

Impact of Operations Strategy on Business Performance: A Case Study of Lusaka Business & Technical College

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Abstract

The study aimed at investigating the impact of operations strategy on business performance at Lusaka Business and Technical College in the last 5 years to address challenges that the institution was facing. A descriptive case study design with a target population of 150 respondents was considered. A sample size of 75 was stratified into; Top Management, Middle Management, Academic Staff, Administration Staff, Regulators, Industry Partners and Clients. Purposive sampling method was used to arrive at the sample by identifying members of the population who were willing to be in the study. Primary data was collected using self-administered Likert type questionnaires. Secondary data was collected from physical and online publications and other sources. The collected data was processed and analyzed with the aid of “Statistical Package for Social Sciences (SPSS)” Version 26. The results were presented in tables and figures. Regression analysis was used to test the hypotheses at 0.05 significant level ($\beta=0.808$, $F=28.281$, $R=0.808$, $R^2=0.382$, $P < 0.05$). Test results showed that operations strategy has an impact on business performance. The financial impact was also established with average income growth of 1 Million and 2 Million Kwacha before and after implementation. The income made the institution finance its operations better than before. Contribution to the country’s economic growth is by improving labor productivity through technology. The results revealed that Operations Strategy has an impact on Business Performance. The study recommends that technical institutions formulate and implement operations strategies that are market-centered and can contribute to business performances.

Keywords

Operations Strategy, Organizational Performance, Strategic Objectives and Learning Institution.

1. Introduction

The findings of the study aimed at contributing to the already existing knowledge on the relationship between operations strategy and organization performance of institutions. In 1994, The Ministry of Science, Technology and Vocational Training (MSTVT), appointed a national task force to review government policy on Technical Education, Vocational and Entrepreneurship Training (TEVET). The report was submitted in January 1995 after which the Government issued a new policy directive whose objective was to develop a system for TEVET that would satisfy the demands and requirements of formal and informal sectors. The Government enacted a law in 1998, which allowed the institute to operate autonomously on business lines and the Management Board was constituted to run the institution. Mandated Functions of LBTC Management Board in accordance with the TEVET Act of 1998 are; provision of training in technical education, vocational and entrepreneurship, develop curricula for the college, ensure standards prescribed by TEVETA are maintained, provision of training for members of staff, administration of the affairs of the institute, charge and collect fees for tuition, boarding and other services provided by the institution subject to the approval by the Minister and do all such things as the management board may consider necessary to promote technical education, vocational and entrepreneurship training. This meant that grants from the Government would soon diminish because its intention was to ensure

that the training institution stands on its own and competes favorably in the training sector. Therefore, the institution had to formulate and operationalize its business strategies if it was to survive in the now competitive skills training sector. Higher Learning Institutions including LBTC are stakeholders that add value to the economy through churning out of 'skilled' labor on the labor market. This entails that whenever the institution underperforms, it contributes negatively to the economy of the country.

The reasons for undertaking the study are therefore twofold and that is;

- i. To evaluate the impact of operations strategy on organization performance of Lusaka Business and Technical College in light of the changes in the educational policy of the Ministry of Technology and Science, and government following the TEVET Act of 1998.
- ii. To add value to the performance of the economy.

1.1 Research Objectives

1.2 Main Objective

To evaluate the impact of operations strategy on organization performance of Lusaka Business and Technical College in the last five (5) years.

1.3 Specific Objectives

- i. To examine organizational performance at Lusaka Business and Technical College in the last ten (10) years.
- ii. To determine the impact of operations strategy on organization performance of LBTC before and after implementation.
- iii. To establish the operations strategies that have a positive impact on organization performance of LBTC.

2. Literature Review

The following section reviews the literature on the relationship between operations and/or improvement strategies and organizational performance that provide useful learning and implementation for organizations such as Lusaka Business & Technical College.

2.1 Operations strategy

According to David Barnes (2008) Operations is the way in which an organization secures, deploys and utilizes its resources in order to determine the extent to which it can successfully pursue its performance objectives while strategy is about how the organization seeks to survive and prosper within its environment over a long term. Scholes and Whittington (2008) stated that strategy is the direction and scope which matches its resources to its changing environment. Slack et al (2004) argues that operations strategy is a pattern of decisions and actions that set the role, objectives and activities of operations while with Lewis (2011) he stated that Operations Strategy is a total pattern of decisions which shape the long-term capabilities of any type of operations and their contribution to overall strategy, through the reconciliation of market requirements with operations resources.

From the above perspectives, we can see at a glance that strategy has got to do with the plan while operations has got to do with a well devised day to day plan of activities that contributes to the achievement of strategic objectives.

2.2 Organization Performance

Steven and Mary (2002), stated that performance is the accumulated end results of the organization's work processes and activities while Thursby (2000) stated that it is about how the organization transforms its inputs into outputs and comprise the actual results as measured and the intended outputs. Richard (2009) stated that organizational performance comprises three specific areas of institutional outcomes; organizational financial performance, product, service or market performance and shareholder return. And Lipton (2003) simply proposes that organizational performance is the ability to prevail. This makes me in perfect agreement with Lipton considering that organizations operate in a competitive marketing environment.

2.3 Operations strategy practices

Designing and implementing a successful Operation Strategy require judgement, experience, creativity and luck, all of which cannot be taught (Jan A., Van M., and Gad A.,2015). Gibus and Kemp (2003) stated that strategic practices play a crucial role in the performance of the firm. Porter (1991) observed that strategic practices lead to superior and sustainable performance. Operations strategy uses strategic practices or variables in order for it to attain its strategic performance objectives and involves the judgement of relative importance of various competitive practices in terms of customer preferences. Competition is a natural fact. There is no business which

can thrive in a competitive environment without a strategy which can entice the customers to buy one's product or service. Operations strategy practices constitute the techniques or ways in which the business entices and maintains its customers.

2.4 Related Studies on the impact of Operations Strategy on Business Performance

John Parker Yanney, Koffi Annan-Dennis and Godwin K. Awuah (2015) on the impact of strategy on performance of SME's in the manufacturing sector in Ghana established that strategy plays a key role in influencing organizational performance through the cost leadership strategy.

Professors Steve Brown and Mike Lewis and, Dr. Brian Squire (2010) on the impact of 'Inclusive and Fragmented Operations Strategy Processes' on operational performance of the PC Industry exhibited that the content of operations strategy had an impact on operations performance in a range of key parameters.

Xhavit Islam, Naimi Mustafa and Marija Topuzovska Latkovikj (2020) investigated the effects of Porters Generic Strategies on firm performance and indicated that there is an obvious link of operations strategy to firm performance.

3. Research Methods

The study was quantitative and as such, the data was analysed from a quantitative point of view. The study was based on the descriptive case study design that investigates the impact of operations strategy on business performance. The descriptive research method was considered because it describes the characteristics of the population that the sample was drawn from for the study. The study used purposive sampling method based on stratified sample to provide an opportunity for the respondents in the strata to be included in the study. It was decided that the survey design be conducted at a prevalent operation status in the business environment in the last 5 years. Case studies are very good at exploring existing theory as well as enabling the researcher to provide a source of new hypothesis

4. Data Collection

The researcher in this study was made to use both primary and secondary research, with the view to have a holistic approach in the process. A self-administered five-point Likert-type scale survey questionnaire comprising of six sections was designed to collect primary data for the case study ranging from 1 to 5 with 1 being strongly agree and 5 being strongly disagree. The researcher ensured that the process of developing a questionnaire had a higher degree of reliability, and that execution was done in line with test instruments that which were able to be formed. The process begun by firstly having to pilot across the potential respondents, so as to ensure that the research instruments such as structured questionnaires could be designed in accordance with the matrix associated with the respondents in line with the research objectives and research questions respectively. The researcher considered using questionnaire for validity purposes, with the view to minimise any risks that could have been associated with the study. It is for this reason why its design was such that, the questions used were close ended to limit the responses from the respondents, because it guaranteed positivity and uniformity of data. The annual enrolment numbers and/or income from both regular and corporate clients during the study period was used to determine if implementation of operations strategies have had an impact on business performance.

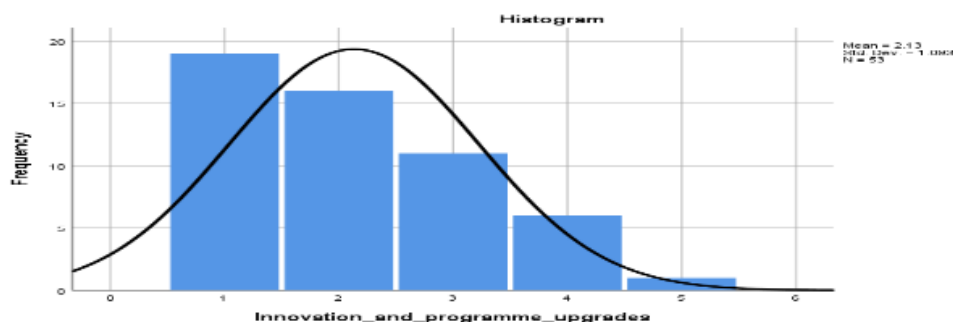


Figure 1. Program upgrades against Frequency

Data collection was however based on the availability of the staff at the time. Secondary data was collected from both physical publications, online journals and articles. The secondary research was reliable as academic literature was used as reference to facilitate for validation of data of the study. The purpose of validation of the findings across data sets was to reduce the impact of potential and degree of biasness, as information was further subjected

to different methods of analysis. The collected data was then processed using “Statistical Package for Social Sciences (SPSS)” Version 26 and presented in tables and graphs. Descriptive statistics such as frequency distributions, percentages, frequency tables, standard deviation, Kurtosis, Skewness as well as the Mean were used to analyse the data. Regression analysis was used to test the hypotheses on the linearity between dependent variable (Operations Performance) and independent variables (Operations Strategies). Kurtosis sample test to determine the characteristics of respondents of one data set is shown in the figure below. The figure is skewed to the left indicating that most respondents strongly agree or agree that OS has an impact on business performance.

5. Results and Discussion

This part of the paper looked at the analysis, discussion and interpretation of the results. Then it goes on to conclusion and recommendation of the study and suggestions for further research.

5.1 Quantitative Results on the Impact of Operations Strategy on Business Performance

The first research objective is set to examine organizational performance using income and/or enrolments as a practical measure of the impact of operations strategy on Business Performance of Lusaka Business and Technical College in the last 10 years. The study revealed that there was an increase in income of 0.1M ,1M and 2M from 2013 to 2016 giving an average increase of 1M over a period of three years. Likewise, there was an increase of 0.7M,0.8M, 2.7M, 0.8M,4.2M and 3M kwacha from 2017 to 2022 giving an average increase in income of 2M translating into 100% increase in income after implementation of operations strategy. The increase in income was from a corresponding increase in enrolments as a result of strategic practices employed by the institution. However, it was also observed that there was a sharp drop in income in 2020 of 1,9M kwacha due to an increase in expenditure in an effort to prevent the spread of the covid-19 virus through the procurement of materials and equipment. The increase in expenditure coupled with a corresponding drop in student payments had a negative impact on business performance of Lusaka Business and Technical College. The tuition fees were reduced in order to lessen the financial pressures on the sponsors as most firms either reduced or retrenched their workforce. The contact time was reduced from 2 hours to 1 hour per session in order to comply with Government health protocols. However, the overall performance in 2020 was better after implementation than before. It is sufficing to mention that LBTC is one of the few colleges or perhaps the only college in Zambia which managed to pay its staff in time even in the midst of covid-19 pandemic. A skilled and productive workforce produces goods and services of higher standards efficiently which in turn forms the basis for faster economic growth and rising living standards and this is what the Zambian Government has embarked on. The knowledge and skills of workers available on the job market are a key determinant for both business and economic growth. Therefore, the skills acquired from Lusaka Business and Technical College are taken to industry and make higher standard goods and services that contributes to the country’s GDP growth.

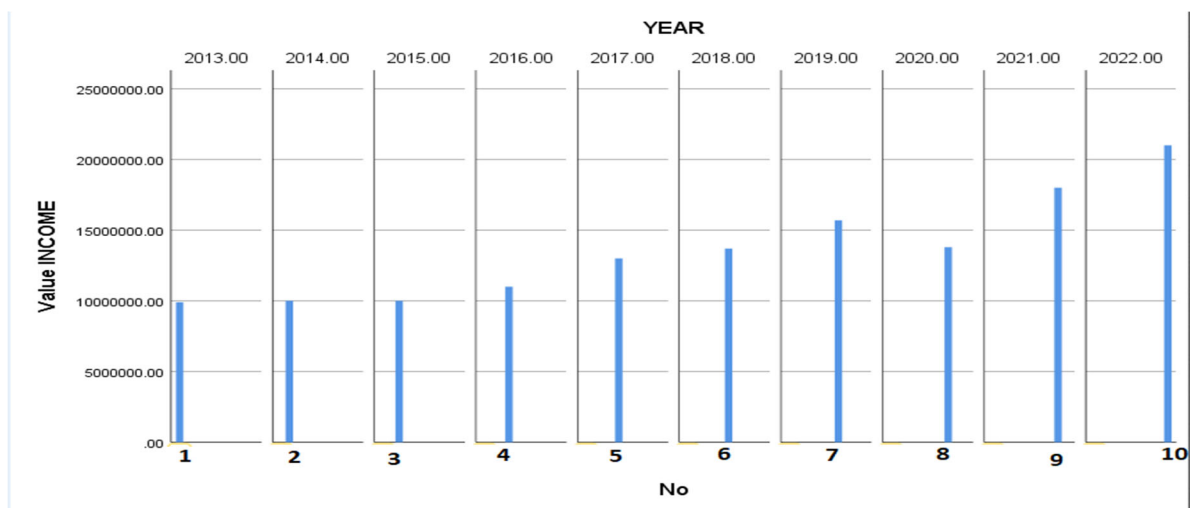


Figure 2. Organizational Performance of LBTC in the last 10 years. Source: Field data, 2022.

The institution recruited and trained approximately 5000 skilled graduates at an average of 1000 graduates per year before the study period and approximately 10,000 skilled graduates at an average of 2000 graduates per year during the study period. The skills offloaded on the labor market is comprised of; Tradesmen, craftsmen, technicians, ICT professionals, purchasing and supply professionals, secretaries, hospitality and business administrators. Additionally, LBTC in collaboration with GIZ Water and Energy Cluster Project Team has

contributed to the growth of the economy through the upskilling of over 400 technical labor force from water and energy sectors across the country in identified skills gaps such as; Faecal Sludge Management, Manual Pity Emptying of On-Site Sanitation, Operation and Maintenance of Faecal Sludge Treatment Plant, Plastic Pipe Welding, Water Quality Sampling and Testing, Inspection and Enforcement of Faecal Sludge Management and Installation of Solar Energy Applications. Some graduates from the institution are in the formal sector while others are in the informal sector, all contributing towards economic development of the country.

5.2 The impact of operations strategy on business performance at LBTC

The second data research objective sought to determine the impact of operations strategy on business performance at LBTC from a theoretical perspective. This was meant to support the practical results observed before and after implementation of operations strategy in section 5.1. A five-point Likert Scale considered an interval mean scale of 1 to 5=SA, 1.9 to 2.7=A, 2.8 to 3.5=N, 3.6 to 4.3=D, and 4.4 to 5. 2=SD. The findings of research objective number one are as depicted in Table 1 below.

Table 1. Impact of operations strategies on business performance at LBTC

Statements	N	SD	D	N	A	SA	Mean	Std. D
Training institutions should be involved in analyzing operational strategies in order to evaluate their impact on business	54	3.7%	1.9%	25.9%	46.3%	22.2%	2.1765	0.95101
Analyzing OS and their impact on BP brings positive benefits	54	7.5%	7.4%	16.7%	40.7%	27.8%	1.4118	0.50730
Employees are aware of OS strategies of the institution	54	7.5%	1.9%	7.4%	59.3%	24.1%	1.4706	0.62426
Stakeholders are aware of the impact of OS on institution	54	5.2%	5.6%	9.3%	48.1%	31.5%	2.7059	1.40378
Some of LBTC strategic objectives have been implemented	54	0.0%	9.1%	16.7%	40.7%	33.3%	2.3529	1.16946
LBTC interacts with stakeholder groups such as employee, students, the board, the authority TEVETA, EIZ, industry, MOE and other cooperating partners	54	7.4%	3.7%	9.3%	37.0%	42.6%	2.2941	0.98518
LBTC standards are established and verified by the authority TEVETA	54	9.3%	5.6%	24.1%	38.9%	27.8%	2.1176	1.05370
Financial impact of analyzing and implementing OS is experienced both in the short and long term	54	3.7%	1.9%	22.2%	51.9%	20.4%	1.7647	0.75245
Implementation of strategic objectives is the responsibility of all employees	54	5.4%	6.1%	7.4%	41.6%	39.5%	2.7142	1.4210

The results in Table 1 indicate that about (68%) of the respondents mentioned that training institutions should be involved in analyzing operational strategies in order to evaluate their impact on business performance, 26% were not sure, and the rest 6% were against the notion that training institutions should be involved in analyzing operational strategies in order to evaluate their impact on business performance (Mean=2.2; S.D=.95). This implies that training institutions should be involved in analyzing operational strategies in order to evaluate their impact on business performance. Results of the study in Table 1 above shows that 65% of the respondents were of the view that analyzing OS and their impact on BP brings positive benefits, 24% were not sure. The rest 11% disagreed that analyzing OS and their impact on BP brings positive benefits (Mean=1.4; S.D=.51). Results of the study showed that analyzing OS and their impact on BP brings positive benefits. 83% of the respondents expressed that employees are aware of OS strategies of the institution whilst 9% were not sure. The rest 7% mentioned that Employees are not aware of OS strategies of the institution (Mean=1.4; S.D=0.62). This therefore indicated that that employees are aware of OS strategies of the institution.

Arguably, results of the study further show that a large portion of the respondents (80%) were of the view that stakeholders are aware of the impact of OS on institution whilst 11% of them were against the notion. The rest (9%) were not sure if stakeholders are aware of the impact of OS on institution or not (Mean=2.7; S.D=1.4). 80% of the respondents mentioned that some of LBTC strategic objectives have been implemented whilst 21% were

not sure. The rest (11%) were against the notion that some of LBTC strategic objectives have been implemented (Mean=2.6; S.D=1.2). Therefore, results of the study shows that LBTC strategic objectives have been implemented. Majority respondents (72%) mentioned that some of LBTC strategic objectives have been implemented, 20% were not sure, and 8% mentioned that LBTC does not use strategic focus to determine the impact of OS on its business performance (Mean=2.4; S.D=1.2). Majority of the respondents (80%) further mentioned that LBTC interacts with stakeholder groups such as employees, students, the board, the authority TEVETA, EIZ, industry, MOE and other cooperating partners whilst 9% were not sure. The rest 11% mentioned that LBTC does not interacts with stakeholder groups such as employee, students, the board, the authority TEVETA, EIZ, industry, MOE and other cooperating partners (Mean=2.4; S.D=1.1). This implies that LBTC interacts with stakeholder groups and other cooperating partners. A large portion of the respondents (73%) stated that LBTC standards are established and verified by the authority TEVETA whilst 24% were against. Only 3% were not sure if LBTC standards are established and verified by the authority TEVETA or not (Mean=2.1; S. D=1.0). Therefore, results of the study showed that operations strategies have an impact on business performance at LBTC.

5.3 Operations Strategy Practices that have a positive impact on Organization Performance

The third research objective however, sought to determine Operations Strategy Practices that LBTC uses to determine the impact of operations strategies on business performance. This was rated with a degree of agreement or disagreements i.e. 1= Strongly Agree (SA), 2=Agree (A), 3=Neutral(N), 4=Disagree (D), and 5=Strongly Disagree (SDA). Also, the five-point Likert Scale considered an interval mean scale. From one 1 to 1.8=SA, 1.9 to 2.7=A, 2.8 to 3.5=N, 3.6 to 4.3=D, and 4.4 to 5.2=SD. Below are the findings of research objective number two as shown in Table 2 below.

Table 2. Operations Strategy Practices that have a Positive Impact on Organization Performance

	N	SD	D	N	A	SA	Mean	Std. D
Quality and reliability strategy	54	5.6%	3.7%	13.0%	44.4%	33.3%	2.3913	0.94094
Work process and ICT process	54	5.6%	5.6%	24.1%	29.6%	35.2%	2.2174	1.04257
Service differentiation strategy	54	3.8%	11.1%	20.4%	29.6%	35.2%	2.3043	1.06322
Innovation and programme upgrades strategy	54	7.4%	3.7%	25.9%	37.0%	25.9%	2.4783	1.16266
Outsourcing strategy	54	5.6%	5.6%	21.1%	37.0%	29.6%	2.5652	1.07982
Strategic marketing strategy	54	5.6%	5.6%	25.9%	33.3%	29.6%	2.5652	1.03687
Strategic focus	54	3.8%	3.7%	20.4%	48.1%	24.1%	2.4348	1.23679
Strategic partnership	54	3.8%	9.3%	27.8%	42.6%	16.7%	2.4348	1.16096
Just-in- time operations strategy	54	3.8%	9.3%	2.8%	51.6%	21.7%	2.3478	1.02730

Source: Field data, 22

The results in Table 2 indicate that the majority respondents (78%) mentioned that LBTC uses quality and reliability strategy to determine the impact of OS on its business performance, 13% were not sure, and 9% mentioned that LBTC does not uses quality and reliability strategy to determine the impact of OS on its business performance d (Mean=2.4; S.D=.94). Also, majority of the respondents (65%) mentioned that LBTC uses work process and ICT processes to determine the impact of OS on its business performance, 24% were not sure whilst the rest 11% disagreed that LBTC uses work process and ICT processes to determine the impact of OS on its business performance (Mean=2.2; S.D=1.0). Besides, the respondents (65%) further mentioned that LBTC uses service differentiation strategy to determine the impact of OS on its business performance whilst 20% were not sure. The rest 15% mentioned LBTC does not uses Service differentiation strategy to determine the impact of OS on its business performance (Mean=2.5; S.D=1.2). Additionally, a large portion of the respondents (63%) were of the view that LBTC uses innovation and programme upgrades strategy to determine the impact of OS on its business performance whilst 11% of them were against the notion. The rest (26%) were not sure if LBTC uses innovation and programme upgrades strategy to determine the impact of OS on its business performance or not (Mean=4.3; S.D=3.5).

Also, above three quarters (68%) of the respondents mentioned that LBTC uses outsourcing strategy to determine the impact of OS on its business performance whilst 21% were not sure. The rest (11%) were against the notion that LBTC uses outsourcing strategy to determine the impact of OS on its business performance (Mean=2.6; S.D=1.2). Besides, a large portion of the respondents (79%) stated that LBTC uses strategic marketing strategy to determine the impact of OS on its business performance whilst 21% were against. Only 3% were not sure if LBTC uses strategic marketing strategy to determine the impact of OS on its business performance or not (Mean=2.6;

S.D=1.1).Furthermore, majority respondents (72%) mentioned that LBTC uses strategic focus to determine the impact of OS on its business performance, 20% were not sure, and 8% mentioned that LBTC does not uses strategic focus to determine the impact of OS on its business performance d (Mean=2.4; S.D=1.2). On average, the respondents (59%) further mentioned that LBTC uses strategic partnership to determine the impact of OS on its business performance whilst 27% were not sure. The rest 14% mentioned LBTC does not use strategic partnership to determine the impact of OS on its business performance (Mean=2.4; S.D=1.1). Lastly, a large portion of the respondents (73%) stated that LBTC uses just-in- time operations strategy whilst 24% were against. Only 3% were not sure if LBTC uses just-in- time operations to determine the impact of OS on its business performance or not (Mean=2.3; S.D=1.0).

Therefore, results of the study reveal that LBTC uses quality and reliability strategy, work process and ICT process, service differentiation strategy, innovation and programme upgrades strategy, outsourcing strategy, strategic marketing strategy, strategic focus, strategic partnership, and just-in- time operations strategy to determine the impact of OS on its business performance.

5.4 Proposed Improvements

There is need to measure performance from an industry perspective as this will measure the performance of our skills graduates that will effectively contribute to the production of good quality products and services. But from the statistical results, industry participation in the research is minimal. There is need therefore to increase industry participation in the study so as to get a feedback on the performance of graduates. The skills gap between college graduates and industry has always been a concern of our industry partners. As such, there is a dire need to conduct a tracer study that will determine the performance of TEVET graduates when they are churned out to industry.

4.5 Validation

The validity of an assessment tool is defined as the extent to which it measures what it was designed to measure. The study therefore considered using questionnaires for validity purposes, with the view to minimise any risks that could be associated with the study. It is for this reason that the design was in such a way that, the questions used were close ended to limit the responses from the respondents, because such guaranteed positivity and uniformity of data. All questions from different sections were designed in such a way that they point to the same objective but from a different perspective. The test for hypothesis is as shown in Table 3 below;

Table 3. Regression Results Between Operations Strategy and Business Performance At LBTC

Model $Y = \alpha_0 + \beta_1 X + e$		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.365	0.365		1.060	0.000
	Operations Strategy	0.780	0.147	0.808	5.318	0.000
a. Dependent Variable: Business Performance b. R=0.808 c. R ² =0.753 d. F = 28.281 e. DF=15 f. Adjusted R ² = 0.630						

5.4 Regression Results on the Impact of Operations Strategy on Business Performance

The regression model $Y = \alpha_0 + \beta_1 X + e$ was used to test the hypothesis regarding dependent and continuous independent variables whose aim was to evaluate and determine the impact of operations strategies on business performance at LBTC. Table above shows regression analysis of effect of operations strategy on business performance at LBTC.

Table 4 shows the results on the relationship of operations strategy and business performance. The regression model (1) is significant at 0.05 level ($\beta = 0.808$, $F = 28.281$, $R = 0.808$, $R^2 = 0.382$, $P < 0.05$). Therefore, results of the study showed that operations strategy has a significant positive effect on business performance. Hence, the null hypothesis that says there is no significant relationship between operations strategy and business performance at LBTC is hereby rejected. The definition and/or explanation for the stated terms in table 4 are indicated below;

The calculated $R=0.808$, is the multiple correlation coefficient between all the independent variables and the dependent variable. In this model (1), the value is 0.808, which indicates that there is a strong positive linear relationship between respondents' perception on the impact of OS on BP. This further implies that respondents are of the view that OS have an impact on BP. The adjusted R^2 for operations strategies on business performance is 0.630. The values of adjusted R^2 mean that operations strategies included in this regression model explain approximately 63% from the variations in the business performance at LBTC. This further implies that the regression results found a positive relationship at 0.05 significance level between dependent variables and independent variables.

As shown from Table 4, the value of R Square is 0.753. R square is simply the squared value of R which indicates that 75% of the variance in the dependent variable (business performance) is explained by the independent variables (operation strategies) in the regression model. Therefore, there is a positive significant relationship at 0.05 significance level between dependent and continuous independent variables. A constant value (alpha) of 0.365 which is the predicted value of the dependent variable measuring (business performance) when the predictor is set at 0 and the coefficient of the independent variables (operation strategies) (beta=0.808, is the size of the coefficient of independent variable means that the size of the effect it has on the dependent variable is 0.808.

The prediction component as shown in Table 1 is the t-value and significance. The t-statistic (1.060) is the coefficient of determination divided by its standard error. If 95% of the t-distribution is close to the mean than the t-value, then the coefficient will have a p-value of 5%. The p-value indicates that the independent variables measure operations strategies. The results indicate satisfactory goodness of fit between the independent variable (operation strategies) and dependent variable (business performance.) It also showed that the F-value which is the mean square model divided by the mean square residual yielded $F = 28.281$ meaning that the model is significant to predict the impact of operations strategies on business performance.

$$BP = 0.365 + 0.808OS \dots\dots\dots \text{Equation (1)}$$

Where: BP= Business Performance, OS=Operation Strategies.

6. Conclusion

The financial records from audit reports during the study period indicated that the impact of operations strategy was practically determined with an increase in income from 1M to 2M kwacha before and after implementation respectively.

The theoretical results of the study showed that training institutions should be involved in analyzing operations strategies in order to evaluate their impact on business performance, analyzing OS and their impact on BP brings positive benefits, employees are aware of OS strategies of the institution, Stakeholders are aware of the impact of OS on institution performance, some of LBTC strategic objectives have been implemented, LBTC interacts with stakeholder groups such as employees, students, the board, the authority TEVETA, EIZ, GIZ, industry, Ministry of Technology and Science and other cooperating partners, LBTC standards are established and verified by the regulatory authority TEVETA, financial impact of analyzing and implementing OS is experienced both in the short and long term, and implementation of strategic objectives is the responsibility of all employees. This further implies that operations strategies have an impact on business performance at LBTC. It was also established that LBTC in collaboration with GIZ has made a contribution towards the growth of the economy through the training and upskilling of technical labor force from informal and formal sectors respectively. This is in conformity with other research findings in section 2.4 which established that there is a linear relationship between operations strategy and business performance. This suggests that operations strategy can be applied to any form of business ranging from domestic business setups up to big business corporations, social groupings and/or organizations.

7. Recommendation

The study recommends that institutions formulate and implement operations strategy if they are to remain competitive in the business environment since there is sufficient evidence that there is a linear relationship between the two variables. Further studies are however recommended that will determine the performance of college graduates from an industry perspective. We also recommend that further studies be conducted to analyze skills gap between college graduates and industry so that necessary interventions can be made to narrow that gap and increase production levels.

8. Limitations of the study

The first limitation of the study came with the collection of primary data from the respondents especially those from industry, cooperating partners and regulators. Most of them indicated that they were very busy with their work schedules and the researcher allowed them to attend to the questionnaire willingly at their convenient time because any form of forcing could have contravened with ethical issues of the study. However, this created a delay

in the processing and analysis of the data and hence the compilation of the thesis report. The second and last limitation is that the results could suffer from a social desirability bias (Mohr et al. 2001), where respondents tend to respond with the intention of pleasing the author (Nederhof 1985).

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