(13%)   | 1(2.2%)  | 0(0%)                | 9.680  |
| Have variety of sales incentive<br>programs (smart cards, bank credit<br>cards) | 10(21.7%          | 5(10.9%)  | 9(19.6%) | 18(39.1) | 4(8.7)               | 5.541  |

Source: Field Data (2017)

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# **VI. Inferential Statistics**

Inferential analysis was conducted to generate correlation results, model of fitness, and analysis of the variance. Pearson correlation was carried out to determine how the research variables related to each other. The results revealed that product differentiation and service differentiation are positively and significant related (r=0.99, p=0.001). The results further indicated that physical differentiation and service differentiation were positively and significantly related (r=0.9218, p=0.023). It was further established that physical differentiation and service differentiation were positively and significantly related (r=0.9111, p=0.031). This implies that an increase in any unit of the variables leads to an improvement in performance of rice milling factories.

Multiple regression analysis was used to determine whether independent variables product differentiation (X1), physical differentiation (X2) and service differentiation(X3) simultaneously affects the dependent variable (Y) performance of large rice milling factories. As a result, the subsection examines whether the multiple regression equation can be used to explain differentiation strategy and performance of large rice milling factories in Kirinyaga County, Kenya. The model used for the regression analysis was expressed in the general form as given below:

## $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$

As can be observed in table 4.7 the value of R-squared is 91.4% which is close to 100% and this implies that the regression model can be used to explain differentiation strategy and performance of large rice milling factories in Kirinyaga County, Kenya. This concurred with Mugenda and Mugenda (2003) that R squared is always between 0 and 100%: 0% indicates that the model explains none of the variability of the response data around its mean and 100% indicates that the model explains all the variability of the response data around its mean. In general, the higher the R-squared, the better the model fits the data. Table 4.7 presents the model of the effects of large rice milling factories in Kirinyaga County with the coefficient of determination  $R^2 = 0.914$  and R =0.956 at 0.05 a significant level. The coefficient of determination indicates that 95.6 % of the variation on implementation differentiation (X1), physical differentiation (X2) and service differentiation (X3). The remaining 5.4% of the variation on differentiation strategy and performance of large rice milling factories in Kirinyaga County is affected by other variables not included in the model. This shows that the model has a good fit since the value is above 75%.

#### Table 4.7 Model of Fitness

|                            | 14010 117 11104           | er or i rarebb         |        |
|----------------------------|---------------------------|------------------------|--------|
| Indicator                  | Coe                       | efficient              |        |
| Multiple R                 |                           |                        | .956   |
| R Square <sup>a</sup>      |                           |                        | .914   |
| Adjusted R Square          |                           |                        | .857   |
| Std. Error of the Estimate |                           |                        | 27.551 |
| - Durdistance (Constant)   | Due deset Differentiation | Coming Differentiation |        |

a. Predictors: (Constant), Product Differentiation, Service Differentiation,

Physical Differentiation

b. Dependent Variable: Performance of Large rice milling factories

Source: Field data (2017)

The study further used one way Analysis of Variance (ANOVA) in order to test the significance of the overall regression model. Green and Salkind (2003) posits that one way Analysis of Variance helps in determining the significant relationship between the research variables. As can be observed in the table 4.8 of the Analysis of Variance (ANOVA) for regression coefficients, the results demonstrate the significance is 0.05 which is equal to 0.05. This therefore implies that there is a significant relationship between product differentiation (X1), physical differentiation (X2) service differentiation (X3) and organization performance. Table 4.8 also reports the summary ANOVA and F statistic which reveals the value of F (20330.165) being significant at 0.05 confidence level. The value of F is large enough to conclude that the set of independent variables; product differentiation (X1), physical differentiation (X2) and service differentiation (X3) are the major factors affecting performance of large rice milling factories in Kirinyaga County, Kenya.

| Model     |                     | Sum of Squares | Df | Mean Square | F         | Sig.              |
|-----------|---------------------|----------------|----|-------------|-----------|-------------------|
|           | Regression          | 11389.061      | 3  | 3796.354    | 20330.165 | .005 <sup>b</sup> |
| 1         | Residual            | .187           | 1  | .187        |           |                   |
|           | Total               | 11389.248      | 4  |             |           |                   |
| a. Depen  | dent Variable: y    |                |    |             |           |                   |
| b. Predic | tors: (Constant), x | 3. x2. x1      |    |             |           |                   |

Table 4.9 presents the results of the test of beta coefficients which indicates that the significant relationship between product differentiation (X1), physical differentiation (X2) service differentiation (X3) and organization performance is positive. The coefficient significance of product differentiation (X1) is 0.315, physical differentiation (X2) is 0.357 and service differentiation (X3) is 0.338.

Table 4.9 Coefficients Of Differentiation And Performance Of Large Rice Milling Factories In Kirinyaga County, Kenya

| Model |            | Unstandardized Coefficients |            | Standardized<br>Coefficients | Т      | Sig. |
|-------|------------|-----------------------------|------------|------------------------------|--------|------|
|       |            | В                           | Std. Error | Beta                         |        |      |
|       | (Constant) | .179                        | .614       |                              | .292   | .819 |
| 1     | x1         | .315                        | .023       | .449                         | 14.012 | .045 |
| 1     | x2         | .357                        | .033       | .314                         | 10.847 | .059 |
|       | x3         | .338                        | .015       | .253                         | 23.115 | .028 |

a. Dependent Variable: y

From the regression findings, the equation is:

### $Y = 0.179 + 0.315X1 + 0.357X2 + 0.338X3 + \varepsilon$

The data findings hence shows that a unit changes in product differentiation lead to a 0.315 change in performance of large rice milling factories; a unit change in physical differentiation will lead to a 0.357 change in performance of large rice milling factories; a unit change in service differentiation will lead to a 0.338 change in performance of large rice milling factories. However, the physical differentiation is not significant at 95% level of confidence (0.059>0.05). This shows that it could not be a factor of performance though it correlates with the others. This differs with previous findings that physical differentiation could affect performance of an organization (Barone & DeCarlo (2003); Eckman & Yan (2009); Eckman (2009); Gathoga (2011). For the rice millers, physical differentiation could not affect them. Product differentiation and service differentiation however are significant at 95% level of confidence. This corroborate with findings from other scholars like Trout (2000); Horovitz (2000); and Lorentz, Häkkinen and Hilmola (2006) who advocates that performance is dependent on product and service differentiation.

This leads to a new model arrived by dropping the physical differentiation as follows:

 $Y = 0.179 + 0.315X1 + 0.338X3 + \varepsilon$ 

Strategic issues present the potential for change from the status quo in a firm's business environment (Oliver & Donnelly, 2007). Oliver and Donnelly observe that issues always have some degree of conflict and can generate stress, anxiety and confusion in organizations. Proper management of these issues is therefore very important at a time in under threat (Perrot, 2008). The findings are however, consistent with the differentiation theory which states that the ability of a firm to maintain its competitive advantage depends on how it manipulates other variables, in line on variety and immutability of its organizational strengths and weaknesses (Awino et al, 2008). The findings also support a study by Bordes (2009) who established that increasing buyer values or any dimension in value-adding activities means a need to reconfigure or to improve activities within the firm's value chain.

## VII. Conclusions

The main objective of the research study was to establish the effect of differentiation on performance of large rice milling factories in Kirinyaga County, Kenya. The study drew conclusions that only product differentiation and service differentiation affects rice milling factories in Kirinyaga County. Physical differentiation was not statistically significant and therefore it was not considered.

Product differentiation affects performance of large rice milling factories in Kirinyaga County. Product differentiation entails product selection, product assortment, products quality and products positioning to be able to convince customers that their products are better than those of their competitors.

Service differentiation strategy affects performance of large rice milling factories in Kirinyaga County. Service differentiation entails after sale service, sales incentive, advertising and promotion and operating hours to be able to undo their competitors.

# VIII. Recommendations

For the product differentiation, the study recommends that the milling factories umbrella come up with minimum expected product standards to set a bar for the factories products. The study recommends that rice milling factories differentiate the product using activities like sorting the rice and polishing it to make it attractive. The study also recommends that the milling factories provide clear grading system and rice specifications for example grade 1, grade 2 and grade 3.

The study recommends on service differentiation that all rice milling factories to offer online shopping services making their services available to many and not only to those coming to their factories. Packaging it in attractive packets for branding and adding cooking instructions could also differentiate the product. The study also recommends that rice milling factories to offer transport services to customers who buy in bulk. This would add value to the customer and enhance customer royalty.

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