

The Effect of Reverse Logistics Practices on Economic Performance: A case study of Simba Breweries

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Abstract

The subject of reverse logistics has grown exponentially due to an increase in production and consumption activities. Companies are now more pressurized by regulatory bodies to be more responsible in dealing with the environment and producing their products. Reverse logistics has been proven to be an effective and efficient way to deal with the environment and optimize the performance of organizations. However, this concept is often misunderstood and many companies still don't realize the benefits of implementing it in the operation of their businesses. Academic research in this field is limited, especially in the context of the Republic Democratic of Congo. There are no studies conducted to evaluate the effect of reverse logistics practices on the economic performance of companies, this is the case of the manufacturing companies such as Simba Breweries in particular. The gap has been identified and should be filled by researchers. The study aimed at evaluating the economic benefits of the reverse logistics system at Simba Breweries. For this, a descriptive research design was followed and data was collected through a questionnaire and analyzed using descriptive and inferential statistics. The results indicate that there was a positive and significant correlation between Reuse practice and the economic benefit of the company with a correlation and regression coefficient of 0.91 and 3.38. The study identified the economic benefit of implementing RL practices. Reuse practice decreases the cost of production by 65% and increased the profitability of the company by 60%. More research is needed to investigate further the implementation of other practices of this system.

Keywords

Reverse logistics, Reuse, Remanufacturing, Recycling, and Company performance.

1. Introduction

Over the years, the subject of reverse logistics has received growing importance across the globe (Agrawal et al. 2015). It accounts for the end of the life cycle of products such as packaging material in both, developed and developing countries (Govindan and Soleimani 2017). It has been pointed out by many others as being an effective and efficient way to deal with environmental pollution and improve companies' performance (Mwanza et al. 2017).

The study aimed at identifying the economic effect of reverse logistics practices on the economic performance of the company. The reverse logistics system deals with the inverse flow of products from their point of consumption to the point of production to recapture value and proper disposal (Banihashemi et al. 2019). It is implemented in developed countries as a strategic tool to protect the environment and decrease the cost of production. This system is more successful in developed countries with strong regulations for the protection of the environment (Mwanza et al. 2016).

Luthra et al. (2017) and Yu et al. (2018) indicated that in Europe, firms are held accountable for the waste they generate. However, in the context of developing countries, the subject of reverse logistics is still in a state of infancy due to several barriers (Bouzon and Rodriguez 2018). Waste management and reverse logistics practices are still in the infancy stage in developing countries (Waqas et al. 2018). Post-consumer products such as used glass bottles from beverages are buried in landfills, dumped on roadsides, burnt, and thrown away in significant amounts; this leads to issues such as environmental pollution, waste of resources, and health problems (Menon et al. 2017).

Manufacturing companies can take advantage of the benefits of the reverse logistic system to protect the environment in which there are doing business and cut off on their cost of production. In DRC, the subject of reverse logistics is a

new context that needs to be developed and introduced in manufacturing companies. Only a few companies are aware of the existence of RL practices, and those who are aware are not yet able to implement them effectively and efficiently. This study will cover the knowledge gap and evaluate the economic benefits of this system in the economic benefit of Simba Breweries.

In the case of the republic democratic of Congo (DRC), from the perusal of the literature review, it has been found that the subject of RL is still a very new concept for businesses, very few studies if not none have been conducted around this topic in general, and on the evaluation of the economic benefits of this system in particular. A lot of manufacturing companies in different industries do not know how to implement effectively and efficiently the practices of RL, thus having challenges to identify its role and benefit in the performance of their businesses. This is the case of SIMBA breweries. Simba Breweries implement the RL system in the operation of its business to make sure that it has enough glass bottles in its inventory, to smoothen the process, by taking advantage of the economic benefits of this system and protecting the environment against pollution by collecting glass bottles after consumption of the products. However, no study has been conducted to evaluate the effect of this system on the economic performance of the company. Thus, this study aimed at filling this gap.

1.1 Objectives

This research was aimed at evaluating the economic benefits of reverse logistics at Simba Breweries. The specific objectives of the study were the following:

- To determine the extent to which the company implements the practices of the reverse logistics system in the operating performance of its business.
- To evaluate the economic benefits of the reverse logistics system in the performance of the company.
- To identify barriers to the implementation of the reverse logistics system in the company.

2. Literature Review

Recently, the topic of reverse logistics has gained increasing popularity worldwide due to global awareness as the result of resource depletion and environmental degradation (Abdulrahman et al. 2014). Reverse logistics is a system in which the flow of material moves in the opposite direction of the supply chain (Abdullah and Yaakub 2014). It is a system of recapturing value from used products or waste from the downstream to the upstream (Afum et al. 2019). This system is more effective in developed nations than it is in developing ones (Muhammad et al. 2018). Several studies have been conducted in the field of RL, this study focuses on evaluating the economic benefits of implementing the three practices of this system (reuse, remanufacturing, and recycling) in the performance manufacturing company. This is the main reason why the literature review will be centered on the three RL practices and the economic benefit that these practices bring.

2.1 Recycling

Recycling is among disposition options that bring positive impacts on the environment and economic benefits to a company; it is a set of processes and activities involved in the revalorization of used products, and it brings back used materials or thrown waste into the production cycle (Khor et al. 2016). Recycling involves the utilization of discarded material in the process of reproduction of another product, it is a strategy put in place by firms to contribute to the sustainable management of solid waste (Mwanza et al. 2017).

Even though reverse logistic practice is an efficient tool used in resource recovery and waste management, the majority of firms in developing countries need to redevelop and restructure their recycling systems for them to be more effective and efficient enough. This is what will make it possible for firms to take advantage of the various benefits that this practice of reverse logistics brings.

2.2 Remanufacturing

Remanufacturing can be defined as the process of returning a good or a product that has been already used in its initial state; it denotes a higher process than recondition (Khor et al. 2016). It can also be defined as an industrial process through which used goods or products are restored to their initial useful life (Wainaina 2014). Remanufactured goods or products have a warranty to be equal to the previous one. This option can be also defined as the process of returning a used product to at least its original performance (Yao and Kong 2012). Remanufacturing is all about rebuilding the product to have back the previous specification as when the product was manufactured first; it improves the quality

of the returned products to the functional or initial condition (Khor et al. 2016). Thus, remanufacturing is a process through which the initial value of a given product can be recaptured (Heda et al. 2017).

2.3 Reuse

In the reverse logistics system, reuse practice is known as the process by which a product can be corrected to remove specific faults in them (Yao and Kong 2012). It is the act of taking old items such as glass bottles and finding a new use for them after some processes on them. The term reuse is applied only to products that have been used previously (Heda et al. 2017). This practice is common in manufacturing companies in general and in the brewery industry in particular, where glass bottles used for packaging are brought back into the company and worked on through several processes that put them in conditions of usability.

2.4 Reverse logistics practices and economic benefits

The implementation of reverse logistics activities brings benefits not only to the environment and firms; further, this system will be also beneficial for customers (Abdullah and Yaakub 2014). However, the primary reason for implementing reverse this system in the process of any given business is to minimize costs and increase profits (Grabara et al. 2019). RL can bring tangible and intangible benefits by recapturing value from used or returned goods and extending the life cycle of products through activities such as recycling, remanufacturing, and reuse among others (Banihashemi, et al. 2019). Reverse logistics can bring many economic benefits to the performance of manufacturing firms which can be classified into two groups which are direct benefits and indirect benefits. These benefits include the reduction of costs and the aggregation of socio-environmental value among others. However, they are also some drawbacks to this system in the operation of the businesses (Borges et al. 2020). Reverse logistics practices in an organization save and minimize costs and natural resources related to the production process and increase the profitability of the firm by reutilizing used materials instead of buying new raw materials from suppliers and wasting manpower and time (Banihashemi et al. 2019).

2.5 Drivers of the reverse logistics system

There are many drivers of reverse logistics, among which we can think of the following three: economic, corporate citizenship, and environmental/ regulation. We can find different reasons that can push firms to implement Reverse logistics practices in their businesses; we can think of regulations and laws, customers and social pressure as well as profit maximization (Mobolaji 2017). Mwanza et al. (2019) indicated that there are mainly three drivers of the reverse logistics system which are namely government legislation, environmental concerns, and economic concern. Firms in developed and developing countries have got different approaches to the implementation of reverse logistics systems in their businesses; this is mainly due to some reasons such as the maturity level of reverse logistics, rules, regulations in place, company size, and operation systems. They are facing different barriers and dealing with them differently (Waqas et al. 2018). Muhammad et al. (2018) researched critical barriers to the implementation of reverse logistics in the manufacturing industry and found that the most critical barriers to the implementation of reverse logistics are the high cost of reverse logistics adoption, the lack of skilled professionals, the lack of skilled professionals, lack of law and regulation, poor management, lack of new technology among many other factors.

2.6 Research gap

The subject of reverse logistics had recently gained significant importance in the literature review. However, there is still a significant need to investigate feather this topic in developing countries of the African continent. From the perusal of the literature review, it has been observed that several studies have been conducted in different areas such as plastic manufacturing companies, and food manufacturing companies, barriers to the implementation of reverse logistics, drivers of this system, identification, and prioritization of the critical factors in implementing reverse logistics practices among others areas. However, very few of them focused on the evaluation of the economic benefit of reverse logistics practices on the performance of manufacturing firms using glass bottles as containers, and none of these studies was conducted in the context of DRC.

3. Methods

The study adopted a descriptive research design. Data was collected from managers, their assistant managers, and senior members from different departments related to the reverse logistics system of the company. A sample size of 70 respondents was selected using simple random sampling. The principal instrument for primary data collection was a survey questionnaire, and data were analyzed using descriptive and inferential statistics. For descriptive statistics,

data were summarized using mean and standard deviation. For inferential statistics, correlation and multiple regression tools were used.

4. Data Collection

For this study, primary data was collected from respondents through questionnaires that have been administered by a method known as a drop and pick later; on the other hand, secondary data was collected from both published and unpublished material such as actives, books, thesis, and electronic media among others. This was done to achieve the different objectives of the study.

5. Results and Discussion

5.1 Descriptive analysis

The study used a 5-point Likert where 1 represented “no extent all”, 2 “small extent”, three, 3 “moderate extent”, 4 “large extent”, and 5 “very large extent” to evaluate the extent to which reverse logistics practices (Remanufacturing, Reuse, and Recycling) and the economic performance of the company are implemented.

5.1.1 Remanufacturing practice

Table 1 below displayed the results related to the implementation of the remanufacturing practice.

Table 1. Remanufacturing practices

Statement on Remanufacturing Activities	Mean	SD
SIMBA breweries has a return system for used bottles for remanufacturing	1	0
There are set qualities for the collection of used glass bottles for remanufacturing	1	0
Glass bottles used for packaging are designed for remanufacturing	1	0
SIMBA breweries implement remanufacturing to comply with regulations	1	0
Remanufacturing activities bring about economic benefits for the company	1	0
Grand mean	1	0

From the result presented in Table 1 above, the study's findings show that respondents disagree on the implementation of remanufacturing activities in their company as the overall mean found is 1. They indicated that the company has no return system for remanufacturing as the mean found was 1. They stated that the company was not implementing remanufacturing to comply with regulations as the mean found was 1. They indicated that glass bottles used for packaging are not designed for remanufacturing as the mean found was 1. Respondents indicated that there was no set of qualities for the collection of used glass bottles for remanufacturing as the mean was 1. They disagreed with the statement indicating that remanufacturing activities bring about the economic performance of the company 1. The overall standard deviation was 0, which means that there was no variation in the responses provided by respondents.

5.1.2 Recycling practice

Table 2 below displays the results related to the implementation of the recycling practice.

Table 2. Recycling practice

Statement on Recycling Activities	Mean	SD
SIMBA breweries has an appropriate system for recycling	1	0
Returned glass bottles are recycled at SIMBA breweries	1	0
Customers are aware of the recycling of glass bottles at SIMBA breweries	1	0
Recycling activities are implemented to comply with regulations	1	0
Recycling activities increase the profitability of the company	1	0
Grand mean	1	0

From the result presented in Table 2 above, the study's findings show that respondents indicated that the company doesn't have an appropriate system for recycling as the mean is 1 with a standard deviation of 0. All respondents revealed that returned glass bottles are not recycled with a mean of 1. They indicated that customers are not aware of the recycling of glass bottles by the company as the mean is 1. They disagreed with the statement that says recycling

is implemented to comply with regulations as the mean is 1. They indicated that recycling activities are not increasing the profitability of the company as the mean is 1. The overall mean found was 1, and the majority of respondents stated that the company was not implementing recycling activities in the operation of its business. The overall standard deviation was 0, meaning that there was no variation in responses.

5.1.3 Reuse practice

Table 3 below displayed the results related to the implementation of the reuse practice.

Table 3. Reuse Practice

Statement on Reuse activities	Mean	SD
SIMBA breweries has a return system for used bottles for reuse	3.5	0.624
There are set qualities for the collection of used glass bottles	3.71	0.613
Glass bottles used for packaging are designed for reuse activities	3.56	0.767
SIMBA breweries implement reuse activities to comply with regulations.	3.6	0.717
Reuse activities bring about economic benefits for the company	3.63	0.735
Grand mean	3.60	0.1331

According to the results presented in Table 3 above, respondents were neutral and agreed with the statement that said Simba Breweries has a return system for used glass bottles for reuse as the mean is 3.5. They agreed that there are a set of qualities for the collection of used glass bottles as the mean was 3.71. The majority of respondents indicated that glass bottles used for packaging are designed for reuse activities as the mean was 3.56. They also indicated that Simba breweries implement reuse activities to comply with regulations as the mean found was 3.6. They indicated that reuse activities bring about economic benefits for the company as the mean found was 3.63. As the overall mean found was 3.60, this indicated that respondents were neutral and agreed that the company implements reuse activities for glass bottles in its business. The overall standard deviation was less than 1, which means that there was no significant variation in responses given by respondents.

5.1.4 Reverse logistics practices and the Company's Performance

Table 4 below displayed the results related to the implementation of the reuse practices and the company's performance.

Table 4. Reverse logistics practices and the company's economic performance

RL practices and the company's economic performance	Mean	SD
Reverse logistics activities increase the profitability of the company	3.56	0.62
RL activities practices increase customer loyalty	3.76	0.59
RL activities of glass bottles decrease the cost of production	3.66	0.70
RL activities bring about an increase in market share	3.7	0.64
RL activities decrease the price of products	3.75	0.65
Grand mean	3.69	0.051

Results presented in Table 4 above indicated that respondents agreed with the statement indicating that reverse logistics increase the companies' economic performance as the grand mean found was 3.69. Respondents indicated that reverse logistics activities increase the profitability of the company with a mean of 3.56. They indicated that Reverse logistics practices increase customer loyalty with a mean of 3.76. They indicated that RL activities of glass bottles decrease the cost of production with a mean of 3.66. They revealed that RL activities bring about an increase in market share. They also indicated that RL activities decrease the price of products with a mean of 3.75. The overall standard deviation found indicated that there was not a significant variation between responses provided by respondents.

5.1.5 Challenges in reverse logistics

Table 5 below displays the results related to the challenges in reverse logistics.

Table 5. Challenges in reverse logistics

Challenges in reverse logistics	Grand mean	SD
Cost-related challenge	4.0	0.0781
Management related challenge	3.6	0.154
Challenges related to products return	3.6	0.1862
Information-related challenges	3.63	0.1879
The challenge in the SC and its partners	4.08	0.1736
Grand mean	3.782	0.155

The result of the study indicated that the main challenges faced by the company were the challenge in the SC and its partners with a mean of 4.08, Cost-related challenges with a mean of 4.0, Management related challenges with a mean of 3.6, Challenges-related to product return with a mean of 3.6, Information-related challenges, an Information-related challenges with a mean of 3.63. The overall mean found was 3.782 and the standard deviation of 0.155 indicating that there are challenges in implementing the reverse logistics system with no variation in the responses provided by respondents as the grand mean was less than 1.

5.1.6 Strategies to Enhance RL Implementation

Table 6 below displayed the results related to the strategies to enhance RL implementation.

Table 6. Strategies to enhance RL implementation

Improvement of the RL system at SIMBA breweries	Mean	SD
Hire a third part company that will be in charge of the RL	4.1	0.9513
Raise awareness of clients on the importance of retaining glass bottles.	4.0	0.7811
Utilize the full capacity of material and human resource	4.3	0.7876
Put in place strategies to implement effectively and efficiently RL	4.4	0.8067
Train employees on RL practices	4.7	0.4621
Involve all the partners of the SC in the RL system	4.5	0.5042
Grand mean	4.3	0.1909

Table 6 above depicted the results of strategies to enhance RL implementation. Respondent indicated that the company needed to train employees on RL practices as the main improvement with a mean of 4.7 and a standard deviation of 0.4621. Involving all the partners of the SC in the RL system was the second with a mean of 4.5 and a standard deviation of 0.5042, put in place strategies to implement effectively and efficiently RL was the next with a mean of 4.4 and a standard deviation of 0.8067. Utilize the full capacity of material and human resources with a mean of 4.3 and a standard deviation of 0.7876. Hire a third part company that will be in charge of the RL with a mean of 4.1 and a standard deviation of 0.9513, and Raise awareness of clients on the importance of returning glass bottles with a mean of 4 and a standard deviation of 0.7811. The overall mean found was 4.3 indicating that respondents agreed with the strategies to enhance the implementation of the reverse logistics system with a grand standard deviation of less than 1.

5.2 Inferential statistics

To find the inferential statistics, the study computed the correlation between variables using Pearson analysis and the regression analysis determining the test coefficients.

5.2.1 Person correlation

Table 7 below displayed the results of the correlation between variables found by the calculation of the Pearson analysis.

Table 7. Person correlation

	Remanufacturing	Recycling	Reuse	Company's performance
Remanufacturing	1			
Recycling		1		
Reuse	0	0	1	
Company's performance	0	0	0.91	1

From the results of the Pearson correlation above, we can see that there was only one independent variable having a relationship with the dependent variable. The results revealed a positive and strong relationship between reuse and the company's performance 0.91, the other two independent variables (recycling and remanufacturing had no relationship with the company's performance.

5.2.2 Regression analysis

Regression analysis was used to determine the Relationship and the strength between reverse logistics practices and Company's Economic performance. To determine the relationship between the three reverse logistics practices and the economic performance of the company, the study made use of regression analysis tools using Excel to build a mathematical model representing the relationships between dependent and independent variables. The study followed adopted the following model:

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

With:

Y: Company's economic performance;

β_0 : Intercept

β_i (i = 1 – 3): The coefficients of the estimated regression model;

X1: Remanufacturing practice;

X2: Recycling practice;

X3: Reuse practice.

Test of coefficient

Table 8 below displayed the results of the test of coefficient.

Table 8. Test of coefficient

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	3.34	0.70	4.76	0.00
Remanufacturing	0	0	0	0
Recycling	0	0	0	0
Reuse	0.38	0.19	1.98	0.01

From the result of Table 8 below, we can see that the intercept β_0 had a coefficient value of 3.34, the remanufacturing practice had, a coefficient value of 0, the recycling practice had a coefficient value of 0 too, and reuse had a coefficient value of 0.38 with a p-value of 0.01. Now the equation of the model can be written as follows:

$$Y = 3.34 + 0 X_1 + 0 X_2 + 0.38 X_3 + \alpha$$

This means that when all the other variables are held constant and X1 and X2 are given their coefficient value respectively, there won't be any change in the value of the dependent variable. However, when all other factors are held constant and X3 is given the value of its coefficient a unit change in X3 will result in an increase of 0.38 in the economic benefit of the company.

Coefficient of determination

Table 9 below displays the results of the coefficient of determination.

Table 9. Regression Statistics

Multiple R	R Square	Adjusted R Square	Standard Error	Observations
0.42	0.17	0.13	0.57	60

The model summary presented in Table 9 above indicated that multiple regression coefficient R equals 0.42 revealing that there is a median correlation between the dependent variable (Company's financial performance) and the independent variables. The value of R^2 which is equal to 0.17 in the table implies that the independent variables account for a 17% variation in the performance of the company. This means that regression translates into a small change in the economic performance of the company.

F test for the full model ANOVA

Table 10 below displayed the results of the F test for the full model ANOVA

Table 10. F test for the full model ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	3.86	1.29	3.93	0.01
Residual	56	18.32	0.33		
Total	59	22.18			

The F-test was conducted to predict the overall validity of the model. Through this test, we can see if there was a linear relationship between the independent variables and the dependent variable. From Table 10, the total variance F was 3.93, there was significant goodness of fit between variables, $F(3, 56) = 3.93$, this indicated that the model considered between variables was a good fit for the data. Both null and alternative hypotheses were predefined, there is no significant independent variable and there is at least one significant independent variable respectively. From the table above table, the P-value is represented by the Significance F and it equals 0.01 and less than 0.05. Thus, at the 5% significance, the null hypothesis was rejected and the alternate hypothesis was considered as there is at least one significant independent variable. This proved that the model of fit considered was valid.

6. Discussion

Remanufacturing

From the Pearson correlation coefficient table 7, the study found that there was no relationship between independent the remanufacturing independent variable and the economic performance of the company as the correlation value was 0. From the regression model, we can see that when other factors are kept constant and remanufacturing considered, there will be no changes in the value of the dependent variable as the coefficient of determination found was 0. Remanufacturing practice doesn't bring any form of economic benefits to the performance of the company. The study conducted by Alloys (2019) indicated that companies implementing remanufacturing in the operation of their business found that it brings economic benefits to the performance of companies.

Recycling

From the Pearson correlation coefficient table 7, the study found that there was no relationship between the Recycling RL practice and the economic performance of the company as the correlation found was 0. From the regression mode, we can see that when we keep all the other variables constant and consider only recycling. There won't be any change in the predicted variable as the coefficient of determination was 0, this indicates that the Recycling RL practice does not have an economic benefit on the performance of the company. However, the studies conducted by Alloys (2019) and Guta (2016) indicated that recycling RL practice has a strong and positive effect on the performance of companies.

Reuse

From the Pearson correlation coefficient table 7, the study found that there was a positive and significant correlation between Reuse and the economic performance of the company with a correlation coefficient of 0.91. This indicated that whenever there is a change in the reuse practice, there will be a positive effect on the economic performance of the company. From the regression model, an increase in a unit of reuse practice by holding all other independent variables constant will result in a 0.38 increase in the economic performance of the company which is a 38 % variance. The studies conducted by Guta (2016) confirmed that the reuse of RL practice has a positive and significant impact on the economic performance of the company. A change of a unit in the reuse RL practice will automatically affect the economic performance of the company. The results revealed that out of the three reverse logistics practices considered, only the reuse practice was implemented in the company with an overall mean of 3.60 and a standard deviation of 0.113. The other two RL practices recycling and remanufacturing were found to not be implemented by the company with their overall mean of 1 and a standard deviation of 0.

6. Conclusion

The main objective of this study was to evaluate the effect of the reverse logistics system on the economic performance of the company. To conclude, the results from Tables 1, 2, and 3 indicate that the company had a reverse logistics system in place in which only the reuse practice was implemented out of the three practices considered in this study with an overall mean of 3.60 and a standard deviation of 0.113. Results in Table 4 indicated that the reverse logistics practice implemented by the company increases brings economic benefits to the company as the grand mean found was 3.69. Tables 7 and 8 indicate that reuse practice had a positive and strong correlation with the economic performance of the company, a unit increase in the reuse practice resulted in an increase of 0.38 in the economic performance of the company. The study also indicated that the reuse practice decreased the cost of production by 65% and increased the profitability of the company by 60%. However, remanufacturing and recycling did not have any correlation with the performance of the company as they were not implemented. In Table 5 the study found that the high cost related to the implementation of the RL system, the lack of the implementation of IT solutions, the lack of collaboration with partners in the Supply Chain, the lack of government implication in green, and the product return are the biggest challenges faced by the company.

There is a need of conducting more research on the topic of reverse logistics in general, especially in African countries, and the focus should be on its economic benefits on the performance of manufacturing companies and other RL practices. The study contributed to the body of knowledge and covered the gap by focusing on the evaluation of the economic benefits of this system on a manufacturing company in the RDC. Firms in this industry should focus on the implementation of the reuse RL practice and open doors to other practices of the system to maximize the benefits. The study was limited to one company in the brewery industry of Lubumbashi/DRC and considered only three practices of the system. Further research can pick it from here and include many companies and other practices.

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Biographies

Alex Lumba is a Postgraduate Student at the University of Zambia under the Graduate School of Business in the field of Operation, Project, and Supply Chain Management. He is coming from an engineering background where he got a degree in electro-mechanics from the University of Lubumbashi in the Republic Democratic of Congo. He has decided to deepen his knowledge and specialize in the field of supply chain management, and is now working as An Account Project Manager and has relevant experience working in a customer-facing environment and dealing with SaaS for in-person, virtual, and Hybrid events.

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