ISSN: 2519-0997 (Print)

Effect of Digital Strategy on Transient Competitive Advantages of Large-scale Manufacturing Companies in Kenya

***Nderitu, Kiarie W., Muraguri, Charity W., & Wambalaba, Francis W.**
Chandaria School of Business, United States International University– Africa,
P.O Box 14634 – 00800, Nairobi, Kenya

***Corresponding author**

Cite: Nderitu, K.W., Muraguri, C.W., & Wambalaba, F.W. (2024). Effect of digital strategy on transient competitive advantages of large-scale manufacturing companies in Kenya. *The University Journal, 6*(1), 1-11.

Abstract

This paper examines the influence of digital strategy on transient competitive advantages of large-scale manufacturing companies in Kenya. The research is driven by the observation that the manufacturing sector in Kenya faces challenges in maintaining a competitive edge, as reflected in declining growth rates. The study employed correlational research design and targeted a subset of 857 large-scale manufacturing firms in Kenya, identified based on criteria from the International Labour Organization and Kenya Association of Manufacturers. These firms constituted the unit of analysis. The study employed Pearson Correlation analysis and bivariate regression analysis to examine the relationship between the variables. The key finding of the study is that there is a strong positive correlation (r=0.758, p-value = 0.000) between overall digital strategy and transient competitive advantage in large-scale manufacturing firms in Kenya. The regression analysis further supports this, with the model being statistically significant (F-test p-value = 0.000) and explaining 57.45% of the variation in transient competitive advantages. The positive and significant coefficient (β = 0.841, p-value = 0.001) for digital strategy suggests that an increase in digital strategies is associated with a significant increase in transient competitive advantage. The study recommends creating a supportive policy environment for digital transformation initiatives, offering incentives, grants, and tax breaks for firms investing in digital technologies. Collaboration between policymakers and industry associations is crucial for promoting digital skills development programs. At the organizational level, clear digital policies, workforce training programs, and strategic alignment of digital marketing efforts are recommended for firms aiming to fully leverage digital strategies and secure transient competitive advantages.

Key words: *digital strategy, transient competitive advantage, manufacturing companies*

Introduction

Transient Competitive Advantage (TCA) involves adopting organizational practices that accommodate contexts whose advantages change over time. Within this rationale, enterprises must consistently advance fresh strategic endeavors in a realm where a competitive advantage often dissipates in under a year (Forrest, 2018), by crafting and harnessing multiple transient competitive advantages concurrently. In the context of TCA, companies possess the capability to promptly detect an advantage, capitalize on it fully, and subsequently transition to the next advantage before the present one diminishes, rendering their advantages more dynamic and increasing the likelihood of success. Consequently, it has been asserted by a number of researchers (Gottschalck & Günther, 2016; Mubako, 2017; Santalainen, 2019) that digital business transformation strategies allow the firm to be more prepared to acquire and maintain transient competitive advantages (Forrest, 2018).

Although still at the nascent stages, the concept of Transient Competitive Advantage has garnered practical and research attention across the globe. Globally, the practice of TCA

seems to have garnered significant traction. In Japan, manufacturing firms are following TCA regardless of whether they are small or large. This is because the landscape for manufacturing firms is becoming increasingly competitive and dynamic, with new technologies and business models emerging on a regular basis (Liao et al., 2018). Through adoption of a TCA strategy, manufacturing firms in Japan stay ahead of the competition and remain profitable, while the company also maintains good ratings in economic complexity. Similarly, in United Kingdom (UK) and the United States (US), TCA has become a favored strategy, particularly among start-ups and well-established enterprises. In the UK, technology start-ups are utilizing TCA to remain agile and competitive within the ever-shifting tech landscape (Forrest et al., 2019). In the US, established firms are embracing TCA to navigate dynamic market trends effectively (Forrest & Nightingale, 2018). This strategic choice enables them to stay ahead in a highly competitive market environment (Forrest et al., 2019). Brazil, known for its economic volatility, has witnessed a surge in TCA adoption. According to Salgado et al. (2022) and Fernandes et al. (2023), companies across various sectors are turning to TCA to fortify themselves against unpredictable economic shifts. This approach equips Brazilian firms with the resilience needed to withstand economic uncertainties and maintain their stability.

Regionally, there is a noticeable scarcity of research that delves into Transient Competitive Advantage (TCA), especially within the African context. Existing studies seem to gravitate towards exploring various latent variables associated with competitive advantage. For example, Nyarku (2017) conducted a comparative study focusing on brand building for competitive advantage within the Ghanaian adornments trade. His findings revealed that factors such as innovation, branding, brand positioning and promotion, and customer engagement play pivotal roles in helping companies gain a competitive edge.

In South Africa, Botes and Pretorius (2020) observed a significant shift in contemporary business environments, driven by rapid digital transformations. They noted that businesses in South Africa are grappling with the challenge of maintaining sustainable competitive advantages, leading to a growing emphasis on transient competitive advantages. Meanwhile, Bosch and Rossouw (2021) undertook research on the strategic positioning of a motorcycle manufacturer in South Africa, particularly in the context of the fourth industrial era. Their study highlighted that motorcycle manufacturers must embrace technology and innovation to meet the rising demands and expectations of customers, thereby retaining a competitive edge. The advent of the fourth industrial revolution has compelled firms to formulate more aggressive strategies aimed at enhancing product quality, service delivery, innovation, speed, and cost competitiveness. In another context, Kaluyu and Odollo (2023) conducted a comparative case study investigating the influence of product innovation and pricing on the competitive advantage of beer products in Uganda. Their research established a significant relationship between product innovation, pricing strategies, and competitive advantage in the beer industry.

In Kenya, despite the importance of strategic posturing given the dynamic business environment, there exists scanty literature on whether companies have adopted TCA. Nevertheless, within the hospital setting, Kaluyu and Odollo (2023) discovered that the strategic aggressiveness posture notably impacts transient competitive advantage in private multi-practice hospitals situated in Nairobi City County, Kenya . Mwasiaji (2019) studied the competitive advantages of medium scale manufacturing companies in Kenya. In order to establish a sustained competitive edge, it is essential for business professionals to possess the capacity to promptly adapt to shifts in their surroundings. Enhancing their adeptness in remaining competitive becomes imperative for survival in an intensely competitive setting. The ability to diversify products, adapt swiftly, and undergo

reorganization to align with evolving market conditions and technological advancements is crucial for not only surviving but also thriving and achieving success. Furthermore, competitive advantage studies on manufacturing industries in Kenya, tend to focus on the general Porter's five forces competitive advantages, green competitive advantage (Osano, 2019) and sustainable competitive advantage (Muthoni & Kinyua, 2020), while TCA is yet to be covered.

Some authors posit that the increasing adoption of digital business transformation is the main driver and anchor of transient competitive advantage (Mubako, 2017; Koch& Windsperger, 2017; Kodama, 2018). Digital strategy is the core strategy among the digital business transformation strategies. The phrases digitalization strategy, digital business strategy, digitization strategy, and digital transformation strategy are frequently employed interchangeably. In essence, they delineate the comprehensive outlook of a company within the realm of digitalization, encompassing the strategic steps required to realize this vision (Adner et al., 2019). Digital strategy can be used to help guide and inform a company's digital business transformation initiatives. This entails the development of customized plans and strategies that consider a company's competitive landscape, available resources, and capabilities to establish a competitive advantage within the digital arena (Deniz, 2021). Digital strategy can involve activities such as market positioning, competitive intelligence, innovation, and customer relationships. By utilizing a digital strategy, companies can identify specific areas of their businesses that could benefit from digital transformation initiatives, such as improved customer experiences or enhanced operational efficiencies (Sebastian et al., 2020; Deniz, 2021).

In an era when industrialization should be a priority, the contribution of the manufacturing sector to the Kenyan economy is diminishing. Over the span of five years (2016-2020), it has witnessed a decline, dropping from 9.3 percent to 7.6 percent. The manufacturing industry in Kenya has experienced an annual growth rate of 3.7% between 2017 and 2022, which falls below the average annual growth rate of the overall real GDP at 4.6% (KPMG, 2021). This signifies a relatively modest performance and limited competitive edge, hindering the advancement toward the realization of Kenya Vision 2030 and sustainable manufacturing aligned with the achievement of the Sustainable Development Goals. While TCA has been cited by many researchers as a catalyst of improved performance and sustainability, in Kenya manufacturing firms encounter a number of challenges when attempting to implement transient competitive advantage, such as difficulty in attracting the right talent, high costs associated with developing cutting-edge technology, or complex regulatory environments (KPMG, 2022). Additionally, a lack of support from local and national governments also adds to these challenges hence limiting the effectiveness of transient competitive advantages (KAM, 2021). This discrepancy between the growth rates of the manufacturing sector and the overall economy portrays that digital strategies might be the missing link that can accelerate the growth of the industry.

Nonetheless, research on digital strategy and transient competitive advantage in the context of large-scale manufacturing companies is also elusive. Studies often explore different industries and countries, creating contextual gaps. For instance, Lin et al. (2020) focused on European manufacturing firms, while Lee et al. (2020) studied the impact of digitization on Small and Medium Enterprises (SMEs) in Malaysia. Some investigations, like the one conducted by Soltanizadeh et al. (2017), stressed business strategy without sufficient attention to competitive advantage. Others, such as Mithas et al. (2018), explored the relationship between digital strategic posture and business strategy, with a focus on the competitive environment. Despite these efforts, the connection between digital strategies and transient competitive advantages remains insufficiently explored in the existing literature.

Therefore, this research examined the influence of digital strategy on transient competitive advantages of large-scale manufacturing companies in Kenya.

Methodology

Research Design

The study adopted a correlational research design which involves the application of quantitative data collection and analysis methods to assess the extent and characteristics of relationships between variables (McClintock, 2018). This design is particularly suitable when the objective is to understand the connections between different dimensions (Bell et al., 2018), such as digital strategy, and transient competitive advantage. The correlational approach allows for the examination of causal correlations using quantitative data without modifying it, aligning with a positivist methodology (Krause, 2018).

The study targeted a subset of 857 large-scale manufacturing firms in Kenya, identified based on criteria from the International Labour Organization and Kenya Association of Manufacturers. These firms constituted the unit of analysis. The focus was on 2571 managers from operational, marketing, and Information Technology (IT) departments as the unit of observation, selected for their strategic roles in digital business transformation. This approach aimed to capture a comprehensive view and minimize potential biases in the study.

The research employed a multi-stage sampling method. In the first stage, a representative sample of 857 large-scale manufacturing companies in Kenya was selected using stratified proportionate random sampling. The second stage involved the selection of operational, marketing, and IT managers from these firms using stratified proportionate sampling. The sample size, determined using the Yamane formula, was 348 managers, distributed proportionately across the categories. Operational managers were represented by a sample size of 125, marketing managers 115, and IT managers 108. This approach aimed for cost efficiency, time management, and representative results.

Data collection was conducted using a structured questionnaire designed on a 5-point Likert-scale to gather quantitative information. This approach, recommended by Kothari (2017) for large-sample cross-sectional studies, is in line with the scientific principles of data analysis outlined by Saunders et al. (2015).

To facilitate data analysis, the collected data underwent preparation, coding, and entry into the SPSS version 26 data analysis program. Descriptive statistics, including measures of central tendency such as frequency, percentile distributions, mean, and standard deviation, were computed to provide a comprehensive overview. Diagnostic tests were conducted to assess the suitability of proposed statistical models for fitting the data. For inferential analysis, the study conducted Pearson Correlation and bivariate regression analysis. Pearson's correlation analysis offers a quick and straightforward assessment of the magnitude of the association between two variables. The study hypothesis stated that; there is no statistically significant influence of digital strategy on the transient competitive advantage of Kenya's large manufacturing firms. To test the hypothesis, the empirical model (1) was utilized and the study failed to reject the hypothesis with p> 0.05, at 5% significance level.

$$TCA = \beta_0 + \beta_1 DS + \varepsilon \quad \text{..... (1)}$$

Where; TCA = Transient competitive advantage, DS = Digital strategy, β_0 = Constant term

$\beta_1 =$ is the coefficient of digital strategy variable and ε = error term

Results

Response Rate

Table 1 displays the response rate based on returned questionnaires. Overall, from the total of 348 questionnaires administered, 267 were returned, leading to a cumulative response rate of 76.8%. According to Bell et al. (2018) a response rate of more than 70% is sufficient.

Table 1. Response Rate

Category	Administered	Returned	Percentage Returned
Operational Managers	116	97	83.6
Marketing Managers	116	86	74.1
ICT Managers	116	84	72.4
Total	**348**	**267**	**76.8**

Descriptive Statistics

Table 2. Descriptive Statistics for Transient Competitive Advantage

ID	Statement	Mean	Std
MF1	Our organization is able to recognize changes in the market	2.2	1.1
MF2	Our organization is able to adapt when faced with changes in business environment	1.7	1
MF3	Our organization is able to maintain old customers	1.8	1
MF4	Our organization is able to attract new customers even during the changing business environment	4.1	1.1
CR1	Our organization agility allows to change with the trends	1.8	1
CR2	Our organization organizes itself around the available opportunities	1.8	1
CR3	Our organization is able to create temporary advantages over competitors	1.9	1
RA1	Our organization proactively removes obsolete resources in competitive terms	2.3	1.1
RA2	Our organization budgets in continuous rapid cycles	4.1	1.2
RA3	Our organization managers understand what opportunities present advantages to the business	3.6	1.1
PI1	Our organization is able to innovate differential products that are valued in the market	3.6	1.3
PI2	Our organization managers search for new growth areas	1.8	1
LP1	Our organization considers the lost advantages as a way of freeing-up resources for new advantages rather than lost glory	4	1.2
LP2	Our organization considers disengaging from old advantages as normal business cycle	3.1	0.9
LP3	Our organization top leaders keep strategizing on how to get ahead of the competitors	3.5	1.4
	Aggregate	**2.75**	**1.09**

Overall, the aggregate mean of 2.75 suggests that large manufacturing companies have very low transient competitive advantages, brought about by product innovation, market focus, continuous reconfiguration, proactive resource allocation, innovation proficiency and leveraging of lost advantages. This implies that in a rapidly changing environment, large

manufacturing companies in Kenya may struggle to attract and retain customers; struggle to adapt to changing business environments, such as shifts in customer preferences, emerging technologies, or market trends. These organizations are also at risk of disruption due to rapid technological advancements, wasted resources and missed opportunities to invest in more strategic initiatives.

Table 3. Descriptive Statistics for Digital Strategy

ID	Statements	Mean	Std
DS1	Our mission statement captures the mission to digitally transform	3.5	1.2
DS2	We have digital policies that guide digitalization of the company process and products	2.3	1.1
DS3	We focus on digital innovations to automate processes	3.5	1.3
DS4	We have a digital model that governs automation of operations	2.2	1
DS5	We have a sustainable approach to digital development, adoption, and implementation, with clear goals and metrics for success	2.2	1
DS6	We have successfully cultivated a digital culture in our organization	2.1	1
DS7	The company regularly cultivates the digital culture	2	1.2
DS8	The digital culture in our organization supports digital transformation	2.2	1
DS9	Our employees have the technical abilities to handle automation processes	3.9	1.3
DS10	We have an effective information technology architecture	3.8	1.3
DS11	We have integrated both internal information systems and external information systems	3.9	1.3
DS12	We have an effective operations architecture that offers support and management of IT services	3.5	1.3
DS13	Our operations architecture is effective at production scheduling and monitoring	3.9	1.2
DS14	Our operations architecture is effective at system monitoring.	2.1	1.2
DS15	Our operations architecture allows effective performance monitoring	2.6	1.3
DS16	We engage in digital networking with partners and customers to build and maintain relationships	1.8	0.9
DS17	We have dedicated social media accounts for connecting with customers and partners	2.6	1.3
DS18	Our digital marketing strategy is effective and aligns with our overall business objectives.	2.2	1.4
	Aggregate	**2.79**	**1.18**
	Reliability Results	Alpha	Items
	Digital Strategy	0.913	18

Table 3 shows that the aggregate mean score of 2.79 indicates that respondents generally have mixed responses, with some expressing agreement, some disagreement, and others having neutral opinions. Based on the aggregate mean score, it can be inferred that large manufacturing companies in Kenya exhibit a moderate level of digital strategy. Thus, digital strategies although appreciated, there is low implementation of the strategies which can be

attributed to poor/low digital culture, poor low digital networking practices, and poor and low digital business model. In terms of reliability, it can be inferred from the Cronbach Alpha of 0.913, that the scale was reliable. This suggests that the items in the scale effectively capture the variability in digital strategy and provide a reliable measure of this construct. These results provide confidence in the consistency and dependability of the measurement scale used in the study.

Inferential Statistical Results

Table 4. Correlation Analysis Results Matrix

		TCA	Digital Strategy
TCA	Pearson Correlation	1	
	Sig. (2-tailed)		
Digital Strategy	Pearson Correlation	0.758**	1
	Sig. (2-tailed)	0.001	
	N	267	267

** Correlation is significant at the 0.01 level (2-tailed).

The findings in Table 4 show that overall digital strategy and transient competitive advantage are positively correlated with a coefficient of 0.758. This indicates a strong positive relationship between these two variables. The correlation is significant at a 5% significant level as shown by the p-value of 0.001.

Table 5. Regression Analysis Results (Digital Strategy and Transient Competitive Advantage)

TCA	Coef.	Robust St.Err.	t-value	p-value	[95% Conf	Interval]
Digital strategy	0.841	0.044	18.92	0.001	0.754	0.929
Constant	0.481	0.122	3.92	0.03	0.239	0.723
R-squared		0.5745	Number of obs			267
F-test		357.78	Prob > F			0.000

As displayed in Table 5, the regression model is significant, as shown by the significant F-test (Prob >F =0.000) and R-squared value of 0.5745. This suggests that 57.45% variation in transient competitive advantages is explained by digital strategies. The constant has positive and significant effect (β =0.481, p-value = 0.03). This implies that even when all other predictor variables are zero, the dependent variable is expected to have a positive value equal to the model constant. Digital strategy therefore has a positive and significant effect on transient competitive advantage (β = 0.841, p-value = 0.001). This implies that, holding everything else constant, a standard deviation increase in digital strategies will result into 0.841 increase in transient competitive advantage. Consequently, the study dismisses the null hypothesis asserting that digital strategy does not exert a statistically noteworthy influence on the transient competitive advantage of Kenya's large-scale manufacturing firms. Following this result, the optimal regression model can be presented as follows:

$$TCA = 0.481 + 0.841\,DS + \varepsilon \qquad (2)$$

Overall, the analysis shows that some large manufacturing companies in Kenya have high level of digital strategy implementation and others have low levels of digital strategy implementation. Thus, digital strategies although appreciated, there is low implementation of the strategies which can be attributed to poor/low digital culture, poor low digital networking practices, and poor and low digital business model. The variation in implementation of digital strategies could explain the variation in transient competitive advantage. This is confirmed by correlation and regression analysis results which revealed that digital strategies positively influence transient competitive advantage of large-scale manufacturing firms in Kenya.

Discussion of Results

The study identified a significant gap between the appreciation and implementation of digital strategies in large-scale manufacturing firms in Kenya. Factors such as a lack of a robust digital culture, limited digital networking practices, and insufficient development of digital business models were identified as contributors to this disparity (McClintock, 2018). The limited adoption of digital strategies correlated with diminished transient competitive advantage capabilities (Krause, 2018). Regression analysis confirmed a substantial positive impact of digital strategy on transient competitive advantage, substantiating the hypothesis. Empirical literature supported these findings, emphasizing the positive impact of digital strategies on competitive advantage in various sectors (Kamariotou et al., 2021; Pramuki & Kusumawiti, 2021; Mikalef & Pateli, 2017).

The evolving nature of the digital landscape necessitates continuous adaptation for firms to maintain their competitive edge. Transient competitive advantage, arising from swift responses to market changes, is facilitated by effective digital strategies (Warner & Wager, 2019). These strategies enable agility through real-time analytics, enhanced customer engagement, open innovation, streamlined operations, and dynamic resource allocation (Canhoto et al., 2021). The confirmation of the positive influence of digital strategy on transient competitive advantage aligns with dynamic capabilities theory (Teece, 2019). Digital strategies, representing a facet of dynamic capabilities, enhance firms' ability to sense opportunities, mobilize resources, and continuously renew organizational capabilities. By leveraging technology and digital platforms, firms can stay attuned to market trends and seize new opportunities, ensuring the continuous reconfiguration of resources to adapt to the evolving business environment.

Conclusion and Recommendations

Conclusion

The study concludes that while certain large manufacturing firms in Kenya acknowledge the importance of digital strategies, there is a gap in their full embrace and implementation. While there is a focus on digital transformation and innovation, the lack of clarity in digital business models and a sustainable approach to digital development indicates incomplete adoption of digital strategies. A robust digital culture is lacking, despite employees showing good digital competencies. Disparities in digital networking practices also persist. The lack of clarity in digital business models and sustainable digital development poses a challenge, hindering effective leveraging of digital technologies and competitive advantages in the digital era. The study further concludes that digital strategies positively impact the transient competitive advantages of large-scale manufacturing firms in Kenya. Companies prioritizing and investing in digital strategies are more likely to attain and sustain these advantages compared to those lagging in digitalization. The study emphasizes the crucial role of adopting

digital transformation and allocating resources to digital strategies for enhancing competitiveness in an evolving business environment. Firms seamlessly integrating digital technologies into operations are better positioned to outperform competitors and adapt effectively to changing market conditions, securing transient competitive advantages.

Recommendations

The study recommends policymakers, such as the Kenya Association of Manufacturers (KAM), creating a supportive environment for digital transformation initiatives. This involves offering incentives, grants, or influencing government tax breaks for firms investing in digital technologies. Policymakers and industry associations should collaborate to promote digital skills development programs, fostering education in digital literacy, data analytics, and emerging technologies.

At the organizational level, large-scale manufacturing companies should formulate and implement clear digital policies guiding the digitalization process. These policies should cover digital transformation approaches, data privacy, cybersecurity, and aspects of digital strategy like Industry 4.0 and generative artificial intelligence (AI). Clear policies serve as a roadmap for digital initiatives and ensure consistency. To fully leverage digital strategies, companies must invest in training programs to enhance the digital competencies of their workforce, covering digital tools, data analysis, and Generative AI. Integrating information systems and investing in effective information Technology (IT) and Operational Technology (OT) architecture are crucial for supporting digital transformation initiatives. Assessing and upgrading current IT infrastructure aligns with the digital strategy. Additionally, aligning the digital marketing strategy with overall business objectives is essential for large-scale manufacturing companies. Focusing on targeted and effective digital marketing campaigns that resonate with the target audience contributes to achieving business goals.

Conflict of Interest

We want to clarify that there are no actual, potential, or perceived conflicts of interest related to this document. Our role as authors is primarily to disseminate scholarly materials to researchers, maintaining a high degree of objectivity and integrity.

References

Adner, R., Puranam, P., & Zhu, F. (2019). What is different about digital strategy? From quantitative to qualitative change. *Strategy Science*, *4*(4), 253-261. https://doi.org/10.1287/stsc.2019.0099

Bell, E., Bryman, A., & Harley, B. (2018). *Business research methods*. Oxford Press.

Bosch, Z. J., & Rossouw, D. (2021). Strategic positioning of a motorcycle manufacturer within the Fourth Industrial Revolution. *Acta Commercii*, *21*(1), 32–54. https://doi.org/10.4102/ac.v21i1.907

Botes, M., & Pretorius, M. (2020). Exploring management perceptions of competitive versus transient advantage. *Journal of Contemporary Management*, *17*(1), 41–63. https://doi.org/10.35683/jcm19052.55

Canhoto, A. I., Quinton, S., Pera, R., Molinillo, S., & Simkin, L. (2021). Digital strategy aligning in SMEs: A dynamic capabilities perspective. *The Journal of Strategic Information Systems*, *30*(3), 101-122. https://doi.org/10.1016/j.jsis.2021.101682

Deniz, F. (2021). Strategies for digital transformation in business. *Disruptive technology and digital transformation for business and government*, *43*(1), 153-171. https://doi.org/10.4018/978-1-7998-8583-2.ch008

Fernandes, S. M. F. da S., Aires, R. F. de F., & Salgado, C. C. R. (2023). The transient competitive advantage model to analyze business scenario of technology companies. *Journal of Open Innovation: Technology, Market, and Complexity*, *9*(1), 100011. https://doi.org/10.1016/j.joitmc.2023.100011

Forrest, J.Y. (2018). *Dealing with indecisive customers through pricing.* https//doi: 10.1007/978-3-030-04558-6_20

Forrest, J. Y.-L., & Nightingale, J. (2018). Successfully transition into the era of transient competitive advantages. *Northeastern Association of Business, Economics and Technology Proceedings 2017*, *23*(12), 1–18. *Northeastern Association of Business, Economics and Technology Proceedings 2017.*

Forrest, J. Y., Nicholls, J., Schimmel, K., & Liu, S. (2019). Successfully ride waves of transient competitive advantages. *Managerial Decision Making*, *33*(12), 103-130. https://doi.org/10.1007/978-3-030-28064-2_6

Gottschalck, N., & Günther, C. (2016). Lost in transformation: Strategy formulation in a digitized world. *The Palgrave Handbook of Managing Continuous Business Transformation*, *33*(32), 67-93. https://doi.org/10.1057/978-1-137-60228-2_3

Kaluyu, V., & Odollo, L. (2023). Influence of strategic aggressiveness posture on transient competitive advantage adoption among private hospitals in Nairobi city county, Kenya. *The University Journal*, *41*(11), 375–392. https://doi.org/10.59952/tuj.v5i3.291

Kamariotou, M., Kitsios, F., Charatsari, C., Lioutas, E. D., & Talias, M. A. (2021). Digital strategy decision support systems: Agrifood supply chain management in SMEs. *Sensors*, *22*(1), 274-291. https://doi.org/10.3390/s22010274

Kenya Association of Manufacturers. (2021). *Kenya Association of Manufacturers | Driving Global Competitive advantages*. KAM. https://kam.co.ke/bfd_download/manufacturing-priority-agenda-mpa-2022/

Kenya Association of Manufacturers. (2022). Manufacturing Priority Agenda 2022. Manufacturing sector recovery and sustained growth for Kenya's shared prosperity. https://kam.co.ke/wp-content/uploads/2022/02/Manufacturing-Priority-Agenda-2022-Final-Copy.pdf

Kenya Association of Manufacturers. (2022). *Policy & sustainability report*. https://kam.co.ke/wp-content/uploads/2023/06/KAM-Policy-Sustainability-Report-2022.pdf

Koch, T., & Windsperger, J. (2017). Seeing through the network: Competitive advantage in the digital economy. *Journal of Organization Design*, *6*(1), 67-78. https://doi.org/10.1186/s41469-017-0016-z

Kodama, M. (2018). *Sustainable growth through strategic innovation: Driving congruence in capabilities*. Edward Elgar Publishing.

Kothari, C. R. (2017). *Research methodology methods and techniques by CR Kothari*. New Age Publishers.

KPMG. (2021, September 1). *Impact of COVID-19 on the manufacturing sector in Kenya: One year on*. https://assets.kpmg.com/content/dam/kpmg/ke/pdf/thought-leaderships/2021/Impact%20of%20COVID-19%20pandemic%20on%20manufacturing%20sector-One%20year%20on.pdf

KPMG. (2022, February 27). *Industrial Markets - KPMG East Africa*. https://home.kpmg/ke/en/home/industries/corporates-and-retail/industrial_markets.html

Krause, M. S. (2018). Associational versus correlational research study design and data analysis. *Quality & Quantity*, *52*(6), 2691–2707. https://doi.org/10.1007/s11135-018-0687-8

Lee, Y. Y., Falahat, M., & Sia, B. K. (2020). Drivers of digital adoption: A multiple case analysis among low and high-tech industries in Malaysia. *Asia-Pacific Journal of Business Administration*, *13*(1), 80-97. https://doi.org/10.1108/apjba-05-2019-0093

Liao, T., Rice, J., & Lu, J. (2018). The vicissitudes of competitive advantage: Empirical evidence from Australian manufacturing SMEs. *Journal of Small Business Management*, *53*(2), 469-481. https://doi.org/10.1111/jsbm.12078

Lin, H., Hsu, A. W., & Chung, H. (2020). Creating competitive advantages: Interactions between ambidextrous diversification strategy and contextual factors from a dynamic capability perspective. *Technological Forecasting and Social Change*, *154*, 119-142. https://doi.org/10.1016/j.techfore.2020.119952

McClintock, C. (2018). Research design and quantitative analysis. *Oxford Scholarship Online*, *13*(2), 43-67. https://doi.org/10.1093/oso/9780190879754.003.0002

Mikalef, P., & Pateli, A. (2017). Information technology-enabled dynamic capabilities and their indirect effect on competitive performance: Findings from PLS-SEM and fsQCA. *Journal of Business Research*, *70*(23), 1-16. https://doi.org/10.1016/j.jbusres.2016.09.004

Mithas, S., Tafti, A., & Mitchell, W. (2018). How a firm's competitive environment and digital strategic posture influence digital business strategy. *MIS Quarterly*, *37*(2), 511-536. https://doi.org/10.25300/misq/2013/37.2.09

Mubako, A. (2017). *Digital transformation. The realignment of information technology and business strategies for retailers in South Africa*. Anchor Academic Publishing.

Muthoni, D. M., & Kinyua, G. M. (2020). Corporate Reputation and Firm Performance: An Empirical Analysis of Motor Vehicle Assemblers in Nairobi City County, Kenya. *Journal of Business and Economic Development*, *5*(2), 73–89. https://doi.org/10.11648/j.jbed.20200502.13

Mwasiaji, E. T. (2019). Corporate Strategy for Medium Scale Manufacturing Enterprises in Kenya. *International Journal of Management Excellence*, *14*(1), 2019–2028. https://doi.org/10.17722/ijme.v14i1.1127

Nyarku, K. M., & Oduro, S. (2017). Effect of legal and regulatory framework on SMEs growth in the Accra metropolis of Ghana. *The International Journal of Entrepreneurship and Innovation*, *19*(3), 207-217. https://doi.org/10.1177/1465750317742842

Osano, H. M. (2019). Global expansion of SMEs: role of global market strategy for Kenyan SMEs. *Journal of Innovation and Entrepreneurship*, *8*(1), 18–29. https://doi.org/10.1186/s13731-019-0109-8

Pramuki, N. M., & Kusumawati, N. P. (2021). The influence of product innovation, digital marketing and competitive advantage in improving the marketing performance of small and medium industries in Bali. *Proceedings of the 2nd International Conference on Business and Management of Technology (ICONBMT 2020)*, *40*(1), 89-105. https://doi.org/10.2991/aebmr.k.210510.040

Salgado, C. C. R., Aires, R. F. de F., & de Araújo, A. G. (2022). Transient Competitive Advantage Model (TCAM) to analyze companies in the context of transience. *Global Journal of Flexible Systems Management*, *23*(2), 185–199. https://doi.org/10.1007/s40171-021-00296-4

Santalainen, T. (2019). Sustainable strategizing: Extending competitive advantages to viability advantage. *CSR, Sustainability, Ethics & Governance*, *33*(23), 87-104. https://doi.org/10.1007/978-3-030-06014-5_5

Saunders, M. N., Lewis, P., & Thornhill, A. (2015). *Research methods for business students PDF eBook*. Pearson Higher Ed.

Sebastian, I. M., Ross, J. W., Beath, C., Mocker, M., Moloney, K. G., & Fonstad, N. O. (2020). How big old companies navigate digital transformation. *Strategic Information Management*, *43*(21), 133-150. https://doi.org/10.4324/9780429286797-6

Soltanizadeh, S., Abdul Rasid, S. Z., Mottaghi Golshan, N., & Wan Ismail, W. K. (2017). Business strategy, enterprise risk management and organizational performance. *Management Research Review*, *39*(9), 1016-1033. https://doi.org/10.1108/mrr-05-2015-0107

Teece, D. J. (2019). Dynamic Capabilities: Routines versus Entrepreneurial Action. *Journal of Management Studies*, *49*(8), 1395–1401.

Warner, K. S., & Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long Range Planning*, *52*(3), 326-349. https://doi.org/10.1016/j.lrp.2018.12.001