

The Effect of Product Quality on Competitiveness of Small Medium-Sized Enterprises (SMES) In South Western Uganda; Reflection on Kayonza Growers Tea Factory, In Kanungu District.

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Abstract: *The study focused on the Kayonza Growers Tea Factory, located in Butogota Town Council in Kanungu District, in order to assess the impact of product quality on the competitiveness of small to medium-sized firms (SMEs). The researcher focused on three distinct goals: to define the function of product quality in Kayonza Growers Tea Factory, to investigate the impact of product quality on Kayonza Growers Tea Factory's market share, and to propose the role of product quality in Kayonza Tea Factory sales. A convenience sampling method was used to choose a sample of 130 respondents for the study, which had a cross-sectional survey research design. Self-administered questionnaires were the primary techniques and equipment employed in the inquiry to collect data. Inferential and descriptive statistics were employed in the study to analyze data. The study's results demonstrate that Kayonza Growers Tea Factory's competitiveness is significantly impacted by product quality because the P-value (0.000) is less than the alpha level of significance of 0.05. R-squared is 0.256, which means that product quality, market share, and sales volume all account for 26% of the variability in small- and medium-sized businesses' competitiveness. Other factors in the error term account for 26% of the explanation, so they are left out of the model. The R2 is high because it doesn't take degrees of freedom into consideration which implies that the data is fitted nicely thus a good fit. Market share was found to have a significant positive impact with competitiveness of small scale businesses. Value addition of market share should be prioritized to ensure more profits are obtained. This is because most cash crops are agricultural products thus there is need to improve on their quality.*

Keywords: Product Quality; Competitiveness; Small medium sized enterprises

INTRODUCTION

The word "product quality" describes how effectively a product fits industry standards, the needs of the client, and its intended use (Team, MBA Skool, 2021). Businesses take into account a number of important factors when assessing the quality of a product, including whether it solves a problem, tasks efficiently, or serves a customer's purpose. The capacity of a product to compete against those of other businesses in order to maximize profits is known as product competitiveness (Yang et al., 2021). Product competitiveness is essential for maintaining industrial businesses' competitiveness (Ikramov et al., 2019). Moving forward, a company's ability to distinguish its products from its competitors and remain financially stable in the absence of significant revenues, are generated from the product. Globally, in the past, it was impossible for business owners to beat the prices of some of his or her global competitors, that did not mean that they could not compete with those businesses but it just meant that business the owners were to find creative ways to compete with other existing businesses (Lam, S.Y.2007). In that era, product quality management not only emphasized the implementation of traditional training programs but also required training in leadership, quality concepts and problem-solving, which to date, stand the taste of time. The evolvement of global economic states and advancements in market economics as

spurred by liberalization, globalization and the technological developments, have all contributed to emergence of new products to meet ever changing tastes and preferences across all ages. To this end, this have increased overall levels of national competitiveness alongside dwindling developing markets in their infancy stages. For instance, in Ukraine, sunflower oil is one of the most in-demand products on the international market, in terms of exports (International Telecommunications Union, 2013). Additionally, Ukrainian producers have continually focused on enhancing product quality and competitiveness in order to survive in the face of heightened competition on the global market. African nations that prioritized the quality and excellence of their products have increased their competitiveness on the global market and expanded significantly to fulfill millennial preferences in both domestic and foreign markets (Mersha, 2000).

In the past, African governments, primarily in Zambia, engaged in an aggressive battle for market share of the global marketplace and foreign direct investment critical awareness of product quality and for purposes of effective competitiveness for national development, was year-in-year out prioritised, with high regard and compliance in order to create a strong foundation for buttressing appropriate mechanisms for initiating, supporting and

sustaining the quality improvements throughout. On the other hand, in East African, countries like Kenya, building of strong technological prowess, favored and allowed growth of several automated industrial establishments that gave rise to fastest and consistent production which in terms of mass of production, which grew Kenya's both domestic and International markets as well as the building up of an equaled competitiveness (Mugenda, O.M & Mugenda, 2013). And in the ensuing development, this led to massive production of variety of products which gave the consumer the benefit of freedom in choosing in between alternative products taking in consideration their level of quality and price which forced establishments to direct attention to providing high quality products with reasonable prices in a way that doesn't favor high quality over cost, Douglas, & John (2011). In related in development, management of product quality in Uganda has since the 2000 taken a new twist, with strong emphasis on standards and certifications, integrated in-built "processes". In order to meet the constantly changing needs of various consumer segments, Kayonza Growers Tea Factory has implemented a number of standards and certifications to date. Included in this list are environmental management systems (EMS), standards for food safety (FSS), the Fairtrade Labelling Organization (FLO), ISO 140001, ISO 22000, and most recently, the Rain Forest Alliance. The company must satisfy all of these pricey consumer compliance and standards certification criteria in order to maintain both domestic and global competitiveness. Report on Kayonza Factory (2021). Food grade floors, hygiene, quality control rooms, thermometer temperature gauges and monitors, provision of personal protection equipment (PPE), along with effective waste disposal effluents, are crucial and undesirable at Kayonza Growers Tea Factory. This is due to the fact that quality is heavily emphasized when designing, integrating, and producing products. In nutshell, quality issues constitute an integral part of the entire manufacturing and processing from the beginning and the key performance characteristics are continuously and routinely checked, monitored, appraised and tracked for evaluation. According to Jacoby, J. & Davis B. Kyner (2013), organizational competitiveness involves an organized effort to sell products and services on a regular basis. However, manufacturers over time, have shifted to developing products which retail stores wanted to stock according to customer tastes and preferences. And in such un regulated market economy, one needed to have studied the strength, weaknesses and opportunities your competitors are thriving on in order to strategize and position yourself to take them on. Further, in the past, most small medium sized enterprises were used to only competing with those providing similar products or services in their area of specialization but this is no longer the case. Kayonza Growers Tea Factory, where this study was carried out was established in the year 1966 under Uganda After the Ugandan economy was liberalized in 1995, the Tea Growers Corporation was privatized to smallholder farmers, who are presently its sole owners. The initial goals for establishing this company consisted, among other things, assisting smallholders in growing and processing high-quality tea products for export in order to earn significant

revenue and family income for participating favourable climatic conditions and high altitude, coupled with good acid soils.

In Kanungu District, Western Uganda, the Kayonza Growers Tea Factory receives green tea leaves from 7,200 smallholder tea growers. Having realized that product quality is a major determinant of customer satisfaction and that variations in the firm's product quality and the clients' level of satisfaction are a "grey area," as any decline or increase in product quality can either reduce or increase the level of customer satisfaction, which in turn affects the level of customer loyalty and firm's revenues (Sambo et al., 2022), the firm decided to enhance its product quality. The company had lacked the equipment to package in its tea in form modern tea sachets and tea bags for sale as premium branded tea. And as the result of acquisition, coupled with subsequent training, sales climbed by 51 percent (from UGX 14.1 billion to UGX 28.6 billion) while gross profits increased by 38 percent (from UGX 2.4 billion to UGX 6.4 billion) in 2018. Kayonza External Audit Report (2018).

Problem Statement

After the Ugandan economy was liberalized in 1995, the Tea Growers Corporation was privatized to smallholder farmers, who are presently its sole owners. The initial goals for establishing this company consisted, among other things, assisting smallholders in growing and processing high-quality tea products for export in order to earn significant revenue and family income for participating. Recent literature notes that when quality is produced with fixed costs, a high quality firm can undercut its rival's prices and may in return find it profitable to invest more in quality as market share grows strenuously (Adam Hayes, Khadija Khartit, 2021). Customer satisfaction is the key driver for survival, competitiveness and growth. Accordingly, customer royalty not only increase the value of the business, but also enable businesses to maintain costs lower than those associated with attracting new customers and in so doing organizations develop a long term, mutually beneficial relationship with the customers. (Hoe & Mansori, 2018). Markets can remain concentrated, provided original quality of the product has not in any way been compromised.

Kayonza Growers Tea Factory is small medium enterprise SME's employing between 100-250 employees and with turnover of not more than 30billion AGM Report (2020). And to this end, this places it under Small Medium Enterprise (SME) according to Uganda's SME classification. Relatedly, subsequent studies on a linear relationship between product quality and competitiveness have provided an insight on the effect of product quality on competitiveness of small medium enterprises (Ittner, C. & Tellis. D.F, 1997). However, several other studies conducted, have only concentrated on product quality and competitiveness of large businesses in East Africa and have not explored the exact relationship between the product quality and competitiveness in Uganda.

Particularly, Kayonza Growers Tea Factory sells a significant amount of manufactured tea on the Mombasa auction market, where product quality is paramount. As a result, any change in Kayonza product quality has an impact on consumer satisfaction, sales volume, and brand loyalty. In contrast, it is still unknown whether the results of time series studies conducted in the East African region accurately reflect the precise correlation between product quality and competitiveness in small and medium-sized enterprises engaged in the tea industry, as this study is intended to do (Garvin, D.A., 1987). This research on small and midsize enterprises (SME's), specifically reflecting on Kayonza Growers Tea, is based on this Factory, has been conducted to ascertain, the role of product quality on competitiveness of the product.

Objectives of the Study

- i. To determine the response of product quality in Kayonza Growers Tea Factory;
- ii. To investigate the impact of product quality on Kayonza Growers Tea Factory's market share
- iii. To establish the role of product quality in Kayonza Growers Tea Factory's sales volume.

The study's hypothesis

HO: The Kayonza Tea Factory's competitiveness is unaffected by the quality of its products.

Ha: The competitiveness of the Kayonza Tea Factory is impacted by product quality.

HO: The share of the market of the Kayonza Tea Factory is unaffected by the quality of its products.

Ha: Kayonza Tea Factory's market share is impacted by the quality of its products.

HO: The quantity of sales at the Kayonza Tea Factory is unrelated by the quality of the products.

Ha: The Kayonza Tea Factory's sales volume is influenced by the quality of its products.

METHODOLOGY

The study advocated a case study methodology because it would produce an in-depth, multifaceted understanding of complicated topics in their actual environment. This case study design was supported by both qualitative and quantitative research methodologies. We collected information from both primary and secondary sources. The Kayonza Growers Tea Factory's accountants, procurement officers, support staff, sales staff, general manager, production manager, and an ICT specialist made comprised the 130-person sample. The method used to

select clients was simple random sampling. This approach was chosen because it would allow all responders to have an opportunity to take part in the study. The techniques of simple random selection and selective sampling were employed to choose the respondents. Questionnaires were administered to 110 respondents while 20 key informants participated in interviews. Data analysis involved editing, coding, classifying and tabulating the collected data using Statistical Package for Social Sciences (SPSS). The researcher employed both qualitative and quantitative data analysis techniques. Qualitative data, particularly responses from interviews were analyzed following the content analysis while the analysis of the quantitative data was done using descriptive and inferential statistics.

Model specification.

Competitiveness of small business=constant+ market share+ sales volume+ product quality+ error term.

$$Y = \beta_0 + \beta_1 * (POP) + \beta_2 * (SALV) + \beta_3 * (MARK) + ui$$

$$Y = f(\text{Product quality, market share, sales volume})$$

This type of function was essentially effective for developing countries like Uganda greatly endowed with many cash crops like tea which required expensive resources to explore them.

This can be expressed in linear form as;

Where

Y - Competitiveness of small medium business.

POP - product Quality

SALV - Sales volume

MARK-Market share

The vestige of other variables is contained predominantly in the error term expressed as above Estimation techniques.

Descriptive analysis.

To confirm the distribution of the data was normal, the data was descriptively evaluated. These include a measure of variability as well as central tendency measurements (mean, median, and mode) (standard deviation, skewness and kurtosis)

Correlation analysis.

To ascertain whether there is a statistical relationship between the variables and whether one variable can be predicted from another, correlation tests were carried out.

Diagnostic procedures

Stationarity tests for time series data, such as sales, were done using unit root tests, such as the augmented dickey fuller test. A long run and short run link between the variables was also constructed for purposes of making policy suggestions in Uganda if the data meet the requirements for stationarity.

RESULTS

The results Table 1 show that the mean of the variables are good measures of central tendency since these are within the minimum maximum values of the various series, respectively. The average age is 37.94, the market share is 56.60, and the sales volume is 26052.35, according to the table above. The upper age limit is 71. The minimum is 18 and its standard deviation is 11.634 from the mean. The standard deviation was used to quantify variability, and since it was within a proper range of both the greatest and lowest mean, it suggests that there were no significant differences between both the data.

Table 1: Summary statistics of the data used in this study and its characteristics that is, measures of central tendency and measures of variation.

		age	market share(%)	sales(000's)
N	Valid	110	110	110
	Missing	0	0	0
Mean		37.94	56.60	26052.35
Median		35.00	59.00	5400.00
Std. Deviation		11.634	22.661	65149.285
Variance		135.345	513.508	4.24E+009
Skewness		.896	-.380	6.706
Std. Error of Skewness		.230	.230	.230
Kurtosis		.487	-.817	54.011
Std. Error of Kurtosis		.457	.457	.457
Minimum		18	7	45
Maximum		71	98	590000

The correlation coefficient in Table 2 is 0.301, which suggests that there is only a marginally positive link between product quality and age. At a 5% threshold of significance, this association is statistically insignificant because the P-value (0.512) Thus, it is concluded that there is no meaningful association between product quality and age and thus the null hypothesis has been accepted. The link between product quality and market share is somewhat favorable, with a correlation coefficient of 0.336. Due to the P-value, this link is statistically significant at the 5% level of significance (0.000). The correlation coefficient of 0.063 implies a tenuous positive association between sales volume and product quality. At a 5% threshold of significance, this link is statistically significant since the P-value (0.000) thus the null hypothesis is accepted and conclusion made there is a significant relationship between product quality and sales volume.

Table 2: Correlation analysis between age and market share.

Correlations				
		age	market share(%)	sales(000's)
age	Pearson Correlation	1	.100	.063
	Sig. (2-tailed)		.301	.512
	N	110	110	110
market share(%)	Pearson Correlation	.100	1	.336**
	Sig. (2-tailed)	.301		.000
	N	110	110	110
sales(000's)	Pearson Correlation	.063	.336**	1
	Sig. (2-tailed)	.512	.000	
	N	110	110	110

** Correlation is significant at the 0.01 level (2-tailed).

Ho: The competitiveness of Kayonza Growers Tea Factory is unaffected by the quality of the products.

Ha! Product quality affects Kayonza Growers Tea Factory's competitiveness.

According to Table 3, a one percent improvement in product quality results in a 0.654 percent rise in Kayonza Growers Tea Factory's competitiveness, all other things being equal. According to results from Romanus & Dickson (2019) in Tanzania, the market share has a positive significant effect on Kayonza Growers Tea Factory's competitiveness, as indicated by the p-value (0.000), which is less than 0.05.

Table 3: showing whether Product Quality affects Competitiveness of kayonza tea factory.

	Un standardized coefficients		Standardized coefficients		
Model	B	Standard error	Beta	T	Sig
Constant	0.0178	0.058		4.704	0.000
Product quality	0.545	0.051	0.654	10.938	0.000

Source: Primary Data, 2022

testing whether Kayonza Tea Factory's competitiveness is impacted by market share.

Ho: The competitiveness of the Kayonza Tea Factory is unaffected by market share.

Ha! Market share influences Kayonza Growers Tea Factory's ability to compete.

According to Table 4, a one percent increase in market share results in a 0.352 percent improvement in Kayonza Growers Tea Factory's competitiveness, all other things being equal. The market share has a positive significant effect on the competitiveness of the Kayonza Tea Factory, as indicated by the p-value (0.00), which is less than 0.05.

Table 4: showing whether Market Share affects competitiveness of kayonza tea factory.

	Unstandardized coefficient		Standardized coefficient		

Model	B	Standard error	Beta	T	Sig
Constant	41.622	2.829		14.714	0.00
Market share	25.347	3.680	0.352	6.888	0.00

Testing whether number of sales affects the number of Sales of kayonza tea factory.

Table 5 shows that keeping other factors constant, a one percent increase in the number of sales leads to 0.267 percent increase in competitiveness of Kayonza Growers Tea Factory. The p-

value (0.487) is greater than 0.05 which implies that number of sales have a positive but insignificant effect on competitiveness of Kayonza Growers Tea Factory.

Table 5: showing whether Product Quality affects the number of Sales of kayonza tea factory.

	Unstandardized coefficients		Standardized coefficients		
Model	B	Standard error	Beta	T	Sig
Constant	1106.689	397.843		0.543	0.487
Number of sales	3446.496	1225.534	0.267	2.899	0.005

Source: Primary Data, 2022

Root unit test.

Ho: Sales has a unit root

Ha: Sales numbers don't have a unit root.

We reject the null hypothesis that the number of sales has a unit root since the tau test statistic (-5.456) in absolute terms exceeds

the 5% critical threshold (-2.234) in absolute terms, and we therefore infer that the number of sales is non-stationary at level and therefore not I (0).

We fail to reject the null hypothesis and conclude that the number of sales is steady and hence integrated of order one since the tau test statistic (0.000) in absolute terms is less than the crucial value at 5% (-2.234) in absolute terms.

Table 6: Augmented Dickey Fuller test for number of sales at level and first difference.

Variable	Test statistic at level	5% critical value at level	Test statistic at first difference	5% critical value at first difference	Probability at level	Probability at first difference
Number of sales	-5.456	-2.234	0.000	0.000	0.000	0.000

Source: Primary Data, 2022

Test for spurious

Since the Durbin Watson d-statistic (1.258) is greater than R squared value (0.25), it is non-spurious at 5% level of significance.

Findings have shown that all variables are integrated of order one which necessitates a co-integration test.

Table 7: Durbin Watson test.

Number of gaps	Durbin d-statistic	R-squared
1	1.258	0.245

Source: Primary Data, 2022

CONCLUSION

According to the study, the majority of respondents were 28-year-old men who had completed their undergrad degrees and belonged to the Roman Catholic faith. In determining the impact of product quality on competitiveness, the study discovered that small enterprises' capacity to compete is significantly affected by product quality. The study also demonstrated that market share significantly impacts small businesses' ability to compete. According to research on the relationship between a small business's sales volume and its ability to compete, such as Kayonza Growers Tea Factory, there is a one-way relationship between the two.

RECOMMENDATIONS

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