

Supply Chain Integration and Customer Service at Hariss International Limited Uganda

Cigiriza Samuel¹, Olutayo K. Osunsan², Moses Muhwezi², Christine Kabasinguzi^{2,3}

¹MBA Student, School of Postgraduate Studies & Research, Cavendish University, Uganda

²Lecturer, Faculty of Business and Management, Cavendish University, Uganda

³Lecturer, College of Economics and Management, Kampala International University, Uganda.

Abstract:- The paper accesses the relationship between supply chain integration dimensions (customer integration, supplier integration, internal integration) and customer service at Hariss International Ltd. The study employed both descriptive and cross-sectional designs, utilizing quantitative data collection methods. A sample of 36 employees was chosen from the organization for data collection. Primary data was collected through interviews and surveys, while secondary data came from records and published sources. The study utilized statistical tools such as correlation analysis, multiple regression analysis, and factor analysis to analyze the data. The results reveal significant positive relationships between customer integration, supplier integration, internal integration, and customer service. The findings indicate that enhancing these integration dimensions can lead to improved customer service. Factor analysis identified sub-dimensions within each integration dimension, shedding light on the specifics of integration within the company. The paper emphasizes the importance of these integrations in influencing customer service positively. It concludes that organizations prioritizing supply chain integration can achieve better customer service, adapt to changes, and maintain a competitive edge. In conclusion, this paper contributes to the understanding of how different dimensions of supply chain integration affect customer service, using a case study of Hariss International Ltd. The findings highlight the significance of fostering integration strategies to enhance customer service and overall organizational performance.

I. INTRODUCTION

Globally, there has been an upsurge in the demand for customer service. According to a Genesys Global survey cited by Savitz (2021), poor customer service costs businesses \$ 338.5 billion in lost revenue worldwide each year. What's particularly alarming is that, while service teams believe that consumer expectations are higher than ever, they also feel that their organizations are treating service less seriously, many organizations views customer service as an expense rather than an opportunity for growth (Tsohoh, 1996). Customers think customer service influences their brand decision and loyalty; this is a fact that is too vital to

ignore (Kumar, Dalla Pozza & Ganesh, 2013). Soosay, Ferrer and Santa (2021) stated that organizations confront significant problems today since the successful provision of numerous goods and services necessitates the effective integration of logistical activities across a growing supply chain and increasing geographical isolation (Soosay, Ferrer and Santa, 2021).

In Africa, customer service is still a challenge. Thaba, Jacobs and Laby (2023) that customer experience service levels in South Africa have continued to drop over the last five years, as has customer loyalty to brands. The emotional and service-related components of the consumer experience are both declining. In Uganda, generally customer service is considered moderate. Wampande & Osunsan, (2020) found out that employee attitudes are largely negative in Uganda, whereas customer satisfaction is moderate. Ramdhani, et al. (2017) noticed that an increasing number of firms and organizations in recent years have realized that being able to provide acceptable levels of customer service delivery may be the deciding factor in whether or not they will exist in the future. Despite the fact that companies in Uganda are doing their utmost to provide good customer service, most organizations' customer service levels remain low. According to this research, while there may be various elements influencing customer service in the country, supply chain integration may be one of them. So, the issue is postponing the extent to which customer integration, supplier integration, and internal integration impact customer service. The purpose of this study was to examine the effect of customer integration, supplier integration, internal integration on customer service in food and beverage industry in Uganda: A case study of Hariss International Ltd Uganda. More specifically: (i)to examine the relationship between customer integration and customer service at Hariss International Ltd Uganda, (ii)to determine the relationship between customer integration, internal integration and customer service at Hariss International Ltd Uganda, (iii)to evaluate the relationship between supplier integration, internal integration and customer service at Hariss International Ltd Uganda, (iv)to assess the relationship between supplier integration and customer service at Hariss International Ltd Uganda, and (v)to explore the factor structure of Customer integration, Supplier integration, internal integration and customer service.

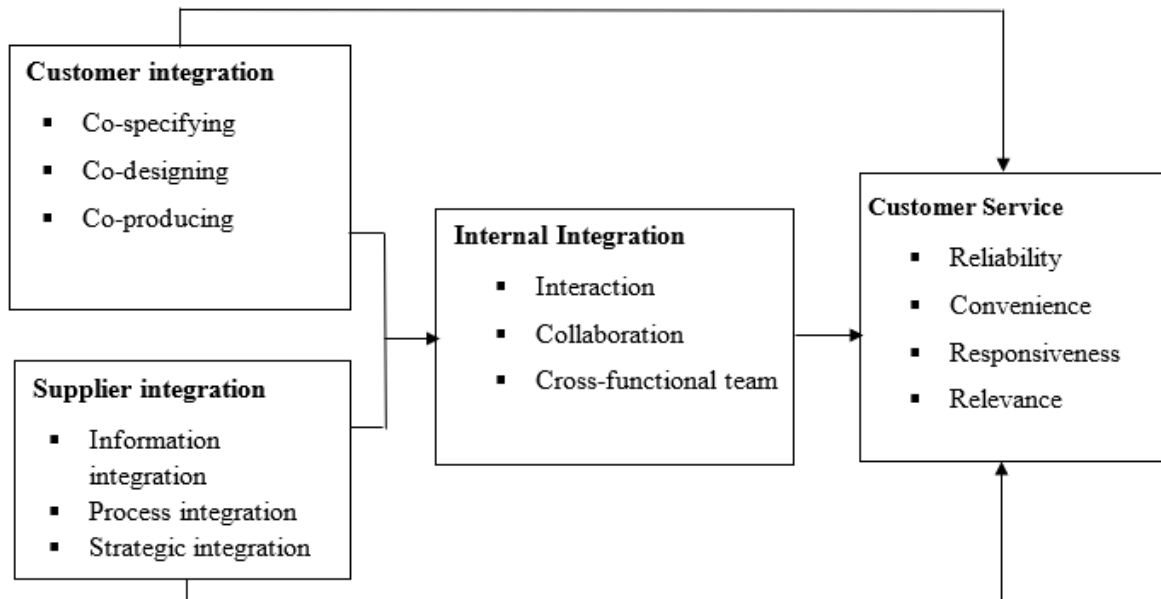


Fig 1: Conceptual framework

The diagram (figure 1) depicts the hypothetical relationship that was expected to exist between customer integration, supplier integration, internal integration and customer service. Customer integration is measured by the customer roles of Straub, Kohler, Hottum, Arrass, & Welter (2013) and it has attributes that include co-specifying, co-designing and co-producing. Supplier integration is measured by the supplier integration model of Zhang, Nguyen, & Lettice (2018) with attributes that are information integration, process integration and strategic integration. Internal integration is moderating customer integration and supplier integration. Internal integration is measured by its prominent dimensions as described by Talib and Alam (2016) with attributes that are interaction, collaboration and cross-functional team. Customer service that is dependent variable is measured by the trust factors as described by Ramdhani, Mnyamana and Karodia (2017) with attributes like reliability, convenience, responsiveness and relevance.

II. LITERATURE REVIEW

A. Customer Integration and Customer Service

Different studies have examined the relationship of customer integration and customer service. Cichosz et al. (2017) discovered in their preliminary results that including customers into the logistics process of innovation may boost customer service in the same way improve the performance of innovation of Logistic Service Provider in their study on Logistics outsourcing innovation relationships seeking client satisfaction. They used a two-stage approach, where Stage one consisting of focus groups involving of Logistics Service Providers with their customers, then Stage two consisting of a survey to test theories to exemplify early data from the American market, European case studies context, and explaining collaboration between Logistics Service Providers and their clients on logistics advancements. When pursuing anything new, aligning with a customer is a critical factor for success in the logistics industry, particularly when exploring

and developing revolutionary personalized service improvement. As a result, the integration of innovation should include both management and relational methods. Innovation In the service industry, alignment performance is primarily reliant on interpersonal dynamics including mutual understanding, relational involvement, and relational dedication. Abramovici and Schulte (2007) discovered that efficient use of customer information is only doable by its systematic, context-oriented integration into the working environment of the product development at the Department of IT in Mechanical Engineering (ITM), Ruhr-University Bochum with the goals of increasing product development effectiveness and optimizing customer service. Thus, integrating clients into product development must be regarded as being a long-term, endless management activity instead of single initiative. Customer orientation as part of company strategy will result in a shift of enterprise organizations from a traditional, monolithic organization form to a customer-driven organization form in the coming years. This organizational structure will be distinguished, on the one hand, by an intense cross-linking of the relevant knowledge carriers for product development and, on the other, by the incorporation of consumer knowledge into product development processes.

Kasiri, Cheng, Sambasivan, and Sidin (2017) collected data from 315 clients of three service industries: healthcare, hotel, and education, utilizing a framework by extending Grnroos' quality of service model by integrating the service quality antecedents. The data was analysed using PLS-SEM and validate the model. They discovered that combining uniformity and customisation of service offerings is essential for improving service quality. As a result, it is proved that customer integration is associated with customer service performance. Mensah, et al. (2019) mentioned that customer integration occurs when a corporation exchanges resources with their clients in order to boost efficiency and meet the client's needs. Zaida, et al. (2021) considered that customer

integration is critical in generating customer worth and pleasure. Pakurár et al., (2019) indicated that sharing information based on interactions between customers and organizations improves customer integration. There are numerous methods for developing customer integration, including the use of networks in IT, analysing relationships, collaboratively planning, forecasting expectations, and satisfaction evaluation. Raja, et al. (2013) pointed out that the differences between producing products and services are less essential in a customer solutions environment than how they might be connected to lead to an integrated offering that satisfies customer needs. Existing methods for integrating customer voice into value-added processes differ depending on the addressed product lifecycle phase and hence the point of customer interaction.

B. Customer Integration, Internal Integration and Customer Service

There is a connection between customer integration, internal integration, and customer service. Yang, Sun, Sohal, Li, and Zhao (2009) discovered that in their investigation on the relationship of internal and external integration and its effect on performance, both customer integration and internal integration have positive effects on customer operational performance. Mensah, et al. (2019) mentioned that internal integration occurs when a company integrates all of its departments in order to exchange resources, data, skills, and experience in order to boost business performance. Zaida, et al. (2021) pointed out that internal integration is critical in ensuring a match between productions and marketing success. Pakurár, et al. (2019) mentioned that customers' uncertainty can be reduced by fully understanding the organization's aims, intents, and strategy. Du, Zhang, and Feng (2019) used data from 176 Chinese manufacturing enterprises to investigate green customer and supplier integration's direct and interaction effects on green innovation effectiveness, as well as the moderating influence of internal integration. According to the findings of their study, the association of green customer integration and green innovation performance is moderated by internal integration. This implies good customer service with the green innovation measures to be put in place after customers are integrated in making decisions. Based on the findings of a recent study by Ibama, Lolia, and Ogonu (2021) on Rivers State multinational corporations' customer integration and business effectiveness, using customer service and competitive advantage as measures of organizational success, in Rivers State, there is a considerable association between customer integration and multinational corporation business effectiveness. This validates the relationship between customer integration and customer service. According to this report, the ultimate success of enterprises will be determined by management's capacity to incorporate the firm's extensive business network contacts, permitting for better decision taking and, as a result, lowering costs and customer response time. Therefore, internal integration has a major role to play.

C. Supplier Integration, Internal Integration and Customer Service

Supplier integration, internal integration, and customer service are all linked. Yang, et al. (2009) mentioned that suppliers with an increased degree of supplier integration allows for more up-to-date and exact information on order needs and variations., allowing for tight coordination of inbound activities. Zaida, et al. (2021) indicated that the integration of suppliers is an important component of the company's input supply process. Pakurár, et al. (2019) pointed out that sharing information with suppliers builds trust while eliminating dysfunctional buyer-supplier conflicts and enabling good communication. Amoako, et al. (2019) proposed that in their study on supplier integration, operational capability, and performance of the firm, increases in organizational effectiveness from the standpoint of supplier integration are contingent on improvements in operational capabilities. They investigated this dependency using survey data from Ghanaian businesses. Internal integration leads to operational capability. Their findings underscored the significance for managers in emerging countries and worldwide to invest in supplier integration to enhance their organizations' operational effectiveness and competitiveness. The ability of a firm to modify its initiatives, as well as improve interactive and collaborative interaction with its main suppliers is a critical facilitator of its competitive performance. As a result, lead to good customer service. Zhang, Nguyen, and Lettice (2018) discovered according to data collected from 261 Vietnamese manufacturing enterprises, supplier integration is favorably associated with company performance, implying customer service, in their study on internal integration and trust as moderators of supplier integration and firm performance. Furthermore, internal integration improves the effect of supplier process integration on company performance. They discovered that internal and supplier integration can be used to achieve complementarities, and that organizations cannot enjoy the all of the advantages of their supplier integration efforts unless they also integrate internally.

D. Supplier Integration and Customer Service

Several research across the writings investigated the connection between supplier integration and customer service. Mensah, et al. (2019) indicated that supplier integration happens when a company integrates, adjusts, and combines its providers' procedures and systems in order to improve exchange of information in order to build a strategic partnership in which knowledge and resources are shared to the mutual benefit of both company and suppliers. Pakurár et al., (2019) explained that whatever phrase is used to describe supplier integration, its basic goal is to extend beyond the limitations of a single organization in order to seamlessly coordinate processes. Supplier integration can be enhanced by involving suppliers in activities other than transactions, such as improving collaboration, planning, and information sharing, ordering, scheduling, information technology linkages, and procedures.

In their study on supplier involvement in new product development, Petersena, Handfieldb, and Ragatzc (2005) emphasized the importance of, in this type of attempt, the supplier evaluation decision, taking into account not only the supplier's capabilities, however also the supplier's culture, that will impact the purchasing firm's capacity to effectively communicate with the provider. They also highlighted two key input types that purchasing company may look for suppliers. Involving the supplier while determining acceptable technical measurements and project goals, as well as agreement on these targets together with the supplier, has been found being critical component in the effectiveness of project teams. Kwamboka (2019) carried out a study with primary objective of examining the influence of supplier partnerships on customer service. The study looked at a scope of Sarova Hotels' supplier collaborations as well as the impact of supplier collaboration on customer service. Kwamboka (2019) conducted a descriptive research study in Sarova Hotels with 28 participants drawn from a population of 50. Kwamboka's (2019) research found that supplier partnerships have favourable as well as having a big impact on client satisfaction at Sarova Hotels. Supplier partnership is a method of integrating suppliers. According to the same study, participants agreed that supplier collaboration had raised customer trust, enhanced delivery of services, and raised the number of customers receiving.

E. Customer Integration, Supplier Integration, Internal Integration and Customer Service

Integration of supply chain has impact on customer service. Supplier chain integration consist of integration with customer, supplier and internally (Zaida, et al., 2021). Mensah, Ahenkorah, and Osei (2019) found out that that organizations that use Information technology in logistics have a high likelihood of improving their success as measured by customer service and internal and external integration of customers and suppliers. Many academics suggest that in order to gain and maintain a market position that is competitive, a company must establish business relationships strategies with its partners in the supply chain. Mensah, et al. (2019) mentioned that supply chain integration is the process through which enterprises share resources and data with their partners in supply chains in order to gain a competitive edge and boost efficiency. Yang, et al., (2009) indicated that close connection between manufacturers and customers allows partners to create mutual tolerance and increase information accuracy. Pakurár, et al. (2019) pointed out that teamwork, collaborative planning, functional cooperation, and information sharing improve organizational internal integration and effectiveness to guarantee customer preconceptions are exceeded, and deliveries are on schedule.

According to Yang, Sun, Sohal, Li, and Zhao (2009)'s empirical study, the more the internal integration, the greater the association in downstream integration with logistical effectiveness. When a manufacturing has strong internal integration, characterized by the unification of all functions and operations, the influence of external integration on operating efficiency is boosted since the manufacturer can benefit from both integration at internal and external level. Zhao, et al. (2011) mentioned that the impact of internal

integration has on external integration can be deduced based on three primary characteristics of SCI: exchange of information, strategic cooperation, or partnership, and collaboration. Mensah, et al. (2019) mentioned that adoption of supply chain techniques for example, supply chain integration and the deployment of IT assist organizations in efficiently managing their supply chain so to capitalize on supply chain competitive edge in addition to in-house core capabilities. Droge et al. (2004) discovered that internal integration mitigated external integration's effect on performance, as stated by Yang, Sun, Sohal, Li, and Zhao (2009). Because organizations, before participating in significant external integration, should first develop internal integration capabilities through system, data, and process integration, internal integration enables external integration. Zhao, et al. (2011) indicated that according to organizational capability, if a corporation has strong internal coordination and communication capabilities, it will be better equipped to achieve strong exterior integration. Zaida, et al. (2021) mentioned that increased supply chain integration will have an effect on improving operational performance, which will have an impact on increasing customer service and loyalty to the products produced. The integration of the supply chain, which includes integration with suppliers, customers, and internal team, had a substantial direct impact on operational success and customer happiness. Yu, et al., 2013 discovered that given that customer service is linked to integration with clients and suppliers, and given the relationship between customer service and loyalty, there are more dealings with the same clients when the company is integrated with its trade partners. Pakurár, et al. (2019) emphasized that internal integration must include the integration process for consumers and suppliers since it serves as the foundation for the development of both dimensions.

III. METHODOLOGY

This study employed both descriptive and cross-sectional designs. Descriptive research aims to create detailed profiles of individuals, events, or situations without manipulation to understand variable relationships (Robson, 2002 cited in Saunders et al., 2007). A cross-sectional survey was chosen for its efficiency in quickly gathering substantial information (Cherry, 2019). A quantitative approach was used to establish relationships between variables, utilizing closed-ended questions to collect numerical data (Dudovskiy & John, 2019). The study targeted employees of Hariss International Limited Uganda, with a sample size of 36 determined using the Krejcie and Morgan table (1970) to ensure practicality (ABS, 2022).

Primary data was collected from organization workers through interviews and surveys, while secondary data came from records and published sources (Mukasa, 2018; Allen, 2017). The interview guide and questionnaire were used as research tools (Bird, 2021; Lucid, 2022). Content validity of the instruments was confirmed through expert validation (Dudovskiy & John, 2019), resulting in a Content Validity Index (CVI) that indicated high validity (Mukasa, 2018). This is indicated in table 1

Table 1: Content Validity Index (CVI) of the Study Variables

Variable	Anchor	CVI (Content Validity Index)
Customer Integration	5-point	0.787
Supplier Integration	5-point	0.789
Internal Integration	5-point	0.846
Customer Service	5-point	0.862

As shown in table 2, the reliability of the instruments was assessed using Cronbach's alpha coefficient, with values above .7 indicating reliability (Stephanie, 2019; UCLA, 2021).

Table 2 Study Variables Reliability

Variable	Anchor	Cronbach Alpha Coefficient
Customer Integration	5-point	0.711
Supplier Integration	5-point	0.877
Internal Integration	5-point	0.836
Customer Service	5-point	0.871

Data analysis was carried out using SPSS statistics version 23. Correlation analysis was used to assess relationship strength between variables. We conducted multiple regression analysis below:
 $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mu$

Where: Y = independent variable, β_0 = intercept of Y, β = parameter of the dependent variables, and μ = error term. To estimate the multiple regression models, it was converted as follows: $CS = \beta_0 + \beta_1 CI + \beta_2 SI + \beta_3 II + \mu$

Where: CS = Customer Service, β_0 = Constant or Intercept, β_1 = Coefficient of Customer Integration, β_2 = Coefficient of Supplier Integration, β_3 = Coefficient of Internal Integration, μ = Error term, CI = Customer Integration, SI = Supplier Integration and II = Internal Integration.

The sign of the slope coefficients (β_1 , β_2 and β_3) was used to establish the effect of Customer Integration, Supplier Integration, Internal Integration on Customer Service at Hariss International Limited Uganda. Positive and significant slope coefficients would indicate that Customer Integration, Supplier Integration, Internal Integration have a positive effect on Customer Service at Hariss International Limited Uganda. Negative and significant slope coefficients, on the other hand, would indicate that Customer Integration, Supplier Integration, Internal Integration have a negative effect on Customer Service at Hariss International Limited Uganda. The a priori expectation of the slope coefficients are as follows: $\beta_1, \beta_2, \beta_3 > 0$. All the tests were tested at the five

percent (5%) significance level. Factor analysis aided in understanding complex relationships within the dataset (Alchemer, 2018), and ANOVA tests evaluated differences between participant groups (Simkus, 2022).

IV. RESULTS

A. Respondents' Demographic Characteristics

The demographic characteristics of the respondents were analysed and presented in Tables 4.2 to 4.6. In terms of gender/sex distribution, the study comprised 66.7% male and 33.3% female respondents. Regarding marital status, the largest portion, 64.3%, were married, followed by 28.6% single, 4.7% widow, and 2.4% widower, with no respondents reporting separation or divorce. Age distribution revealed that 52.4% of participants were aged 28 to 37, 23.8% were aged 18 to 27, 16.7% were aged 38 to 47, and 7.1% were aged 48 to 57, with none in the 58+ category. In terms of departments within the company, 26.2% were from production, 21.4% from procurement, 19% from transport, 16.7% from marketing, and another 16.7% from administration. Respondents' working experience revealed that 42.9% had worked for 6-10 years, 33.3% for 1-5 years, and 23.8% for over 11 years at Hariss International Ltd.

B. Relationship between Study Variables

Pearson's zero order of correlation is seen in Table 3.

Table 3: Pearson's zero order correlation matrix

Variables	1	2	3	4
Customer Integration (1)	1			
Supplier Integration (2)	.383**	1		
Internal Integration (3)	.431**	.362**	1	
Customer Service (4)	.579**	.435**	.468**	1

***. At the 0.01 level, correlation is positive (2-tailed).*

**. At the 0.05 level, correlation is significant (2-tailed).*

The findings in Table 3 reveal a favourable and meaningful relationship between Customer Integration and Customer Service ($r = .579$, P-value < 0.01). It reveals a favourable and important relationship between customer integration and internal Integration with ($r = .431$, P-value < 0.01) and internal integration and customer service have a positive and important relationship ($r = .468$, P-value < 0.01). The findings in Table 3 also reveal a favourable and significant relationship between supplier integration and internal integration with ($r = .362$, P-value < 0.01) and internal integration and customer service have a positive and meaningful relationship ($r = .468$, P-value < 0.01). The table also shows a favourable and important relationship between supplier integration and customer service ($r = .435$, P-value < 0.01).

C. Regression Analysis

Table 4 displays the Regression Analysis Results

Table 4: Regression Analysis

Model	Un-standardized coefficients		Standardized coefficients		
	B	Std. Error	Beta	t	Sig
(Constant)	8.564	2.221		6.000	.000
Customer Integration	.657	.152	.461	7.753	.000
Supplier Integration	.258	.053	.248	2.641	.000
Internal Integration	.175	.086	.147	1.446	.000
R= .873, R- Square = .762, Adjusted R- square = .760, F= 32.112, Sig = .000					

Table 4 results reveal a linear association (r=.873) between customer integration, supplier integration, internal integration, and customer service. Customer, supplier, and internal integration accounted for 76% of the detected variance in customer service (Adjusted R Square .760). Customer integration (Beta=.461 Sig. 000) was a greater predictor of customer service than supplier integration (Beta=.248, Sig. 000) and internal integration (Beta=.147, Sig. 000). The regression model was significant, as evidenced by the Significant (sig. <.01) level.

The predictive model resulting from the research finding is: $CS = .461CI + .248SI + .147II$

As a result of the data, it is possible to conclude that customer service can be increased by combining Customer, Supplier, and Internal Integrations.

D. The Factor Analysis

➤ Customer Integration Factor Analysis Results

The Factor Analysis of Customer Integration is demonstrated in Table 5.

Table 5: Factor Analysis of Customer Integration

Variables	Co-specifying	Co-designing	Co-producing
In our company, the customers define the details of the service they need before we deliver to them	.945		
At Hariss International Ltd the customers' actions trigger the service or product we deliver	.897		
In our company, customers push and steer innovation via product specification	.878		
We always take into consideration customer requirements for production	.867		
At Hariss International Ltd, customers assist in the development of new services or products.		.912	
we usually get early insight from customers' opinions and preferences		.825	
At Hariss International Ltd we consult customers regularly concerning our products		.817	
In our company, the customer is involved in the product and service design and decision-making processes.		.795	
At Hariss International Ltd, customers provide inputs in the sort of factor of production, such as work, expertise, knowledge, capital, etc.			.869
The interactions with the customers generate more value in ways of production in our company			.813
At Hariss International Ltd, customers instruction are part considered during production			.791
Our company customers are involved and aware of the production process			.787
Eigen Value	3.22	2.81	2.66
Variance percent	26.84	23.43	22.18
Cumulative	26.84	50.27	72.45

The factor analysis findings for customer integration are shown in Table 5. Three factors were identified, with the first (co-specifying) explaining 26.84 percent of it, the second (co-designing) explaining more customer integration with 50.27 percent, and all the attributes explained the variable of customer integration with a percentage of 72.45 percent.

➤ *Supplier Integration Factor Analysis Results*

Supplier Integration Factor Analysis is presented in Table 6 below

Table 6: Supplier Integration Factor Analysis

Variables	Information Integration	Process Integration	Strategic Integration
At Hariss International Ltd, through a coordinated communication process and system, we work collaboratively with suppliers to share information.	.898		
with our suppliers, we have timely information transmission and handling for supply chain decisions	.875		
we are using technological tools that facilitate our communication with the suppliers	.862		
our relationship with suppliers is based on trust and openness	.823		
At Hariss International Ltd, we do structure and synchronize inter-organizational processes		.877	
We do involve keys suppliers in internal operations		.854	
our suppliers work alongside us in designing the product we produce		.848	
our suppliers help in decision making concerning the production process		.832	
At Hariss International Ltd, we structure our strategic goals, objectives, and plans jointly with suppliers			.799
Our key suppliers have long-term contracts with us.			.784
we do consult our key suppliers before taking a strategic decision concerning our operations			.769
Our strategic direction is supported by an interdependent relationship with our key suppliers			.757
Eigen Value	2.99	2.91	2.42
Variance percent	24.96	24.25	20.16
Cumulative	24.96	49.21	69.37

The factor analysis findings of supplier integration are shown in Table 6. Three factors were extracted, with the first component (Information Integration) explaining supplier integration better with a 24.96 percent explanation rate, the second component (Process Integration) explaining supplier integration more fully with a 49.21 percent explanation rate, and all the attributes explaining supplier integration with a 69.37 percent explanation rate.

➤ *Internal Integration Factor Analysis Results*

Table 7 below presents the Factor Analysis of Internal Integration

Table 7: Factor Analysis of Internal Integration

Variables	Interaction	Collaboration	Cross-functional team
The culture at Hariss International Ltd supports interaction among employees	.933		
The management of Hariss International promote interaction among employees	.889		
Both informal and informal interaction are part of employees’ relationship in the organization.	.867		
Interaction is an element that lead to organizational well-being at Hariss International Ltd.	.814		
At Hariss International Ltd, collaboration is done for common purpose of making work done well		.864	
The employees attitude at Hariss International Ltd is that of collaboration and sharing of ideas		.838	
Collaboration is the foundation of all work processes at Hariss International Ltd		.821	
In our organization employees work in tandem in order to achieve their individuals’ responsibilities		.815	
At Hariss International Ltd we often people from different departments to work together for accomplishing the purpose of the team			.880
Top managers in the organization emphasize the importance the integration to functional			.781
Cross functional team is a way of optimizing companywide coordination, systems, and processes at Hariss International Ltd.			.763
We experience stronger employee engagement at Hariss International Ltd trough cross functional team			.749
Eigen Value	3.08	2.79	2.53
Variance percent	25.63	23.23	21.06
Cumulative	25.63	48.86	69.92

The outcomes of Internal Integration factor analysis are given in Table 7, three factors were identified, with the first (Interaction) explaining 25.63 percent of it, the second (collaboration) explaining more customer integration with 48.86 percent, and all the attributes explained the variable of internal integration with a percentage of 69.92 percent.

➤ *Customer Service Factor Analysis Results*

Table 8 below presents the Customer Service Factor Analysis results

Table 8: Customer Service Factor Analysis

Variables	Reliability	Convenience	Responsiveness	Relevance
Hariss International Ltd deliver always on promises made to consumers	.957			
our customer put high trust on the delivery of our products and services	.936			
Our customers get the delivery of our products on time and in right quantity and quality	.896			
Employees at Hariss International Ltd are faithful on their words and promises to customers	.859			
Our customers find it time saving and effort reductions when they receive our services and products		.875		
At Hariss International Ltd we are consistent in providing our services and products in a		.860		

timely manner				
Our customers are not stressed in getting our services and products		.838		
the processes a customer went through in order to get our services and products are simple, clear and short		.819		
At Hariss International Ltd we listen to consumers requests and respond to them swiftly			.799	
Employees at Hariss International Ltd are trained on the best ways to attain customers' demands and questions			.788	
we are flexible to support clients and provide timely service			.776	
our customer are mostly satisfied with the responsiveness to their requests			.768	
At Hariss international our services are personalized and meaningful to customers				.759
Our customers respect and remember our brand because we understand very well what they want and we are innovative to meet the needs and wants				.743
At Hariss International Ltd we are consistent in meeting customers' needs				.738
Our performance usually surpass the customer expectation				.711
Eigen Value	3.33	2.88	2.45	2.27
Variance percent	20.83	17.99	15.32	14.16
Cumulative	20.83	38.82	54.14	68.3

The findings of the factor analysis of Customer Service are displayed in Table 8, four components were identified, with the first (reliability) explaining 20.83 percent of the variance, with 38.82 percent, the second component (convenience) likewise explained more customer service, and the third component (Responsiveness) also explained more customer service with 54.14 percent, whereby they all the attributes explaining the variable of customer service.

V. DISCUSSION AND CONCLUSION

The relationships between various dimensions of supply chain integration (customer integration, internal integration, and supplier integration) and customer service were explored and analyzed based on the findings presented. The study revealed significant associations between these dimensions, indicating their impact on customer service at Hariss International Ltd. Specifically, the positive and substantial correlation between customer integration and customer service ($r = .579$, P -value 0.01) highlighted those improvements in customer integration positively influenced customer service. This observation aligns with previous research by Cichosz et al. (2017), which emphasized the positive effect of involving customers in the innovation process on customer satisfaction. The study's results also underscored the strong relationship between internal integration and customer service ($r = .468$, P -value 0.01), as well as the association between internal integration and supplier integration ($r = .431$, P -value 0.01). These findings reinforce the idea that internal integration and customer integration collaborate to enhance customer service. Similarly, the relationship between internal integration and supplier integration was shown to be positive and significant ($r = .362$, P -value 0.01), indicating that improved supplier integration led to better internal integration, ultimately benefiting customer service. These conclusions resonate with prior research findings. Studies by Abramovici and Schulte (2007) highlighted the long-term and continuous nature of customer integration in product development, which facilitates enhanced decision-making and reduced costs. Furthermore, Yang et al. (2009) and Ibama et al. (2021) found that both customer and internal integration positively

impact operational performance and organizational success. Moreover, the research indicated a positive and statistically significant relationship between supplier integration and customer service ($r = .435$, P -value < 0.01), confirming that improvements in supplier integration are associated with enhanced customer service. This finding is consistent with Kwamboka's (2019) study on supplier partnerships in the hospitality industry, which reported improved service delivery and customer trust.

Mensah, Ahenkorah, and Osei (2019) discovered that organizations who implement logistics information technology stand a good opportunity of impacting their performance via customer service and both internal and external cooperation to customers and suppliers. Mensah, et al., (2019) confirmed that many academics argue that in order to gain and maintain a market's competitive strength, a company must establish strategic business relationships with its supply chain partners. Close interaction between manufacturers and customers permits partners to increase information accuracy and mutual tolerance, agreed Yang, et al. (2009). Joint preparation, functional coordination, information sharing, and teamwork boost organisation productivity and internal integration, ensuring that customer expectations are satisfied and deliveries are completed on time; Emphasised Pakurár, et al. (2019). According to Yang, Sun, Sohal, Li, and Zhao (2009)'s empirical study, the stronger the relationship between downstream integration and logistical performance, the higher the internal integration. When a manufacturer has a high level of internal integration, where all activities and procedures are unified, the influence of external integration on operational performance is enhanced since the factory can gain from both internal and external integration; confirmed Yang, et al. (2009). Internal integration has an impact on outward integration because of three important characteristics of SCI: information exchange, strategic cooperation, and collaboration. (Zhao, et al., 2011). Droge et al. (2004) cited by Yang, Sun, Sohal, Li, and Zhao (2009) discovered that the effect of external integration on performance was moderated by internal integration. Internal integration supports external integration because organizations must first create internal integration

capabilities using system, data, and process integration before engaging in significant external integration, confirmed Zhao, et al. (2011). According to organizational capability, if a corporation has strong internal coordination and communication powers, it will be better equipped to achieve strong exterior integration, added on Zhao, et al. (2011). Increased integration of supply chains will improve operational effectiveness, which in turn will increase customer happiness and commitment to the items produced; declared Zaida, et al. (2021). Pakurár et al. (2019) confirmed that internal integration cannot ignore the integration process for customers and suppliers because it serves as the foundation for the development of both dimensions.

The study focused on customer integration, supplier integration, internal integration, and customer service at Hariss International Ltd. The study specifically looked at the correlations between the studied variables. The study concludes that integration on the three levels that are customer integration, supplier integration, and internal integration; will determine customer service level. An organization that uses integration strategy will have a competitive edge over its competitors and therefore have a huge market share. Such organization will easily adapt to the changes that may occur in its environment and proactively handle these changes. Staffs in organizations are encouraged to foster integration within and with external parts that are customers and suppliers, this will up the capacity of the organization to perform on high level and meet the customers' needs and wants. And lastly, organizations that prioritize supply chain integration are flexible and have the ability to implement changes in strategies and operations ways in a way that fit the requirement of current environment and be in good terms with both customers, suppliers while meeting the organization goals and objectives. Therefore, there is urgent need to set and implement effective customer integration, supplier integration, internal integration strategies which will ultimately improve the overall customer service in organisations.

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