# ROLE OF PRODUCT DIVERSIFICATION STRATEGY ON PERFORMANCE OF SELECTED TEA FACTORIES IN KENYA

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## ABSTRACT

Tea factories especially those managed by Kenya Tea Development Agency are faced with challenges of implementing business growth strategies. This has resulted to poor performance leading to public outcry. The study sought to determine the effect of product diversification strategy and performance of selected tea factories in Kenya. This study was anchored on the Ansoff Matrix theory and supported by Resource Based View, Market Based View and Agency theories. A descriptive research design was adopted and used in this study. KTDA has seven regions comprising of 69 factories with 1506 management staff. This study purposively selected Kisii and Kericho Highlands regions. The population of this study was 701 with a sample size of 364obtained using Yamane's (1967) formula. Simple random sampling was used to get specific respondents. А self-constructed questionnaire was used to collect data from respondents. A pilot study was conducted at Kagwe and Theta Tea Factories in Aberdare Ranges region to test reliability of the data collection instruments. Cronbach's Alpha coefficient was used to test reliability which had an overall

coefficient of 0.903. The study tested face validity through peer reviews and content validity by opinions of research expert and supervisors. Data analysis was done using descriptive statistics, which included mean, standard deviation, percentages and frequencies. Inferential statistics, that is Pearson correlation was used to determine strengths of relationship while simple linear regression was used to estimate relationship between variables. The analyzed data was presented using tables, charts and graphs. Study findings indicated that product diversification strategy have positive effect on firm's performance. The study concluded that tea factories employ business growth strategies to enhance firm performance. The study also concluded factories that tea employ product diversification to increase their competitive advantage over other firms and create products that appeal to customers.

**Keywords:** Product Diversification, Kenya Tea Development Authority, Tea Board of Kenya, Tea Research Foundation of Kenya, Confirmatory Factor Analysis

## **INTRODUCTION**

Organizational performance and effectiveness is influenced by processes, organizational structure and external environment (Hrebiniak and Joyce, 2015). Porter emphasized that competitive environment is crucial in the planning and implementation of corporate strategy. Hamel and Prahalad(2012) indicated that strategy is an organic process that evolves and is unpredictable.

Foss and Christensen (2014) asserted that organizations spread to generate upbeat spill offers since the value of resources in one industry is amplified because of investment in another industry. Various firms may adopt dissimilar diversification strategies with an endeavor to improve their performance. Product diversification contains the addition of new products being manufactured or marketed, branding, packaging and resizing to existing products. Product diversification gives a firm a spirited advantage (Njuguna, Kwasira & Orwa, 2018). Product diversification strategy is a necessary approach for firms to employ in widening their markets. Kariuki (2016) further indicates that product diversification increases the profitability of an enterprise.

### **Statement of the Problem**

Successful implementation of business growth strategies in a firm leads to peak performance (Kagwiria, 2014, Hrebiniak & Joyce 2016). Business growth strategies have a positive and significant effect on organizational performance of a firm (Ojwaka & Deya, 2018). Business growth strategies provide a plan of action for improving a firm's sales, profits, output and efficiency (Matthews and Scot, 2015). Business growth strategies provide a vision of where a business seeks to go and how it expects to get there. It is the form by which a business communicates its goals and works towards attaining them (Pearlson and Saunders, 2016).

Tea sector is a key player in the agricultural development in Kenya. However, Kenya Tea Development Authority managed factories have been performing poorly in bonus payment for the last five years (KTDA, 2020). Studies by (Rose & Hudgins, 2018, Ng'ang'a, Namusonge and Sakawa 2016, Kariuki 2016 and Njuguna, Kwasira&Orwa, 2018)have shown that tea manufacturing factories in the region have been hit by a downward trend in bonus payment. The factories have experienced dwindling bonuses (Wainaina, Mbeche, Njihia&Otulia 2017, Ombaka, Machuki & Mahasi 2015 and Ojwaka&Deya, 2018).

Previous empirical studies demonstrate the positive relationship between business growth strategies and firm performance (Kagwiria, 2014, Hrebiniak& Joyce 2016, Ojwaka&Deya, 2018, Matthews & Scot 2015 and Pearlson& Saunders, 2016). Furthermore, most of the recent research

took place in European, American, Asia and China contexts and consequently there is little understanding as to how business growth strategies affect performance in KTDA managed factories in Kenya. The existing studies related to the study include (Maina, Mugambi & Waiganjo, 2018; Muriuki, 2016 & Gesimba, 2015) who agree that product diversification strategy has a positive relationship on organizational performance. None of these studies in my knowledge has considered product diversification strategy and performance. Groosma (2015) pointed out that business growth strategies are always dynamic from one organization to another and do not operate in isolation. Muriuki (2016) assessed various types of business growth strategies but did not focus on the Ansoff Matrix. The study therefore sought to assess the relationship between product diversification strategy and performance of selected tea factories in Kenya.

# LITERATURE REVIEW

## **Ansoff Matrix/ Model**

Ansoff (1957) is the proponent of the Ansoff Matrix, a model that states that for an organization to grow its presentation, it is essential to realize products and market growth through four different strategies which be contingent on whether or not a company or product is previously or current in the market. He measured two scopes; one measurement is based on the product being either new or current while the other measurement considers market as new or existing.

On diversification, the matrix indicates that a business organization attempts to escalate the size of her sales via entry to new markets with novel products which might relate with older ones or which have no semblance with older ones. Such an approach is considered one of the most dangerous approaches when compared with the other three foregoing strategies, since companies want to get into newer markets with newer products without any experience and complete knowledge of the newer markets and products. Consequently, business organizations/companies must have clear ideas based on specific studies and research with a focus on new markets and or products, and to conduct honest assessments of dangers and risks for the sake of appropriate balance between risk and profits. Because it is one of the most dangerous, it can be rewarding, which is consistent with the law that says that the greater the risk level, the greater the income expected (Murray, 2016).

# **Market-Based Theory**

The theory states that firms will diversify in order to enhance competitiveness in corporate strategy. If this is realized, the firm/industry value will go up. This assists in choosing the market combination for products, in which the company/organization utilizes her plans. The plan assists

in designing a structure and a strategy of a company based on the market examination of the industry (Breen & Bill, 2014)

### **Resource Based View Theory**

This theory is the brainchild of Penrose (1959). The theory states that diversification is driven by the exploitation of some firm specific resources that have been accumulated in the past. Performance in that firm is a mixture of resources, so there is growth of the firm theory. The theory explains that a firm's growth is restricted by opportunities that exist because of a set of the firm's making power source. It is Penrose's theory that gave birth to RBV whose basic aim was the guide, type and amount and nature of enterprise resources should be considered first in selecting and establishing approaches that could lead to sustainable competition to achieve competitive advantages.

## **Agency Theory**

It was proposed by Jensen and Mackling in 1976. It states that departure between the owner and manager(s) of a firm/company will always be shadowed by the rise of costs because of lack of interest's arrangement between the owner(s) and the manager(s). The costs are referred to as agency costs and these might include costs to observe managers' activities, spending to create a firm's structure to reduce undesirable manager actions andthe cost coming from the condition in which managers cannot make decisions without shareholders' approval. One vital suggestion of the agency problem is related to a company's investment policy (Jeen, 2016). Investors prefer high risk-high returns profiles, while managers prefer low risk-low return profiles. This happens because they have a personal fear of losing their jobs. Expanding can provide inspirations for managers through ownership and investment. Hence, the emphasis is not based on performance evaluation of financial outcomes, but more emphasis on optimizing behavior (Jensen &Meckling, 1976; Jensen, 1986).

## **Empirical Literature Review**

Morris *et al* (2017) did a study on the result of product diversification relatedness on firm/company performance in the United States in property-liability insurance industries in which they verified the net effect of product diversification strategies. They found out that relatedness affected negatively accounting presentation. The understanding penalty was robust to improvements for potential indigeneity bias; it existed for newly diversifying companies/firms and it had a difference effect on stock and mutual insurers. Further, it was found out that related diversification, especially on product resizing, is mainly responsible for diversification had no relationship to accounting performance.

Oyedijo (2012) conducted a study on the effect of product-market diversification methods on firms' financial growth and performance of Nigerian companies. His study was on how a sample of Nigerian companies performed in regard to specialization, relatedness, unrelatedness, and mixed product-market strategies. It had been observed that firms that followed related or unconnected diversification methods outperformed and grew faster than those whose growth attempted to pursue both. Multi-methodology analytical techniques which involved correlations and multiple regressions, analysis of variance (ANOVA), independent sample test and Scheffe Ad Hoc tests, were used in the analysis of data. He found out that there is a huge, positive correlation between related diversification approaches and financial performance. Further to that, he observed that related diversification had a higher financial performance than unrelated diversification. There also was a small correlation between unrelated and mixed approaches of diversification and growth of sales and financial performance. Regression analyses showed that related diversification had an important impact on performance. His conclusions were that financial performance and growth of sales of firms in Nigeria were affected-remarkably-by the method of diversification in use. His recommendation was that corporations in Nigeria seeking supportable quick growth and greater performance need to follow related product-market diversification approaches/adopt a specialization strategy but not two approaches at the same time.

Njuguna, Orwa &Kwasira (2018) conducted a study on the effect of product diversification approaches on performance of non-financial corporations that are enlisted at the Nairobi Securities Exchange (NSE). The independent variables-in the research-were related and unrelated diversification while, the dependent variable was corporation performance. The design adopted in the study was descriptive correlational survey in which a census of 45 non-financial corporations was taken. Data, both primary and secondary, were used in addition to semi-structured questionnaires administered on 135 departmental managers. It was found out, from the study, that there is a substantial positive relationship between product diversification and corporation performance. The conclusion of the study was that product diversification and approaches are essential for broadening corporations' markets.

# **RESEARCH METHODOLOGY**

## **Research Design**

This study used a descriptive research design. Sekaran (2013) asserts that research design is used equally for the overall process and also, more precisely, for the research design structure. The latter is to do with how data collection is structured. Kothari (2014), descriptive research studies are designed to obtain relevant and precise information concerning the current status of a problem or phenomenon and whenever possible to draw effective conclusions from the facts

exposed. The descriptive research design was used because data and information can be obtained using the technique without shifting the environment (Deyrup, 2013). Scholars who have used descriptive research design before are Kimei (2017); Geroski (2015) Cherotich (2018) and Ojwaka and Deya (2018).

# **Study Area**

The study was conducted in two main regions under the KTDA managed factories that is Kisii Highlands, and Kericho Highlands. These include region 5 and 6. All the 28KTDA managed tea-processing factories were included in the study. Kericho highlands is to the west of Mau forest and it boarders the Kisii Highlands. Decimal latitude and longitude coordinates for Kericho highlands are -0.36774 and 35.28314 respectively. The two regions were chosen because they were found to be applying various business growth strategies and geographically, the tea factories were closely and highly concentrated. Therefore, sufficient requisite data as per the variables of this study could be obtained from the respondents since they were considered to have relevant practical knowledge.

# **Target Population**

Population is a cluster of items, persons or items from which a sample was taken for measurement (Sekaran, 2013). Oso&Onen, (2015) argues that population consists the objects of a study comprising of individuals, organizations, events and products. KTDA has seven regions in Kenya with 69 factories. The total number of management staff in Kenya (top managers (Unit Manager, Production Manager, Factory Accountant, Field/Research Manager and Field Service Administrator), section heads (Production Assistant, Assistant Factory Accountant and Assistant Field Service Administrator) and supervisors (Factory Supervisor I, Senior Factory Mechanic, Clerk II Green leaf, Tea Extension Service Assistant, Boil Attendant, Plant Technicians, Stores Clerk I)) is 1506 (KTDA, 2018). Kisii and Kericho highlands regions were purposively selected. The study population for this study comprised of 701 managers of Kisii and Kericho highlands regions' KTDA managed tea processing firms in Kenya. There were 140 top level managers, 179 section heads and 382 Supervisors=701 (KTDA, 2018). The unit of analysis for this study was therefore the 701-management staff of the 28 KTDA managed factories in the two regions as tabulated below.

# Sampling Procedure and Sample Size

The study categorized the study population into strata, which included the 28 tea processing firms and further into cadres of management. The sample size is symbolic of the large population (Bryman, 2012). The sample size was developed using Yamane's (1967) formula, which

provides a simplified formula to calculate sample sizes for proportions or finite populations as indicated below.

$$n = \frac{N}{1 + Ne^2}$$

Where;

*N* is the size of the population is the size of the sample and e is the level of precision or the level of statistical significance set. The degree of precision desired, generally set at 0.05 levels. At 95% confidence level, therefore level of precision = 5% (0.05)

Hence given the population as

$$n = \frac{701}{1 + 701(0.05)2}$$

 $\frac{701}{1+701(0.0025)}$  n = 255 respondents

The study had a 30% provision for non-response. Cheung (2017), Berg (2018) and Yangon (2015) in their studies proposed that to cover for non-response bias there is need to create a provision of between 10-30% of the sampled population. Therefore, the total sample size will be 255 + 109 = 364 respondents.

The sample size was then proportionately apportioned to each factory and employee strata based on the percentage of the sample to the target population. The study strata included top level managers, section heads and supervisors. Proportions apportioning was done using stratification method. Parson (2014)opined that stratification is used to increase efficiency of a sample design with respect to survey costs and estimator precision.

# **Data Collection**

The researcher used primary data which was collected using self-administered questionnaires from 28 Kericho and Kisii Highlands regions KTDA managed factories. The researcher used simple random sampling to obtain data from the respondents.

# Instrumentation

The study used primary data. Primary data involves collection of information for the first time and it will be done with self-structured questionnaires. A questionnaire is a pre-constructed set of questions to which the respondents respond to (Mugenda & Mugenda, 2013). Use of questionnaire is one of the most common data collection tools employed in research(Kothari,2014). Questionnaires are used extensively to gather data on current issues, practices, attitudes, opinions and conditions speedily and in a precise way (Orodho, 2018). Questionnaires give a comparatively cheap way of getting information. Structured questions were used to capture the opinion of the respondents. Open-ended questions will be used to gather information about the subject from the respondents. The questionnaires were administered through drop and pick technique.

## **Data Analysis and Presentation**

Once the questionnaires were collected by the researcher, they were coded and keyed into SPSS V.24computer software and analyzed. The data analysis tools included descriptive statistics that is means and standard deviation. Regression analysis was done using simple regressions. The simple regressions were as follows; Product Diversification Strategy and Organizational Performance  $Y = \beta_0 + \beta_1 X_1 + \varepsilon$ Where Y- Performance of Tea Processing Firms in Kenya B<sub>0</sub> - intercept coefficient  $\varepsilon_{i-}$  error term (extraneous variables)  $X_1$  – diversification strategy  $\beta_1$  - regression coefficients

# **RESULTS AND DISCUSSIONS**

The researcher distributed three hundred and sixty-four (364) questionnaires to the factory management personnel. A total number of three hundred and nineteen (319) questionnaires were filled and returned which represents 87.64 % response rate. This was considered sufficient for the study according to (Saunders *et al.*, 2011). Forty-five (45) questionnaires were not returned while three (3) of the returned questionnaires were unusable because they were not fully filled. Therefore, 316 questionnaires from the respondents were sufficiently completed. Thus, the response rate of this study was 86.8 %. A study by Holbrook (2009) which sought to establish the acceptable response rate in social sciences surveys revealed that a rate above 50% is representative and is within the desirable response rate.

# **Product Diversification Strategy**

The study sought to assess the product diversification strategies employed by the tea factories. The study results were presented in table 4.1.

|  | Minimum | Maximum | Mean  | Std. Deviation |
|--|---------|---------|-------|----------------|
| The firm offers other products as      | 1       | 5       | 3.50  | 1.651          |
| opposed to tea products                |         |         |       |                |
| Diversified products by the firm are   | 1       | 5       | 3.91  | 1.344          |
| not only in the agricultural sector    |         |         |       |                |
| The company engages in                 | 1       | 5       | 3.84  | 1.379          |
| development of new diversified         |         |         |       |                |
| products regularly                     |         |         |       |                |
| Comparatively, the firm has a high     | 1       | 5       | 3.78  | 1.359          |
| number of products diversified         |         |         |       |                |
| the cost of product diversified        | 1       | 5       | 4.08  | 1.251          |
| constitute a large part of the firms   |         |         |       |                |
| budget                                 |         |         |       |                |
| Diversification investments are only   | 1       | 5       | 4.15  | 1.071          |
| possible through raise of additional   |         |         |       |                |
| capital through equity or debt         |         |         |       |                |
| Diversified products require their     | 1       | 5       | 3.97  | 1.392          |
| own physical, human resource and       |         |         |       |                |
| technological infrastructure           |         |         |       |                |
| payback periods for diversification    | 1       | 5       | 3.84  | 1.387          |
| projects is over a period of periods   |         |         |       |                |
| Diversification is conducted only      | 1       | 5       | 3.97  | 1.180          |
| for products that can utilize existing |         |         |       |                |
| company technologies                   |         |         |       |                |
| The firm is keen to diversify into     | 1       | 5       | 3.72  | 1.425          |
| product that may appeal to tea         |         |         |       |                |
| customers                              |         |         |       |                |
| diversification strategies employed    | 1       | 5       | 3.91  | 1.242          |
| depend on management                   |         |         |       |                |
| The firm diversification policy        | 1       | 5       | 3.78  | 1.355          |
| restricts how diversification is to be |         |         |       |                |
| done                                   |         |         |       |                |
| Average Mean                           |         |         | 3.868 | 1.336          |

## Table 4.1: Descriptive Statistics results of Product diversification strategy (N = 316)

Source: Field Data, (2020)

The study findings indicated that respondents were of the opinion that the firm offers other products as opposed to black CTC (mean=3.50, SD= 1.651). Respondents indicated that diversified products by the firm are easily acceptable in the market (mean=3.91, SD=1.344). Further, respondents were of the opinion that the company engages in development of new diversified products regularly (mean=3.84, SD=1.379). Respondents opined that comparatively the firm has a high number of products diversified (mean=3.78, SD=1.359). Study findings

indicated that the cost of products diversified constituted a large part of the firms' budget (mean=4.08,SD=1.251). The findings also showed that respondents agreed to the opinion that diversification investments are only possible through raise of additional capital through equity or debt (Mean=4.15,SD=1.071). Further, respondents were of the opinion that diversified products require their own physical, human resources and technological infrastructure (Mean=3.97,SD = 1.392).Most respondents were of the opinion that payback periods for diversification projects is over a period of time (Mean=3.84,SD =1.387). Respondents also agreed to the opinion that diversification is conducted only for products that can utilize existing company technologies (Mean=3.97, SD = 1.18). Most respondents showed that the firm is keen to diversify into products that may appeal to tea customers (Mean=3.72, SD=1.425). Respondents opinioned that diversification strategies employed depend on management (Mean=3.91, SD=1.242). Majority of respondents agreed that the firm diversification policy restricts how diversification is to be done (Mean=3.78, SD = 1.355).

With an average standard deviation of 1.336, it shows that all the items were of close range and were not widely dispersed apart thus an indication that they had high level of internal consistency and therefore would measure the same concept (product diversification). Overall, the various items under study in product diversification objective posted a mean of 3.868 and a standard deviation of 1.336. This is a clear indication that KTDA managed factories in Kenya have embraced product diversification as a business growth strategy.

The study findings that tea factories employ product diversification to create products that appeal to customers is interpreted to mean that tea factories have seen the need to deal with their performance challenges by employing diversification as a strategy to enable them to be more productive. These findings are supported by Hajra, & Yang, (2015) who notes that due to steady production of tea, the world market price of processed tea got stagnated with supplies being stable and escalating production costs with decreasing returns for the tea growers. With the launching of several health drinks, beverages with varied flavors, taste and health benefits so as to satisfy the versatile health promoting and organoleptic demands of the 21st century consumer market, its rather unsafe for tea industry with investment of whatever magnitude to focus on the sale of any particular variety of tea as it makes an industry vulnerable to market trends that can divert towards other parallel products.

# **Firm Performance**

The study sought to assess performance of tea factories managed by Kenya Tea Development Authority. The study results were presented in table 4.2.

|  | minimum | maximum | mean | std. deviation |
|--|---------|---------|------|----------------|
| The company is a cost leader in the market   | 1       | 5       | 4.27 | .851           |
| The company pricing of its products is the best for its suppliers                  | 2       | 5       | 4.14 | .835           |
| The firms market share is<br>among the highest in the<br>industry                  | 2       | 5       | 4.07 | .857           |
| The firm market share has<br>improved with business growth<br>diversification      | 2       | 5       | 4.02 | .822           |
| Bonus payments by the firm are among the highest                                   | 1       | 5       | 3.64 | 1.090          |
| The factory farmers are paid in time and at a high rate                            | 1       | 5       | 3.60 | 1.078          |
| Surveys have indicated that<br>customers are satisfied with the<br>firm's products | 1       | 5       | 4.13 | .824           |
| There are high levels of referrals by customers                                    | 1       | 5       | 4.09 | .910           |
| level of customer retention is high  | 1       | 5       | 4.31 | .734           |
| Average Mean   |         |         | 4.03 | .889           |

# Table 4.2: Descriptive Statistics Results on Firms Performance. (N=316)

# Source: Field Data, (2020)

The study findings indicated that tea factories were cost leaders in the market (mean= 4.27; SD=.851). Majority were of the opinion that the company pricing of its products is the best for its suppliers (mean=4.14; SD=0.835). That firm market share has improved as a result of business growth strategies and stands as the best in the industry (mean=4.07; SD=0.857). Most respondents agreed that firm market share has improved with business growth diversification(mean=4.02; SD=0.822). However, respondents had divergent opinion regarding the statement that bonus payments by the factories are among the highest (mean=3.64; SD=1.090). Respondents also varied in opinion regarding the statement that factory farmers are paid in time and at a high rate(mean=3.60; SD=1.078). Others were of the opinion that surveys have indicated that customers are satisfied with the factory's products (mean=4.13; SD=0.824).

Majority of respondents were of the opinion that there are high levels of referrals by the company (mean=4.09; SD=.910). The study findings indicated that respondents were of the opinion that level of customer retention is high (mean=4.31; SD=0.734). Overall, the study items on firm performance objective posted an aggregate mean of 4.03 and a standard deviation of .889. This implies that business growth strategies have an influence in firm performance. The study findings are supported by Namu *et al*, (2014) who argued that the production of tea in Africa is on a minimal scale and with small-scale farmers. The region has the task of competing with large producers who have been able to provide their product at lower prices with their ability to produce at lower costs with advancements in operations.

## **Exploratory Factor Analysis**

## Principle Component Analysis (PCA) for Product Diversification

The study tested validation of data for product diversification using exploratory factor analyses. Using SPSS version 24, the results of this factor analysis, with the assumption of extracting via principal components method and rotating via varimax were presented in table 4.3

**Table 4.3: Factor Analysis for Product Diversification** 

| Rotated Component Matrix <sup>a</sup>  |        |          |
|--|--------|----------|
|  |        | ent      |
|  | 1      | 2        |
| Diversification is conducted only for products that can utilize existing company technologies            | 0.762  |          |
| Diversification strategies employed depend on management   | 0.75   |          |
| Payback periods for diversification projects is over a period of periods                                 | 0.727  |          |
| Diversified products require their own physical, human resource and technological infrastructure         | 0.704  |          |
| The firm is keen to diversify into product that may appeal to tea customers                              | 0.702  |          |
| Diversification investments are only possible through raise of additional capital through equity or debt | 0.682  |          |
| The firm diversification policy restricts how diversification is to be done                              | 0.621  |          |
| Comparatively, the firm has a high number of products diversified  |        | 0.778    |
| The company engages in development of new diversified products regularly                                 |        | 0.757    |
| The firm offers other products as opposed to tea products  |        | 0.735    |
| The cost of product diversified constitute a large part of the firms budget                              |        | 0.683    |
| Diversified products by the firm are not only in the agricultural sector                                 | 0.633  |          |
| Total Variance Explained   |        |          |
| Initial Eigen values   | 5      | 1.650    |
| % of Variance  | 41.667 | 13.751   |
| Cumulative %   | 41.667 | 55.480   |
| KMO and Bartlett's Test  |        |          |
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy.   |        | 0.880    |
| Bartlett's Test of Sphericity Approx. Chi-Square   |        | 1424.968 |
| Df   |        | 66       |
| Sig.   |        | 0.000    |
| Extraction Method: Principal Component Analysis.   |        |          |

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

# Source: Field Data, (2020)

The 12 items for product diversification were subjected to principal components analysis using SPSS version 24. Prior to performing PCA, the suitability of data for factor analysis was assessed. Factors with factor loadings of above 0.5 and above were retained for further data analysis. All items met this criterion and none was dropped. Therefore, the 12 items were retained for further analysis. The Kaiser-Meyer-Olkin Measure value was 0.880exceeding the recommended value of 0.6 (Kaiser 1970, 1974) and Bartlett's Test of Sphericity (Bartlett 1954) was significant with p value less than 0.000 (Bartlett's test=1335.21, p<.05) indicating the manifestation of 3 factors for product diversification.

Principal components analysis revealed the presence of two components with Eigen Values exceeding 1, explaining 41.67% and 13.75% of the variance respectively. An item is considered to belong to a factor component if its factor loading corresponds to that particular component and is relatively higher than its factor loadings in the other factor components. This was further illustrated using the scree plot in (Appendix VI) which indicates that screes started to develop at factor 2 showing that only 2 factors explain product diversification. The two components explained a total of 55.18% of the variance.

# **Correlation Analysis**

Results indicates that Product diversification strategy has a strong, positive and significant relationship (r=.705, n=316, p <0.05) with firm performance.

# **Regression Analysis**

# **Product Diversification Strategy and Firm Performance**

The objective of this study was to determine the role of product diversification strategy on performance of selected tea factories in Kenya. The study predicted that product diversification strategy had no statistically significant effect on performance. A simple regression model was used to determine the relationship between product diversification strategy and firm performance. The model that tested the hypothesis was as follows,

 $\mathbf{Y} = \mathbf{\beta}\mathbf{0} + \mathbf{\beta}_1 \mathbf{X}_1 + \mathbf{\varepsilon} \dots \mathbf{i}$ 

Where:

Y -Firm Performance,

 $\beta_o$  -Constant (coefficient of intercept).

 $\beta_1$  = change in firm performance for each 1 increment change in X<sub>1</sub>, that is, product diversification strategy.

X<sub>1</sub> -Product Diversification Strategy.

 $\boldsymbol{\epsilon}$  - the error term

|       |                   |          |                   | Std. Error of the |
|-------|-------------------|----------|-------------------|-------------------|
| Model | R                 | R Square | Adjusted R Square | Estimate          |
| 1     | .705 <sup>a</sup> | .496     | .495              | .53525            |

#### Table 4.4a: Effect of Product Diversification Strategies on Performance

a. Predictors: (Constant), Product Diversification

## Source: Field Data (2020)

Results in Table 4.4a, showed that product diversification strategy had ( $R^2 = .496$ ), meaning that, product diversification, explain .49.6% of the changes in firm performance (dependent variable) The ANOVA results were presented in table 4.4b

## Table 4.4b ANOVA<sup>a</sup>

| Mode | 1          | Sum of<br>Squares | df  | Mean Square | F       | Sig.              |
|------|------------|-------------------|-----|-------------|---------|-------------------|
| 1    | Regression | 88.667            | 1   | 88.667      | 309.491 | .000 <sup>b</sup> |
|      | Residual   | 89.959            | 314 | .286        |         |                   |
|      | Total      | 178.626           | 315 |             |         |                   |

a. Dependent Variable: Firm Performance

b. Predictors: (Constant), Product Diversification

# Source: Field Data (2020)

The ANOVA model showed model fitness for influence of product diversification strategy on firm performance which was statistically significant (F = 309.491,  $\rho < 0.05$ ). Given that the calculated F = 309.491, while the F <sub>critical</sub> = 3.94(1,314). Then F  $\geq$  F <sub>critical</sub>  $\alpha$  0.05. This is a clear indication that product diversification is a significant predictor on firm performance. Similar to the findings, Oyedijo (2012) concluded that financial performance and growth of sales of firms are affected-remarkably-by the method of diversification in use. He recommended that corporations seeking supportable quick growth and greater performance need to follow related product-market diversification approaches adopt a specialization strategy but not two approaches at the same time. Similarly, Njuguna *et al* (2018) alluded that product diversification approaches are essential for broadening corporations' markets.

The regression coefficients in table 4.4c below established the mean change in firm performance for one-unit change in product diversification.

|                            | Unstandardized<br>Coefficients |            | Standardized<br>Coefficients |        |      |
|----------------------------|--------------------------------|------------|------------------------------|--------|------|
| Model                      | В                              | Std. Error | Beta                         | t      | Sig. |
| 1 (Constant)               | .780                           | .174       |                              | 4.482  | .000 |
| Product<br>Diversification | .775                           | .044       | .705                         | 17.592 | .000 |

#### Table 4.4c Coefficients<sup>a</sup>

a. Dependent Variable: Firm Performance

#### Source: Field Data, (2020)

Findings showed that product diversification had coefficient of estimate which was significant basing on  $\beta_1 = 0.705$ , p< 0.05. The effect of product diversification strategy was more than 17 times the effect attributed to the error; this was indicated by the t-test value = 17.592. Based on the above results the following simple linear regression model was derived as shown below,

$$Y = 0.780 + 0.775X_1$$

# SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

## **Product Diversification Strategy and Performance of Selected Tea Factories**

The study findings indicated that tea factories employ product diversification to create products that appeal to customers. This is interpreted to mean that tea factories have seen the need to deal with their performance challenges by employing diversification as a strategy to enable them to be more productive. The study results indicated that there was a significant relationship between product diversification to firm performance.

# Conclusions

The study concluded that tea factories employ product diversification to increase their competitive advantage over other firms and create products that appeal to customers. Tea factories have seen the need to deal with their performance challenges by employing diversification as a strategy to enable them to be more productive. This strategy dictates that firms make alternative products that could enable them to leverage on their profits. This serves to compensate the low sales periods of their main products. For instance, firms that specialize in processing of black tea have ventured into processing of green tea, purple tea white tea, yellow tea, Kenyan Olong tea pan fried green tea, white premium tea, silver tips tea, golden tips tea and lemon grass tea.

#### **Recommendations of the Study**

Diversification has been illustrated as a key ingredient to either entering or developing a market. Tea factories should therefore invest in diversification of products to ensure that the tea factories have products to offer to the new markets that they will be making an entry into. This strategy ensures that low sales volumes of one product are complemented by the sales volumes of another product thus guaranteeing profits to the tea factories. Further this approach ensures that the factories maintain a competitive advantage in the market.

## **REFERENCES**

- Ansoff, I. (1987). Conceptual underpinnings of systematic strategic management. *European* Journal of operational research.
- Breen.B., & Bill. G. (2014). Strategic orientation and firm performance in an artistic environment. *Journal of Marketing*, 64, 67–83.
- Foss, N. J., & Christensen, J. F. (2014). A Market-process Approach to Corporate Coherence. *Managerial and Decision Economics*, 22(4-5), 213-226.
- Hrebiniak C. &Joce, N. (2015). Strategic Alliances and Product Development in High Technology New Firms: The Moderating Effect of Technological Capabilities. Institute for Innovation Research, Technology Management, and Entrepreneurship Ludwig-Maximilians University at Munchen. Journal of International Marketing, 15, 41-62
- Jean F. (2016). Creating a market orientation: a longitudinal, multiform, grounded analysis of cultural transformation. *Journal of Marketing*, 70, 37–55.
- Jensen M.C. and Meckling W.H (1976). Theory of the Firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*. Vol. 3, Issue 4, pp. 305-360
- Kothari, R. (2014). Research Methodology: Methods and Techniques. New Delhi: Age.
- Maina, E. W., Mugambi, F., & Waiganjo, E. (2018). Influence of strategic Market Development Practices on Competiveness of Kenyan Tea in the Global market
- Morris N., Grewal, R., &Tansuhaj, P. (2017).Building organizational capabilities for managing economic crisis: the role of market orientation and strategic flexibility. *Journal of Marketing*, 65, 67–80.
- Murray, J. Y., Gao, G. Y., Kotabe, M., & Zhou, N. (2011). Assessing measurement invariance of export market orientation: a study of Chinese and non-Chinese firms in China. *Journal of International Marketing*, 15, 41–62

- Muriuki, K. (2017). Technical and strategic human resource management effectiveness as determinants of firm performance. *Academy of Management Journal*, 40, 171–188.
- Ojwaka, A.S. &Deya, J. (2018). Effect of growth strategies on organization performance; a survey of commercial printing firms in Nairobi, Kenya.*The strategic journal of business and change management*, Vol.5, Iss.4, pp 251-266
- Oso K &Onen L. (2015). Vertical integration in the European package tour business. *Annals of Tourism Research*, 31(2), 111-125.
- Oyedijo, A. (2012). Effects of product-market diversification strategy on corporate financial performance and growth. An empirical study of some companies in Nigeria. *American International Journal of Contemporary Research*, 2(3), 199-210.
- Pearlson K. & Saunders C. (2016), *Brief Overview of Business strategy frameworks*. John Wiley, ISS Triangle.
- Penrose, E. T. (1959). The theory of growth of the enterprise. London, UK: Basil Blackwell.
- Sekaran, U. (2013). Research Methods for Business. New York: John Wiley & Sons Inc.
- Wainaina, Mbeche, Njihia s& Otulia (2017). Influence of organizational resources on performance of ISO certified organizations in Kenya. ACTS. Nairobi