# The Power of Internal Systems Integration: A Pathway to Organizational Performance for Clearing and Forwarding Firms in Kenya

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**Abstract**

*Futurists envision a transformative shift in organizational performance, where supply chain agility and strategic strengths surpass individual company competitiveness. To establish dominance, firms must forge alliances across the supply chain, necessitating optimal internal systems integration strategies. The primary focus of this study is to demonstrate the transformative potential of internal systems integration (ISI) implementation by clearing and forwarding (C&F) firms on their organizational performance. The results are based on 298 respondents from Authorised Economic Operators C&F firms in Kenya using structured questionnaires, correlational research design and stratified sampling technique. Data collected was subjected to descriptive statistics, preliminary tests and hypothesis testing using structural equation to test the study hypothesis that internal systems integration has beneficial effects on organizational performance. The path direction in SEM analysis indicates that there is a significant positive influence of internal systems integration on organizational performance of C&F firms in Kenya (Path coefficient = 0.649, C.R = 3.626, P-value < 0.001). The squared multiple correlations (R-square) of the model is 0.42, implying that internal integration explains 42% variation in organizational performance. The study concluded that for C&F firm's to enhance organizational performance and forge alliances with regulators, customers, and suppliers across the supply chain, strategic leader's needs to prioritize internal integration using robust holistic systems and technologies*

**Keywords:** Internal systems integration, supply chain integration, organizational performance, Clearing and forwarding

## Introduction

Futurists have envisioned a transformative shift in organizational performance, where the agility and strategic strengths of the entire supply chain will outweigh the competitive power of individual companies. According to Wang et al. (2016), this future scenario may necessitate firms to carefully select the supply chain strategies they engage in, as competition will extend to the realm of supply chains themselves. To establish dominance in the marketplace, companies will forge alliances with regulators, customers, and suppliers across the supply chain. Consequently, management teams must master the art of shaping optimal supply chain strategies, requiring them to adeptly navigate and cultivate diverse strategic relationships spanning from suppliers to customers. The effective management of these relationships has emerged as a critical capability (Alkalha et al. 2019). In response to this paradigm shift, the concept of Supply Chain Integration (SCI) has gained importance as a

strategic tool that, when properly implemented, can yield cost reductions, enhance customer efficiency, and elevate overall organizational performance. The most studied SCI dimensions include internal integration, customer integration, supplier integration, information systems integration and logistics integration (Prajogo et al., 2017).

Internal integration is defined as the "organizational practices of combining and improving internal resources and information in order to generate knowledge sharing beyond the boundaries of individual functions or departments; to assist external integration initiatives, and to achieve organizational goals" Kim and Chai (2016, p.467). Internal integration recognizes that different departments and functional areas within a firm should operate as part of an integrated process. Because internal integration breaks down functional barriers and creates cooperation in order to meet the requirements of customers, rather than operating within the functional silos associated with traditional departmentalization and specialization, it is expected to be related to performance (Flynn et al., 2009).

In Kenya, there is inadequate literature on supply chain systems integration in logistics industry and limited understanding into how it affects various facets of organizational performance. Research conducted by Njagi and Muli (2020) reveals a low implementation of Supply Chain Integration (SCI) in the Kenyan economy, particularly in sectors such as manufacturing, health, and banking. The authors also note that the relationship between SCI and performance in the service industry remains uncertain, with significant room for improvement in SCI practices. This deficiency in systematic and strategic supply chains has substantial repercussions, as the government of Kenya incurs an annual loss of over Kes 12 billion on transit cargo (Njagi & Muli, 2020). Confirming this perspective, Mutwiri et al. (2019) highlight a lack of knowledge regarding the value of strategic supply chain integration, especially in Kenyan service sectors like public health supply chains. However, there are some success stories, such as the strategic integration of logistics activities by DHL (a global leader in logistics), which has positively impacted its distribution, transportation, and warehousing capabilities (Mwangangi & Kenyatta, 2015). Nevertheless, the limited literature on SCI in Kenya suggests either a low implementation of strategic SCI or a lack of research focus on the subject matter. The low implementation can be attributed to policy-level challenges with regulators and inefficiencies within top management teams. This viewpoint is corroborated by Yuen and Thai (2017), who argue that many firms in developing countries remain at early stages of SCI implementation, with only a few achieving seamless integration with their supply chain partners and overall organizational strategy. These findings resonate across national contexts, underscoring the complex nature of SCI experienced by logistics firms globally.

From a policy point of view, Kenya Revenue Authority (KRA) admits that the disintegration of its systems has enabled rogue agents to collude with unscrupulous traders and facilitate wrong declarations costing the government revenue losses from import taxes of Kes 100 Billion a year (TMEA, 2019) and Kes 12 Billion on transit cargo according to KRA Tax evasion report of 2021. To address disintegration problems, KRA believes that the implementation of integrated management customs system (ICMS) will be a game changer in clearance of goods as Simba system 2005/2014 runs on a number of sub-systems with multiple feeder systems that are not integrated hence causing collusion and delays in customs and port clearance (KRA). The new ICMS is a robust intelligent system that may consolidate all cargo clearing points to one leading to reduced clearance time of up to sixty percent and improvement in customer satisfaction (KRA). Kabui et al. (2019) opined that cargo clearance processes in Kenya is a complex system facing major bottlenecks in the supply chain due to delays caused by semi-automated processes and government policies leading to increase in

costs of running businesses in Kenya. This suggests that there are policy gaps on what SCI strategic dimensions to adopt, and this may be attributed to inexistence strategic leadership among the top management at C&F firms. Lack of proper policies or effective supply chain management warrants a study on how strategic leadership influences on SCI and organizational performance.

Therefore, the primary focus of this study is to demonstrate the transformative potential of internal systems integration (ISI) implementation by clearing and forwarding (C&F) firms on their organizational performance. The study seeks to utilize Structural Equation Modelling (SEM) to analyze the structural relations between internal systems integration and organizational performance of C&F firms in Kenya.

## Literature Review

### *Application of Extended Resource Based View*

The Extended Resource Based View (ERBV) can be traced back to the work of Araujo et al., (1999), Das and Teng (2000) and Mathews (2003). The ERBV of the firm builds upon the traditional resource-based view (RBV) of the firm. The theory states that internal resources can nurture external resources or capabilities and further improve competitive capability and firm performance. Recent studies criticize the internal focus of the RBV and emphasize that some resources may lie beyond the boundary of the firm (Yang et al., 2019). Competitive advantage is derived from both internal and external assets. Compared with the RBV, the core tenet of the ERBV is that strategic resources and knowledge come not only from within the organization's boundaries, but also from outside; thus a firm's strategic capabilities may be embedded in a wider network of inter-firm exchange relationships (Popli et al., 2017).

Internal systems integration plays a pivotal role in enhancing organizational performance by leveraging both internal and external resources and capabilities. Grounded in the Extended Resource-Based View (ERBV), this perspective emphasizes the importance of integrating intra and inter-organizational resources to develop organizational capabilities and gain sustainable competitive advantages (Son et al., 2014). The ERBV suggests that a firm's strategic resources, derived from both internal and external sources, contribute to building internal capabilities and exploiting external resources for sustained competitive advantage (Park et al., 2017). By integrating internal and external resources, organizations can enhance their ability to absorb and exploit external resources, thereby fostering a sustainable competitive advantage (Popli et al., 2017).

Research studies have applied the ERBV framework to support the significance of integration. Arya and Lin (2007) found empirical evidence showing that organizations can enhance their capabilities and achieve higher rewards through collaboration. Squire et al. (2009) demonstrated a strong relationship between suppliers' capabilities, supply chain collaboration, and buyer performance. Lai et al. (2012) conducted empirical tests showing that internal integration plays a strategic role in building customer and supplier integration, influencing mass customization capability. Xu et al. (2014) developed a model linking intra-organizational resources, inter-organizational capabilities, and competitive advantage based on the ERBV.

Based on the ERBV, this study argues that all types of supply chain integration (internal, customer, information, and logistics) significantly impact organizational performance. Internal integration serves as a platform for creating, assimilating, and applying knowledge to product and process design. The collaborative efforts of different departments generate strategic resources to address the complexity and diversity associated with customization

(Yang et al., 2019). Furthermore, firms can acquire valuable supply chain resources and knowledge through integration with supply chain actors/partners. By collaborating with external partners and leveraging their resources and capabilities, a firm can access strategic resources that improve elements crucial to mass customization, including flexibility, agility, cost efficiency, delivery, and product quality (Xu et al., 2014). Effective internal coordination and socialization enable firms to acquire resources from external partners, highlighting the role of internal integration and internal information integration as core strategic resources for facilitating external integration (customer integration and external information integration) and ultimately enhancing operational efficiency and organizational performance.

## Methodology

The study was cross-sectional in nature and relied on primary data collected using structured questionnaires. The target population was 1,919 employees and sample size of this study was 298 employees from the operations, customer service, and finance departments of

88 AEO registered and licensed clearing and forwarding (C&F) firms in Kenya. The selection of employees from these departments is based on their possession of key supply chain operations and organizational performance information, which is crucial for achieving the study objectives and addressing the research problem. In total, out of the 298 questionnaires administered, 232 were returned, resulting in an overall response rate of 77.85%. The study employed a correlational research design and utilized a stratified random sampling technique to select respondents from the three departments. The study conducted descriptive statistics, data evaluation and structural equation modelling. In data evaluation, the study tested for the outliers, conduct normality tests of the internal systems integration and organizational performance data, reliability of the scale, dimensionality assessment, validity, common method bias and non-response bias. Further, to test the study hypothesis that internal systems integration has beneficial effects on organizational performance, the study employed structural equation modelling.

## Results

### *Descriptive Statistics*

The study examined the respondents' perception of internal integration within their organizations and the findings are as shown in Table 1.

***Table 1. Descriptive Statistics for Internal Integration***

| | | Mean | Std |
|---|---|---|---|
| II1 | We have online-integrated systems. | 3.7 | 1 |
| II2 | We consistently use information systems to communicate internally and externally | 3.4 | 1.2 |
| II3 | We use warehouse planning system | 3.3 | 1.2 |
| II4 | We have employed and utilize ERP systems | 3.3 | 1.2 |
| IDI1 | Different departments work together to achieve common goals. | 3.3 | 1.2 |
| IDI2 | Our logistics and operations processes are integrated across different departments within our organization. | 3.6 | 1.3 |
| IDI3 | Our firm has effective organization structure | 3.7 | 1.3 |
| IDI4 | Different departments are able to share information using our internal systems. | 3.9 | 1.2 |

| | | | |
|---|---|---|---|
| IDI5 | Each and every department in this firm is highly responsive to the demands of the organization and customers | 4 | 1 |
| IDI6 | We frequently conduct meetings to enhance cohesion and cooperation between departments and teams. | 2.1 | 1 |
| | **Aggregate** | **3.43** | **1.2** |

**Source: Field Data 2023**

The findings, presented in Table 1, reveal valuable insights into the various aspects of internal integration. The interpretation of the findings reveals that there were both positive and mixed perceptions among the respondents. Several aspects received favorable mean scores, indicating agreement and positive perceptions. These included high responsiveness of departments to organizational and customer demands, the presence and utilization of ERP systems, and an effective organizational structure. However, there was disagreement regarding the frequency of meetings aimed at promoting collaboration and teamwork. Overall, the aggregate mean for items related to internal integration indicated mixed perceptions by C&F employees, with some aspects being viewed positively while others received varying opinions or mixed responses. Further, the study examined the respondents' perception of organizational performance of C&F companies in Kenya and the findings are as shown in Table 2.

As shown in Table 2 findings from the study provide insights into the organizational performance of clearing and forwarding (C&F) firms in Kenya. The results indicate mixed perceptions among the respondents regarding financial performance, with some indicators receiving neutral scores. There is also disagreement or varying viewpoints regarding customers' willingness to bear costs during delays. In terms of learning and growth, there is a moderate level of agreement on certain aspects, but reservations or lower agreement regarding the use of social media for brand building. From the internal process perspective, respondents generally express agreement with on-time delivery and other aspects of internal processes. In the stakeholder perspective, there are mixed perceptions, with neutral scores for customer satisfaction, investor and employee satisfaction, and government agencies' satisfaction, but slightly higher agreement regarding partner satisfaction with systems and efficiency levels.

***Table 2. Descriptive Statistics for Organizational Performance***

| | ***Financials*** | **Mean** | **Std** |
|---|---|---|---|
| OP1 | Our company transaction costs are low | 3.2 | 1.2 |
| OP2 | We record profits every financial period | 3.3 | 1.2 |
| OP3 | We report increased sales and profits year on year | 3.3 | 1.2 |
| OP4 | Our customers decline to refund storage and demurrage costs when process delays occur | 3 | 1.1 |
| | ***Learning and Growth*** | | |
| LG1 | We have proper function and effective IT infrastructure | 3.3 | 1.2 |
| LG2 | Our employees are highly educated and motivated to learn more | 3.4 | 1.2 |
| LG3 | Our managers exhibit high managerial skills | 3.5 | 1.2 |
| LG4 | We use social media usage for brand building. | 2.8 | 1.3 |
| | ***Internal process perspective*** | | |
| IPP1 | Our services are on-time delivery | 3.5 | 1.3 |
| IPP2 | The circumstances of service delivery are always as promised | 3.5 | 1.1 |
| IPP3 | We have sufficient vehicles/trucks for transport | 3.7 | 1.4 |

| | | | |
|---|---|---|---|
| IPP4 | We have sufficient warehouse capacity/space | 3.3 | 1.2 |
| | **Stakeholder perspective** | | |
| SP1 | Our customers are always satisfied with our services | 3.3 | 1.2 |
| SP2 | Our partner(s) are highly satisfied with our systems and efficiency levels | 3.3 | 1.2 |
| SP3 | The government agencies are satisfied with the way we conduct our business and operations | 3.4 | 1.2 |
| SP4 | Our employees are highly satisfied with our business performance. | 3.3 | 1.2 |
| SP5 | Our investors and owners of the company are satisfied with business profits | 3.4 | 1.2 |
| | **Aggregate** | **3.32** | **1.2** |

**Source: Field Data 2023**

***Data Evaluation Results***

The study employed the squared Mahalanobis Distance (D2) method to detect outliers, using a chi-square distribution with a p-value of less than 0.001 and the degrees of freedom equal to the number of independent variables. However, no outliers were identified as none of the squared Mahalanobis Distances (D2) fell within the category of 0.001. The normality of the data was assessed using the Kolmogorov-Smirnov and Shapiro-Wilk tests. For the variable "internal systems integration," the Shapiro-Wilk test yielded a statistic of 0.942 and a p-value of 0.092, indicating that the data does not significantly deviate from a normal distribution. Likewise, for the variable "organizational performance," the Shapiro-Wilk test resulted in a statistic of 0.963 and a p-value of 0.089, suggesting that the data follows a normal distribution. Overall, the normality tests indicate that the data in the study exhibits a relatively normal distribution. Further, the study utilized a scale to measure internal systems integration and organizational performance. The internal systems integration scale, consisting of 10 items, demonstrated a high level of internal consistency with a Cronbach Alpha value of 0.806. This suggests that the items within this variable consistently measure the underlying construct. Similarly, the organizational performance scale, comprising 17 items, yielded a Cronbach Alpha value of 0.713, indicating that the scale was reliable in measuring the construct. These reliability test results confirm that the items within each variable reliably assess the intended concepts, with higher Cronbach Alpha values indicating greater internal consistency.

The study examined the validity of the data using both Exploratory Factor Analysis and Confirmatory Factor Analysis. The factorability of the data was assessed using the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMOMSA) and Bartlett's Test of Sphericity (BTS). For the internal integration construct, the KMOMSA value was 0.866, and the BTS value was 0.000. Similarly, for organizational performance, the KMOMSA value was 0.692, and the BTS value was 0.000. These results indicate that the data is suitable for conducting exploratory factor analysis (EFA), as there is sufficient common variance among the items within each construct. Using PCA method of extraction and based on Eigen values greater than 1, 4 factors were generated under organizational performance and one factor was generated under internal systems integration. The loadings of the four factors reflect the theoretical sub-constructs of organizational performance namely financial (OP1 & OP2), learning and growth (LG1, LG2 &LG3), internal process perspective (IPP1, IPP2, IPP3, IPP4, SPI) and stakeholder perspective (SPI, SP2, SP3, SP4). Internal integration generated 1 factor and the items explained 60.475% total variance of the construct which is more than the cumulative variance of 60% as recommended by Williams *et al*. (2010). The total variance

refers to the amount of variability in the set of items that can be explained by the identified factors. Two items under internal integration were dropped. In addition, items under organizational performance generated 4 factors and explained 62.068% of the total variance of the construct. Five items under organizational performance were dropped in line with the recommendation by Hair et al. (2014).

Further, CFA model approved the validity of the items in measuring the purported variables. The CFA model revealed that all items for internal integration had SFL greater than 0.4. For organizational performance, items OP1, OP2, LG3, SP2, and SP3 had an SFL of less than 4, hence should be dropped in SEM model to improve construct convergent validity. Further, according to Hair et al. (2020) an AVE greater than 0.4 indicates that the construct has sufficiently converged, but a value of 0.5 indicates that the construct has significantly converged. An AVE greater than 0.4 is generally considered acceptable and indicates that the construct is reliably measured by its indicators. This implies that the model has no construct convergent concerns and shows the overall quality of the CFA model. This finding suggests that in the instance where items fail to achieve construct convergent validity, deletion of those particular items can be used to improve their validity. However, according to Strand et al. (2018) it is important to carefully consider the potential impact of removing items on the reliability and content validity of the instrument before making any changes. The discriminant validity test was also examined and the results suggested that Average Variance Extracted (AVE) values of all the two variables are greater than the respective square inter-construct correlations, giving strong evidence of discriminant validity. Moreover, using Harman's single-factor (or one-factor) to test for Common Method Variance (CMV), the study revealed that the total variance extracted was 20.462%, which suggest that a single factor cannot account for the majority of the variance in the data, thus it can be concluded common method bias is not a concern in the analysis of internal systems integration and organizational performance.

***Structural Equation Method***

The study sought to test the hypothesis $\mathbf{H_{O1}}$ that there is no statistically significant influence of internal system integration on the organizational performance of clearing and forwarding firms in Kenya. First, the study evaluates the model fitness for SEM, and then reports the correlation and SEM model results. Figure 1 presents the SEM that is assessed for fitness.

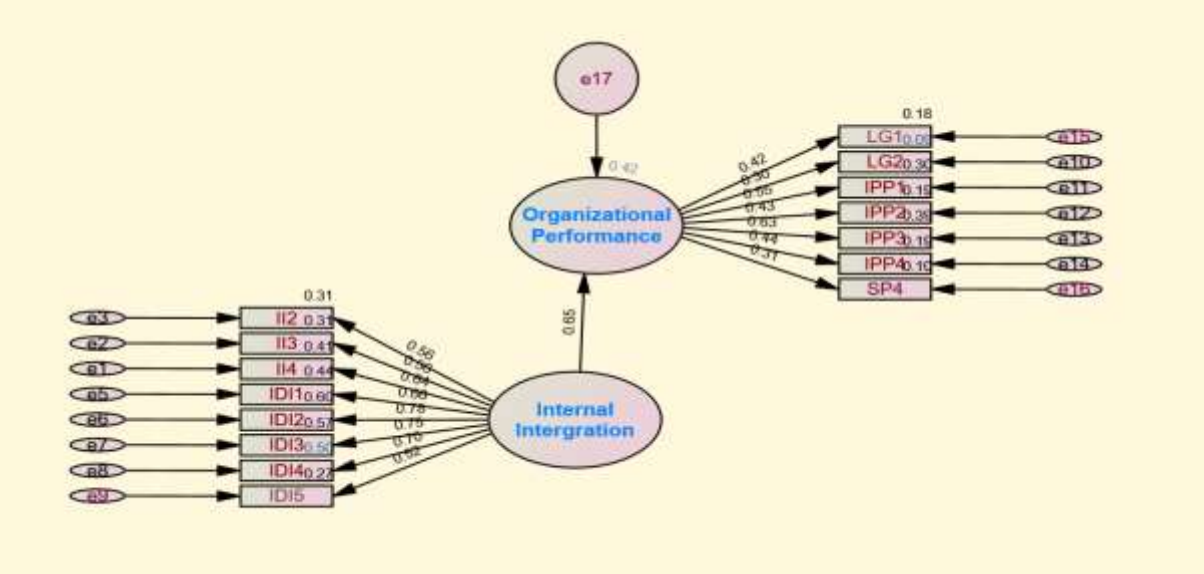

***Figure 1. Structural Equation Model between Internal Integration and Organizational Performance of C&F firms in Kenya***

The model in Figure 1 shows the influence of internal integration on organizational performance of C&F firms in Kenya. The path coefficient is 0.65 and the squared multiple correlations (R-square) of the model is 0.42, implying that internal integration explains 42% variation in organizational performance. To establish whether the model is fit, Table 3 shows the model fit indices after improving the model fit through covariation of some error terms. The fit indices establish whether, overall, the model is acceptable, and if so, whether specific paths are significant.

***Table 3. Model Fit Assessment Results***

| Goodness of Fit Indices | Value | Decision |
|---|---|---|
| $\chi^2$ (p. value) | 89(0.013) | Model not fit since the p. value should be 0.05. |
| CMIN/DF | 1.364 | The requirement is CMIN/DF **<2.** Hence the model fit is admissible |
| Root Mean Square Error of Approximation **(**RMSEA) | 0.040 | The recommended value is < 0.08. Hence the model fit is admissible |
| Comparative Fit Index (CFI) | 0.960 | The recommended value is > 0.9. Hence the model fit is admissible |
| Parsimony Comparative Fit Index (PCFI) | 0.814 | PCFI should be greater than 0.5. Hence the model fit is admissible |

**Source: Field Data 2023**

The model fit assessment results, presented in Table 3, evaluate the overall goodness of fit of the model and the significance of specific paths. Although the chi-square test suggests that the model does not fit well, other fit indices provide a more reliable perspective. The CMIN/DF ratio falls below the acceptable threshold, indicating an admissible fit. The RMSEA value is below the recommended threshold, indicating a good fit to the population covariance structure. The CFI values exceed the recommended threshold, indicating acceptable fit. The PCFI value also indicates an admissible fit, considering model parsimony. Overall, the majority of fit indices support the conclusion that the model has an acceptable fit. These results suggest that the model adequately represents the observed data and can be used for further analysis and interpretation.

***Table 4. SEM Output***

| Path Direction | Estimate | S.E. | C.R. | P. value | Standardized Estimates | Hypothesis Result |
|---|---|---|---|---|---|---|
| ISI → OP | 0.276 | 0.076 | 3.626 | ***(p<0.001) | 0.649 | Reject $\mathbf{H_{O1}}$ |
| Squared Multiple Correlations = 0.42 | | | | | | |
| Correlation Results (r) = 0.569 | | | | ***(p<0.001) | | |

*Where ISI is Internal Systems Integration and Organizational Performance, *** is significant at 0.1% significant level, ** is significant at 0.5% significant level and * is significant at 1% significant level.*

**Source: Field Data 2023**

Table 4 presents the structural equation modeling (SEM) output, which includes the path estimates, standard errors, critical ratios, p-values, and standardized estimates. The table also includes the results of the hypothesis testing and correlation analysis. The path direction in

this analysis is from Internal Integration Systems (ISI) to Organizational Performance (OP). The estimate for this path is 0.276, with a standard error of 0.076. The critical ratio (C.R.) is 3.626, indicating that the estimate is statistically significant at the 0.1% level. The p-value associated with this estimate is also significant at the 0.1% level ((p<0.001)), suggesting a strong influence of ISI on OP. The standardized estimate for this path is 0.649, indicating a significant influence of internal integration systems and organizational performance. This means that when internal systems integration goes up by1 standard deviation C&F organizational performance goes up by 0.649 standard deviations. Based on the results (Path coefficient = 0.649, C.R = 3.626, P-value < 0.01), the hypothesis ($\mathbf{H_{O1}}$) is rejected, indicating support for the hypothesis that internal integration systems have a positive impact on organizational performance.

## Discussions, Conclusions and Recommendations

### *Discussions*

The beneficial effects of internal systems integration can be attributed to a number of factors. First, internal systems integration allows different departments and functions within a C&F firm to share information and work together harmoniously towards common goals. The integration processes such as order management, inventory control, and logistics planning, firms can achieve greater operational efficiency (Du et al., 2018). This leads to streamlined operations, reduced redundancies, improved resource allocation, and ultimately enhanced organizational performance. In addition, with internal systems integration, C&F firms can establish efficient communication channels and information sharing mechanisms. This enables seamless flow of information between different departments, teams, and individuals involved in various stages of the supply chain. Furthermore, Siagian et al. (2020) noted that internal integration enhances coordination and collaboration. Internal systems integration fosters better coordination and collaboration among different functions within a C&F firm. When departments like port operations, customer service, finance, and logistics work together cohesively, they can align their activities, synchronize processes, and respond effectively to customer demands. This integration improves overall coordination, reduces delays, minimizes errors, and enhances customer satisfaction, all of which contribute to improved organizational performance. Thus, through internal systems integration, C&F firms can optimize resource allocation and utilization. This leads to cost savings, minimized waste, improved productivity, and ultimately, better organizational performance. Finally, internal systems integration enables C&F firms to be more agile and responsive to changes in the business environment. Integrated systems provide the necessary flexibility to adapt to market dynamics, customer requirements, and regulatory changes (Won Lee et al., 2017). This agility allows firms to seize opportunities, mitigate risks, and maintain a competitive edge, ultimately contributing to improved organizational performance.

Similarly, the ERBV emphasizes the importance of integrating both intra-organizational and inter-organizational resources and capabilities. By integrating internal systems within the C&F firm, such as ERP systems, information systems, warehouse planning systems, and online-integrated systems, the firm can enhance its internal coordination, collaboration, and communication across different departments and functions. Internal integration systems provide a platform for creating, assimilating, and applying knowledge within the organization. The synergistic efforts of different departments working together and sharing information through internal systems enable the firm to effectively respond to the demands of the organization and customers (Gupta, 2020). This coordination and integration of internal processes lead to improved efficiency, on-time delivery, fulfillment of service promises, and

effective organization structure. Furthermore, the ERBV highlights that building internal resources and capabilities is beneficial for exploiting external resources and capabilities. Through internal integration, C&F firms can enhance their ability to acquire and deploy supply chain resources and knowledge from external partners. By collaborating with external partners and leveraging their resources and capabilities, the firm can acquire strategic resources that improve operational elements such as flexibility, agility, cost efficiency, delivery, and product quality.

The literature also provides strong support for the beneficial effects of internal integration on organizational performance, including innovation, financial performance, and supply chain performance. For instance, Ayoub et al. (2014) found a positive relationship between internal integration and innovation, highlighting the role of increased knowledge sharing and idea exchange. Similarly, Du et al. (2018) demonstrated that internal integration, along with green customer integration and green supplier integration, positively influenced green innovation performance. These studies emphasize the importance of internal integration in driving innovation and performance outcomes. Information sharing is a key mechanism through which internal integration enhances performance. Zhang et al. (2018) found that internal integration improves process and information sharing with suppliers, resulting in improved firm performance. Khanuja and Jain (2018) also identified the significant role of internal integration in enhancing performance, particularly through increased information sharing, transparency, collaborative relationships, and competitive positioning. Moreover, internal integration has been linked to financial performance. Pakurár et al. (2019) found that internal integration had beneficial impacts on the financial performance of the Jordanian banking industry by improving coordination between departments and functions, reducing processing costs, and satisfying customer expectations. Kong et al. (2021) demonstrated a positive influence of internal integration on green customer integration and financial performance in Chinese manufacturing firms. Thai and Jie (2018) found that internal integration efforts had beneficial effects on the operational performance of logistics service providers. Munir et al. (2020) demonstrated the significant effect of internal integration on the operational performance of manufacturing firms in the United Kingdom.

**Conclusions**

Based on the findings of the study and the rejection of the null hypothesis, the study concludes that internal systems integration has a positive and significant influence on the organizational performance of C&F firms in Kenya

The study found that C&F firms in Kenya have varied organizational performance and the internal systems integration is moderate for the majority of the companies. Thus, while some of the C&F firms in Kenya performed well, others have dismal organizational performance. It was evident that while many firms had deployed use of ERP as an internal integration tool a majority did not have an end to end ERP system covering all departments. Managers in C&F firms should therefore prioritize integration of different departments and functions within the organization, such as order management, inventory control, and logistics planning, to work together harmoniously towards common goals. Through streamlining operations, seamless information flow, reducing redundancies, and improving resource allocation, C&F firms can achieve greater operational efficiency. Furthermore, C&F firms currently using disintegrated systems should consider investing in technologies that support internal systems integration, such as holistic Enterprise Resource Planning (ERP) systems. These systems provide a platform for creating, assimilating, and applying knowledge within the organization. By leveraging ERP systems and other integrated technologies, firms can optimize resource

allocation and utilization, enhance internal coordination, and foster collaboration with external partners.

**Recommendations**

The study recommends that to unleash the power of internal system integration, C&F firms should also focus on building a culture of collaboration, knowledge sharing, and innovation. This involves fostering an environment where employees across departments are encouraged to work together, exchange ideas, and share best practices. A culture of continuous improvement and learning will harness the full potential of internal systems integration to drive innovation, increase customer retention, enhance performance, and gain a competitive edge in the Kenyan logistics landscape. The second recommendation is that there is to study the effects of government policies and strategies on C&F industry in Kenya. The continuous change in policies with respect to infrastructure, customs processes, information system changes, credit facilitations and management of ports pose a risk in C&F operations. The third recommendation is there is need to extend this study to smaller firms in C&F industry whose integration levels may still be lower compared to AEO certified firms. Current study focused on large C&F firms who are AEO certified.

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