



Strategic Value Chain Management and Performance of Tea Firms in the West Rift of Kenya

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ABSTRACT

The tea industry is an important component of Kenya's agricultural and export economy, yet tea firms continue to face pressure from production costs, changing markets, operational inefficiencies, competition and the need to sustain value across the supply chain. This journal article examines the effect of strategic value chain management on the performance of tea firms in the West Rift of Kenya, focusing on strategic logistics management, strategic innovation adoption, strategic stakeholder engagement and strategic operations management. The study was anchored on Porter's Value Chain Theory, the Resource-Based View, Stakeholder Theory and Innovation Diffusion Theory. A quantitative descriptive survey design was adopted. The target population comprised 63 tea firms in Kericho, Bomet and Nandi counties, from which 114 respondents were sampled; 108 usable questionnaires were returned, giving a 94.74% response rate. Descriptive statistics and multiple linear regression were used to analyse the data. The regression model produced $R = .825$, $R^2 = .681$ and adjusted $R^2 = .667$, indicating that the four predictors jointly explained 68.1% of the variation in firm performance. Strategic logistics management had a positive and statistically significant effect on performance ($B = .192$, $\beta = .211$, $p = .005$), while strategic stakeholder engagement had the strongest positive and statistically significant effect ($B = .771$, $\beta = .904$, $p < .001$). Strategic innovation adoption ($B = -.139$, $\beta = -.159$, $p = .189$) and strategic operations management ($B = -.045$, $\beta = -.054$, $p = .573$) were negative and statistically insignificant. The findings demonstrate that value chain performance in the West Rift tea sector depends strongly on logistics coordination and meaningful stakeholder relationships. The article recommends stronger stakeholder coordination, improved logistics systems and more deliberate integration of innovation and operations initiatives.

Keywords: value chain management; tea firms; logistics management; innovation adoption; stakeholder engagement; operations management; firm performance; Kenya.

1. Introduction

Value chain management provides a practical way of understanding how organizations transform resources into products and services that create value for customers and other stakeholders. Porter's value chain framework separates organizational activities into primary and support activities and enables managers to examine where costs arise, where value is created and where competitive advantage can be strengthened (Porter, 1985, 2001). Global value chain research similarly emphasizes that competitiveness is shaped not only by what happens within an individual firm but also by relationships, coordination and governance across interconnected actors (Fernandez-Stark & Gereffi, 2019; Kano et al., 2020). In an agricultural commodity such as tea, this perspective is particularly important because production, collection, processing, transport, marketing and distribution are closely connected.

Kenya occupies an important position in the global tea economy. The source study notes that tea contributes approximately 2% of Kenya's gross domestic product and about 40% of agricultural GDP, underscoring the sector's significance to employment, rural livelihoods, exports and economic activity (KIPPRA, 2025). The global tea market is also substantial. FAO (2023) reports that global tea production exceeded 6.5 million metric tonnes in 2022 and that tea remains an important internationally traded agricultural commodity. Kenya is recognized as a leading producer and exporter of black CTC tea, with the West Rift region—particularly Kericho, Bomet and Nandi forming a major production and processing cluster.

Despite the strategic importance of tea, the source project identifies a performance concern. Customer satisfaction was reported to have fallen from 6.5% to 5.6% in 2023, while operating margins declined from 6.2% to 4.6% (Tea Board of Kenya, 2024). The project associates these challenges with inadequate strategic initiatives across logistics, technology adoption, stakeholder engagement and operations. The central concern is therefore not simply tea production, but how effectively firms manage the interconnected activities through which tea moves from agricultural inputs to processed and marketed products.

Previous Kenyan studies have established relationships between value chain capabilities and performance in floriculture, fruit exporting and pharmaceutical supply chains (Munyi & Deya, 2019; Onyiego & Osoro, 2022; Mwangangi & Osoro, 2024). However, the source study identifies limited

empirical attention to tea firms in the West Rift. This article addresses that contextual gap by examining four dimensions of strategic value chain management and their relationship with firm performance.

2. Background and Problem Context

Strategic Value Chain Management

Strategic value chain management goes beyond the routine movement of goods. It involves deliberate decisions about how a firm configures activities, resources, relationships and capabilities so that value is created efficiently and delivered consistently. In Porter's (1985) formulation, primary activities include inbound logistics, operations, outbound logistics, marketing and sales, while support activities include procurement, technology development, human resource management and firm infrastructure. The relevance of this framework to tea firms lies in the need to coordinate activities that are geographically dispersed and operationally interdependent.

A well-managed value chain can reduce unnecessary costs, improve delivery time, support quality and strengthen the organization's understanding of customer requirements. Onyiego and Osoro (2022) argue that value chain management can improve employee competence and technical capability, while weak value chain structures may contribute to poor decisions, weak technology adoption, customer dissatisfaction and loss of market share. These observations are particularly relevant in agricultural sectors where raw material quality, timing, transport reliability and processing capacity interact.

Tea Industry Context in the West Rift

The West Rift tea economy consists of large-scale plantations, smallholder production systems, processing firms and supporting institutions. The region considered in the study covers Kericho, Bomet and Nandi counties. The source project reports a target population of 63 tea firms distributed as 14 in Kericho, 28 in Bomet and 21 in Nandi. The firms operate within a competitive environment characterized by production costs, ageing tea bushes, labour productivity concerns and climate-related pressures.

The competitiveness of tea therefore depends on more than field productivity. Efficient transport determines the speed with which green leaf and finished products move through the system. Inventory practices influence the availability and cost of materials. Processing technologies affect quality and efficiency. Stakeholder relationships shape coordination among farmers, managers, employees, government agencies, service providers and consumers. Production planning influences the ability of factories to use capacity and respond to changes in supply and demand. These interdependencies justify a multidimensional analysis of strategic value chain management.

Problem Statement

The research problem arises from the tension between the strategic importance of Kenya's tea industry and reported pressures on performance. The source project notes declining customer satisfaction and operating margins and associates these outcomes with inadequate value chain practices. At the same time, much of the available Kenyan evidence has focused on other sectors. Consequently, there is a need for context-specific evidence showing which value chain dimensions have measurable relationships with tea-firm performance in the West Rift.

3. Study Objective

The overall objective was to examine the effect of strategic value chain management on the performance of tea firms in the West Rift of Kenya. Four specific objectives guided the analysis: to assess the effect of strategic logistics management; to examine the effect of strategic innovation adoption; to determine the effect of strategic stakeholder engagement; and to analyse the effect of strategic operations management on performance.

Research Questions

How does strategic logistics management affect the performance of tea firms in the West Rift of Kenya?

How does strategic innovation adoption affect the performance of tea firms in the West Rift of Kenya?

How does strategic stakeholder engagement affect the performance of tea firms in the West Rift of Kenya?

How does strategic operations management affect the performance of tea firms in the West Rift of Kenya?

Significance

The study has managerial significance because tea firms can use the findings to identify value chain activities that require greater attention. The results are especially useful for managers responsible for transport, inventory, processing, procurement, stakeholder relations and production planning. The strong role of stakeholder engagement identified in the empirical model provides a basis for strengthening communication, feedback mechanisms and recognition of stakeholder interests.

The findings are also relevant to policymakers and sector institutions. The Tea Board of Kenya and other public institutions can use evidence on value chain relationships when considering policies and programmes designed to strengthen competitiveness. For farmers and communities, better coordination can potentially improve the reliability and effectiveness of interactions across the tea chain. For researchers, the study contributes context-specific evidence to a literature base that has previously concentrated on other Kenyan value chains.

Contribution of the Journal Article

The article contributes by integrating four theoretical perspectives with quantitative evidence from tea firms in a defined regional context. It also highlights an important distinction between descriptive evidence and inferential evidence. Although respondents generally reported positive perceptions of logistics, innovation, stakeholder engagement and operations, the regression results show that not all practices had statistically significant direct effects on performance. This distinction is important because the presence of a practice does not necessarily mean that the practice automatically produces measurable performance gains.

4. Theoretical Review

Porter's Value Chain Theory

Porter's Value Chain Theory provides the central conceptual foundation for the study. Porter (1985) argues that a firm can be understood as a collection of strategically relevant activities through which value is created. The framework encourages managers to examine inbound logistics, operations, outbound logistics, marketing and sales alongside support activities such as procurement, technology development, human resources and infrastructure. The logic is that competitive advantage arises when activities are configured in ways that create superior value or lower cost.

For tea firms, the theory suggests that performance is affected by the efficiency and coordination of activities from raw material sourcing through processing and distribution. Logistics management corresponds closely with the movement and storage of inputs and products, while operations management addresses transformation and production processes. Technology development relates to innovation, and stakeholder relationships influence how internal activities connect with external actors. The theory therefore provides a coherent basis for examining the four independent variables together rather than in isolation.

Resource-Based View

The Resource-Based View (RBV) argues that firms differ because they possess different combinations of resources and capabilities, and that valuable, rare, difficult-to-imitate and non-substitutable resources can support sustained competitive advantage (Barney, 1991). In the tea sector, logistics capability, managerial knowledge, organizational routines, information systems, supplier relationships and innovation capabilities can be viewed as strategic resources when they are effectively developed and deployed.

The RBV is relevant because value chain management is not simply about owning physical assets. A factory may possess vehicles, storage facilities and processing equipment but still perform poorly if the organization lacks the capabilities required to coordinate these resources. Thus, strategic value chain management can be understood as a capability that integrates resources into routines and relationships that produce performance outcomes.

Stakeholder Theory

Stakeholder Theory, associated with Freeman (1984), emphasizes that organizations operate within a network of actors whose interests affect and are affected by organizational decisions. Stakeholders may include employees, customers, suppliers, communities, managers, government institutions and other interested parties. Effective stakeholder management involves communication, consultation, negotiation and balancing interests. Harrison et al. (2010) further connect stakeholder management with value creation and competitive advantage.

Innovation Diffusion Theory

Innovation Diffusion Theory explains how new ideas, technologies and practices are adopted and spread. Rogers' work emphasizes that perceived characteristics of an innovation influence adoption behaviour. In tea firms, innovation may involve machinery, processing technologies, product development, improved processes and information systems. The theory helps explain why innovation adoption may be desirable but may not automatically translate into performance if implementation costs, organizational disruption or weak integration offset the expected benefits.

5. Literature Review and Conceptual Relationships

Strategic Logistics Management and Performance

Logistics management coordinates the movement and storage of resources and products across the value chain. It includes transport management, inventory management, warehousing and distribution. Hill et al. (2012) and Munyi and Deya (2019) emphasize the role of logistics in controlling costs,

reducing waste and improving service. Transport is particularly important because delays can affect the movement of agricultural products, production continuity and customer service. Effective transport management also depends on speed, cost and consistency.

Inventory management provides another important logistics capability. Inventory can buffer firms against fluctuations, but excessive inventory can tie up resources and reduce responsiveness. Chopra and Meindl (2015) therefore treat inventory as a key supply chain decision requiring a balance between availability and cost. Distribution networks similarly determine how efficiently finished tea reaches subsequent markets and customers.

Strategic Innovation Adoption and Performance

Innovation may take the form of technological, process and product innovation. Aksoy (2017) links innovation culture and product and marketing innovation with market performance, while Karlsson and Tavassoli (2016) emphasize that firms adopt different innovation strategies depending on their objectives and capabilities. Process innovation can improve efficiency, reduce waste and enhance production routines (Xie et al., 2019). Product innovation can help firms respond to changing consumer preferences and competitive pressure.

However, innovation does not guarantee immediate performance improvement. Flach and Irlacher (2018) caution that the efficiency of innovation processes matters, not only the presence of innovation inputs or outputs. Zimmerman et al. (2019) similarly highlight the importance of strategic fit between innovation and supply chain strategies. This literature provides a useful interpretation of the present study's negative but insignificant innovation coefficient.

Strategic Stakeholder Engagement and Performance

Stakeholder engagement involves identifying relevant stakeholders, understanding their interests, maintaining communication and incorporating appropriate feedback into organizational decisions. Deverka et al. (2012) describe engagement as a structured process through which stakeholders are involved for a clear purpose. Noland and Phillips (2010) emphasize communication and ethical engagement, while Harrison and Wicks (2013) connect stakeholder value with organizational performance.

In a tea value chain, stakeholder engagement is particularly relevant because firms depend on farmers, employees, suppliers, regulators, communities and customers. Weak communication can increase uncertainty and conflict, whereas structured engagement can support trust, coordination and joint problem solving. This theoretical expectation is strongly supported by the regression findings of the source study.

6. Strategic Operations Management and Performance

Strategic operations management concerns the processes through which resources are transformed into products and services. In tea firms, this includes capacity planning, forecasting, production scheduling, process monitoring, resource utilization and coordination with suppliers. Operations management is closely related to the efficiency with which factories convert green leaf and other inputs into marketable tea. Oakland (2014) argues that operational excellence is strengthened through systematic quality and process management.

Capacity planning allows firms to align production capability with expected supply and demand. Forecasting provides information for decisions about labour, materials, processing capacity and maintenance. Production monitoring can reduce downtime and support more consistent output. Supplier collaboration can improve the reliability of raw material and other input flows. These mechanisms suggest a positive theoretical relationship between operations management and performance.

The source study, however, reports a negative and statistically insignificant coefficient for strategic operations management. This finding should not be interpreted as evidence that operations are unimportant. Rather, it suggests that the specific operational practices measured in the study did not explain additional variation in performance after logistics, innovation and stakeholder engagement were considered simultaneously. It may also indicate that operational practices are embedded in other capabilities or that their performance effects are indirect.

Conceptual Model

The conceptual model treats strategic logistics management, strategic innovation adoption, strategic stakeholder engagement and strategic operations management as independent variables, while operational efficiency, market share, profitability, sales, revenue and production-related indicators represent the performance construct. The model assumes that value chain practices can influence performance by improving coordination, reducing inefficiencies, strengthening relationships and enhancing organizational capabilities.

The model also allows for the possibility that the four dimensions do not contribute equally. This is important because a value chain is an integrated system. A strong logistics system may produce limited benefits if stakeholder relationships are weak. Likewise, technological innovation may require appropriate operational routines and managerial capabilities before its benefits become visible. The empirical analysis therefore estimates both the joint effect of the predictors and their individual effects.

7. Methodology

Research Design and Population

The study adopted a quantitative descriptive survey design. The design was selected because it enables the researcher to collect standardized information about perceptions, practices and organizational conditions and to analyse relationships among variables (Bryman & Bell, 2011; Kothari, 2014). The target population comprised 63 tea firms located in Kericho, Bomet and Nandi counties. According to the source project, the firms were distributed as follows: Kericho 14, Bomet 28 and Nandi 21.

Sampling and Respondents

The sampling frame consisted of tea processors in the West Rift. The project reports a total sample of 114 respondents, drawn through stratified random sampling across categories of tea processors and purposive selection of managers. The final analysis was based on 108 returned questionnaires, producing a 94.74% response rate. This high response rate provided a strong empirical base for the statistical analysis.

Data Collection Instrument

Primary data were collected using a structured questionnaire. The instrument measured strategic logistics management, strategic innovation adoption, strategic stakeholder engagement, strategic operations management and organizational performance using Likert-scale statements. Logistics indicators covered transport, inventory, distribution and warehousing. Innovation indicators covered machines and equipment, operational improvements, new products and improved services. Stakeholder engagement indicators covered stakeholder identification, disclosure, communication and recognition of interests. Operations indicators covered capacity planning, forecasting, production processes, monitoring and supplier collaboration. Performance was assessed through sales, revenue, stakeholder growth and production.

Validity and Reliability

The source project explains that validity was addressed through alignment between questionnaire items, study objectives, conceptualizations and indicators. A pilot study was used to identify ambiguity and improve the instrument. Reliability was assessed using Cronbach's alpha, with the project adopting the commonly used 0.70 benchmark for acceptable internal consistency (Akeen, 2015; Nunnally & Bernstein, 1994). These procedures were intended to strengthen the credibility of the measurements.

Data Analysis

Data were analysed using descriptive and inferential statistics. Frequencies and percentages summarized respondent characteristics, while means and standard deviations described the value chain constructs. Multiple linear regression was used to estimate the individual and combined effects of the four independent variables on firm performance. Diagnostic tests examined normality, multicollinearity and autocorrelation before interpretation of the regression model (Field, 2018; Hair et al., 2019; Gujarati & Porter, 2009).

8. Diagnostic Tests

The Shapiro–Wilk results reported in the source project were all above the 0.05 significance threshold. Strategic logistics management recorded $p = .596$, strategic innovation adoption $p = .728$, stakeholder engagement $p = .715$, operations management $p = .793$ and organizational performance $p = .791$. The results were interpreted as satisfying the normality assumption and supporting the use of parametric analysis.

Multicollinearity

Tolerance values ranged from .615 to .972 and VIF values from 1.029 to 1.626. These values were well within the thresholds used in the study and indicated that the independent variables did not exhibit problematic multicollinearity. Strategic stakeholder engagement had the lowest tolerance (.615) and highest VIF (1.626), but these values remained acceptable.

Autocorrelation

Durbin–Watson values ranged from 1.748 to 2.341. The source project interpreted these results as indicating no problematic autocorrelation. Taken together, the diagnostic tests provided support for proceeding with multiple regression analysis.

9.0 Descriptive Findings on Strategic Value Chain Practices

Strategic Logistics Management

Respondents generally reported favorable logistics practices. The items measured transport management, faster movement of goods and raw materials, inventory management, distribution networks and warehousing. The pattern of responses indicates that tea firms had established logistics systems, although the study's inferential results show that the strength of logistics becomes clearer when its effect on performance is examined through regression.

The practical significance of logistics in tea processing is substantial. Tea is an agricultural product whose quality and processing requirements depend on timely movement. Transport delays can disrupt factory operations, while weak inventory management can create either shortages or unnecessary holding costs. Efficient distribution also affects access to markets and the reliability of customer service. The findings therefore support the view that logistics is a value-creating activity rather than merely an administrative function.

Strategic Innovation Adoption

The descriptive findings indicate that respondents generally agreed that innovation practices were present. The project reports positive mean scores for the use of machines and equipment, innovation directed toward operational effectiveness, introduction of new products and services, improvement of existing goods and services, and reductions in turnaround time and waste. The mean for the turnaround-time and Greenleaf-waste item was the lowest at 3.79, while the introduction of new products recorded 3.84 and improvement of existing goods and services 3.88.

These findings show that firms recognize innovation as part of value chain development. However, the later regression results demonstrate that perceived adoption did not translate into a statistically significant direct performance effect. This contrast is analytically important. Descriptive agreement tells us that firms report using innovation; it does not establish that innovation independently explains performance after other variables are controlled.

Strategic Stakeholder Engagement

Stakeholder engagement received generally positive descriptive assessments. The highest mean was 3.88 for maintaining a list of key stakeholders that helps retain market share. Communication channels scored 3.87, disclosure of relevant information 3.86, prioritization of stakeholder interests in performance planning 3.84 and prioritization according to stakeholder stake 3.78. The findings indicate that firms recognize stakeholders and maintain communication mechanisms.

These descriptive results are consistent with Stakeholder Theory, which proposes that organizational outcomes are shaped by the quality of relationships between firms and their stakeholders (Freeman, 1984; Harrison & Wicks, 2013).

Strategic Operations Management

Operations management items received mean scores ranging from 3.81 to 3.90. Efficient production processes that minimize waste and maximize resource utilization had the highest mean (3.90). Forecasting production capacity scored 3.86, formal capacity planning 3.85, production-line monitoring 3.83 and supplier collaboration 3.81. These results indicate that operational practices were generally perceived to be implemented to a considerable extent.

The high score for waste reduction and resource utilization is particularly relevant in tea processing because processing efficiency affects costs, output consistency and resource productivity. Capacity planning and forecasting also support the matching of production capability with available green leaf and expected market requirements. Nevertheless, the regression coefficient for operations management was negative and insignificant. This suggests that operational practices, while positively perceived, did not independently explain performance once other value chain variables were included.

Organizational Performance

Performance indicators were also positively rated. The highest mean was 3.93 for an increase in revenue over the previous three years. Increase in sales scored 3.86, increase in stakeholders 3.81 and increase in production 3.80. These scores indicate that respondents generally perceived improvement across financial, market and production dimensions.

The combination of positive descriptive scores and a strong regression model suggests that the firms were not uniformly underperforming. Instead, the research identifies differences in the relative contribution of specific management practices to performance. Stakeholder engagement and logistics were statistically important, while innovation and operations were not significant predictors in the final model.

10.0 Regression Results

Model Summary

The multiple regression model produced $R = .825$, $R^2 = .681$ and adjusted $R^2 = .667$, with a standard error of estimate of .421. The R^2 value indicates that the four independent variables collectively explained 68.1% of the variation in performance, while 31.9% remained attributable to factors outside the model. The adjusted R^2 of .667 indicates that the explanatory power remained strong after accounting for the number of predictors.

ANOVA

The analysis of variance showed that the overall regression model was statistically significant, $F(4, 103) = 54.674$, $p < .001$. The regression sum of squares was 37.245 compared with a residual sum of squares of 17.483, producing a total sum of squares of 54.728. The significant F-test indicates that the predictors, considered jointly, provide meaningful explanatory power for firm performance.

Regression Coefficients

Predictor	B	Std. Error	Beta	t	p
Constant	0.362	0.836	—	0.432	0.666
Strategic Logistics Management	0.192	0.067	0.211	2.877	0.005
Strategic Innovation Adoption	-0.139	0.105	-0.159	-1.322	0.189
Strategic Stakeholder Engagement	0.771	0.095	0.904	8.095	<0.001
Strategic Operations Management	-0.045	0.079	-0.054	-0.566	0.573

The regression equation can be expressed as: $\text{Performance} = 0.362 + 0.192(\text{Logistics}) - 0.139(\text{Innovation}) + 0.771(\text{Stakeholder Engagement}) - 0.045(\text{Operations}) + \text{error}$. The coefficients show that stakeholder engagement had the largest standardized effect, followed by logistics management. Innovation adoption and operations management had small negative standardized effects that were not statistically significant.

Discussion of Strategic Logistics Management

The finding that strategic logistics management had a positive and statistically significant effect on performance ($B = .192$, $\beta = .211$, $p = .005$) supports the argument that the movement, storage and distribution of resources are central to value creation in tea firms. The result is consistent with the value chain perspective because logistics links upstream inputs with processing and downstream markets. It also aligns with supply chain literature emphasizing the role of coordination, integration and logistics capability in organizational performance (Bechtel & Jayaram, 2016; Flynn et al., 2013).

The practical interpretation is that improvements in transport management, inventory systems, distribution networks and warehousing are associated with better organizational outcomes. The result is particularly relevant to tea because green leaf movement and processing require coordination. A logistics system that reduces delays, manages inventory effectively and provides reliable distribution can reduce avoidable costs and support customer service. The finding is also compatible with evidence from Kenyan agricultural and manufacturing sectors showing that supply chain capabilities are related to organizational performance (Namusonge et al., 2017; Onyiego & Osoro, 2022).

The standardized beta of .211 indicates that logistics has a meaningful but smaller effect than stakeholder engagement. This suggests that logistics should not be treated as a standalone solution. Its benefits are likely to be strengthened when the firm has good communication with suppliers, transport providers, employees and customers. The result therefore reinforces the integrated nature of value chain management.

Implications for Managers

- Tea firms should review transport routes, service-provider performance, delivery reliability and turnaround time.
- Inventory policies should balance security of supply with the cost of excess stock and storage.
- Distribution systems should be monitored using measurable indicators such as delivery time, cost, reliability and service quality.
- Logistics decisions should be coordinated with procurement, production and stakeholder-management functions.

Relationship with Prior Research

The result is consistent with the broader literature cited in the source project, which emphasizes logistics capability, supply chain collaboration and coordinated value chain practices as contributors to performance. Munyi and Deya (2019) found significant relationships between value chain positioning and performance in Kenyan pharmaceutical supply chains, while Onyiego and Osoro (2022) demonstrated the relevance of strategic value chain management in Kenyan floriculture. The present finding extends this reasoning to tea firms in the West Rift.

11.0 Discussion of Strategic Innovation Adoption

Strategic innovation adoption had a negative but statistically insignificant effect on performance ($B = -.139$, $\beta = -.159$, $p = .189$). The finding does not mean that innovation is inherently harmful or unimportant. Instead, within the variables and period covered by this study, innovation adoption did not provide sufficient independent statistical evidence of a direct effect on firm performance. The distinction is important because innovation can require substantial investment, learning, organizational adjustment and implementation time.

The descriptive findings show that respondents generally agreed that firms were adopting machines and equipment, improving operational effectiveness, introducing new products and improving existing goods and services. Yet these practices did not produce a significant coefficient in the final regression. One possible interpretation is that innovation benefits may require complementary capabilities. Zimmermann et al. (2019) argue for strategic fit between innovation and supply chain strategies, while Flach and Irlacher (2018) emphasize the importance of innovation efficiency rather than simply counting innovation inputs and outputs.

The finding also differs from studies reporting positive relationships between innovation and performance. Aksoy (2017) identifies links between innovation culture and market performance, while Karlsson and Tavassoli (2016) show that firms pursue different innovation strategies. The apparent difference may be explained by context. Tea firms in the West Rift operate within a commodity-oriented value chain in which the immediate performance benefits of technological investment may depend on scale, financing, skills, maintenance, market positioning and coordination with other value chain actors.

Managerial Interpretation

Managers should therefore avoid treating innovation adoption as an automatic route to performance improvement. Innovation investments should be linked to clearly defined operational or market problems, accompanied by implementation plans, employee training and performance indicators. Firms should evaluate whether new technologies reduce costs, improve quality, shorten processing time, reduce waste or create products for which customers are willing to pay. The negative coefficient should be interpreted cautiously. It is not statistically significant, and therefore the study does not establish that innovation reduces performance. Rather, the result indicates insufficient evidence of a direct positive relationship in the sample. Future studies should examine whether innovation influences performance indirectly through process efficiency, product quality, market responsiveness or stakeholder satisfaction.

12.0. Discussion of Strategic Stakeholder Engagement

Strategic stakeholder engagement emerged as the strongest predictor of performance, with $B = .771$, $\beta = .904$ and $p < .001$. This result is the most prominent empirical contribution of the study. It indicates that firms that identify stakeholders, communicate relevant information, provide feedback mechanisms and recognize stakeholder interests tend to report better performance. The magnitude of the standardized coefficient shows that stakeholder engagement contributed more strongly to explaining performance than the other predictors in the model.

The result is strongly consistent with Stakeholder Theory. Freeman (1984) argues that organizations must consider the interests of actors who affect and are affected by organizational activities. Harrison et al. (2010) further suggest that effective stakeholder management can create value and competitive advantage. In the tea sector, the stakeholder network is broad. Farmers provide the raw material base; employees operate production systems; suppliers provide goods and services; government agencies regulate and support the sector; communities provide the social environment; and customers determine market demand.

Effective engagement can reduce uncertainty because information moves more quickly between actors. It can also support problem solving. For example, farmer concerns about quality or payment, supplier concerns about reliability, employee concerns about operational procedures and customer concerns about product requirements can be identified and addressed through structured communication. The result is therefore plausible from both theoretical and practical perspectives.

13.0 Managerial Recommendations from the Finding

- Maintain a current stakeholder register showing stakeholder interests, influence and responsibilities.
- Establish clear and accessible communication channels between firms and key stakeholder groups.

- Use structured feedback mechanisms to identify problems before they become operational or market disruptions.
- Disclose relevant information about risks, performance and impacts in a timely manner.
- Integrate stakeholder interests into strategic planning rather than treating engagement as an occasional activity.

14.0 Broader Implication

The finding suggests that relational capability is a strategic resource. This connects Stakeholder Theory with the Resource-Based View: relationships characterized by trust, knowledge and cooperation can become organizational capabilities that competitors cannot easily reproduce. The performance of a tea firm may therefore depend not only on physical resources but also on the quality of its network relationships.

15. Discussion of Strategic Operations Management and the Integrated Model

Strategic operations management recorded a negative and statistically insignificant effect on performance ($B = -.045$, $\beta = -.054$, $p = .573$). The coefficient is small, and the high p-value indicates that the study does not provide evidence of a statistically meaningful direct effect. This result contrasts with the descriptive findings, where respondents generally agreed that operations management practices were present. The contrast suggests that the existence of operational procedures is not sufficient to explain performance differences among firms.

One possible explanation is that operations management may operate through other value chain capabilities. Capacity planning, production scheduling and process monitoring may be necessary conditions for effective operations, but their effects may become visible only when logistics, supplier relationships and stakeholder communication are functioning effectively. Alternatively, firms may have similar operational procedures, producing limited variation in the variable and therefore limited explanatory power in regression.

Integrated Interpretation

The overall model provides a stronger explanation than any single variable. The R^2 of .681 indicates that the four predictors collectively explain a substantial share of variation in performance. This is consistent with Porter's argument that competitive advantage emerges from the configuration and interaction of activities rather than from a single isolated function (Porter, 1985). The findings therefore support an integrated value chain perspective.

The strongest individual predictor was stakeholder engagement, followed by logistics management. Innovation and operations were not significant. This does not mean that firms should abandon innovation or operations management. Rather, it suggests that these areas may require stronger strategic alignment and complementary capabilities. A new processing machine, for example, is unlikely to produce sustainable gains if maintenance, employee skills, supply reliability and market relationships are weak.

Model Fit and Practical Meaning

The significant ANOVA result, $F(4,103) = 54.674$, $p < .001$, confirms that the set of predictors jointly explains performance. The model's adjusted R^2 of .667 also indicates that the result remains robust after accounting for the number of independent variables. The remaining 31.9% of unexplained variation suggests that other factors—such as market conditions, climate, finance, product quality, governance, labour productivity, international prices and firm-specific capabilities—may also matter.

The findings consequently support a balanced managerial approach: strengthen logistics and stakeholder engagement immediately, while improving the strategic fit and implementation quality of innovation and operations initiatives.

16. Implications for Theory, Practice and Policy

The findings provide empirical support for Porter's Value Chain Theory by demonstrating that specific value chain activities have different relationships with performance. The significant logistics effect illustrates the importance of efficient movement and coordination, while the strong stakeholder effect extends the value chain perspective beyond internal activities toward relational processes.

The findings also support the Resource-Based View by suggesting that logistics capability and stakeholder relationships can function as strategic organizational capabilities. The strongest standardized effect for stakeholder engagement is particularly relevant because relationships, trust and communication are difficult to replicate quickly. Stakeholder Theory receives strong empirical support because stakeholder engagement was the most influential predictor in the model.

Innovation Diffusion Theory receives a more nuanced interpretation. Although innovation was descriptively present, its direct regression effect was insignificant. This suggests that adoption alone is not sufficient; the organizational context in which an innovation is introduced influences whether benefits are realized.

Managerial Implications

For managers, the most immediate priority is to strengthen relationship-based coordination and logistics. Firms should establish clear accountability for transport, inventory, distribution and stakeholder communication. Performance indicators should be used to monitor delivery reliability, stock efficiency, stakeholder response time, production downtime and customer outcomes.

Innovation decisions should be subjected to strategic appraisal. Before investing in new technologies, managers should identify the specific value problem to be solved, estimate total implementation costs, assess staff capability and define expected benefits. Operations management should likewise be connected to broader value chain objectives rather than treated as an isolated production function.

Policy Implications

Sector policymakers can use the findings to strengthen programmes that promote value chain coordination. Training and extension programmes can emphasize collaborative planning, stakeholder communication, logistics efficiency and technology utilization. Sector institutions may also support information-sharing platforms that improve coordination between producers, processors, service providers and markets.

The importance of stakeholder engagement also suggests that policy interventions should involve affected actors in design and implementation. Policies that are technically sound but weakly communicated or poorly coordinated may not produce the intended outcomes. A collaborative approach is therefore consistent with the empirical evidence from this study.

17.0 Conclusion and Recommendations

Conclusion

The study demonstrates that strategic value chain management is relevant to the performance of tea firms in the West Rift of Kenya. The four-variable regression model explains 68.1% of the variation in performance and is statistically significant. However, the individual predictors do not contribute equally. Strategic stakeholder engagement is the strongest and most statistically significant predictor, followed by strategic logistics management. Strategic innovation adoption and strategic operations management do not have statistically significant direct effects in the model.

The evidence therefore supports the conclusion that tea firms can improve performance by strengthening coordination across relationships and logistics systems. The results also caution against assuming that all value chain practices automatically translate into performance. Innovation and operations require effective implementation, strategic alignment and complementary capabilities.

Recommendations

- Tea firms should institutionalize stakeholder engagement through stakeholder registers, scheduled consultations, feedback mechanisms and transparent communication.
- Firms should strengthen transport planning, inventory control, distribution reliability and warehousing systems and monitor these functions using measurable performance indicators.
- Innovation investments should be selected on the basis of clear operational and market needs, with implementation plans, training, maintenance and post-adoption evaluation.
- Operations management systems should be reviewed to ensure that capacity planning, forecasting, production scheduling, monitoring and supplier collaboration are connected to overall value chain objectives.
- Tea firms should develop integrated value chain dashboards that combine logistics, stakeholder, innovation, operational and performance indicators.
- Policymakers and sector institutions should encourage collaborative value chain programmes involving processors, farmers, service providers and other stakeholders.

Areas for Further Research

Future research should examine the mechanisms through which stakeholder engagement and logistics influence performance. Qualitative studies could explore how managers and farmers experience coordination challenges in practice. Longitudinal studies could assess whether innovation investments produce performance benefits over longer periods. Future studies could also include climate resilience, financial capability, product quality, international market conditions, governance and digital supply chain systems as additional predictors.

Comparative research across Kenyan tea-growing regions would also help establish whether the West Rift findings are specific to the regional context or reflect broader patterns in the Kenyan tea sector. Mixed-method research would be particularly useful because quantitative results can identify relationships while interviews and case studies can explain why those relationships occur.

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