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Effect of Product Diversification Strategies on Revenue Generation in Kenya Wildlife Service–Managed National Parks in Kenya

[1]Gladys Jepkemboi Kosgei, [2]Dr. Godfrey Makau

[1]Post Graduate Student, Jomo Kenyatta University of Agriculture and Technology

[2]Lecturer, Jomo Kenyatta University of Agriculture and Technology

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ABSTRACT

Purpose: This study sought to examine the effect of product diversification strategies on revenue generation in Kenya Wildlife Service managed national parks in Kenya.

Methodology: A cross sectional descriptive and explanatory research design was adopted. The target population comprised Kenya Wildlife Service staff in 10 Kenya Wildlife Service managed national parks, drawn from top level management, middle level management, and support staff, while secondary data were obtained from park level financial and administrative records. Stratified random sampling was used to select respondents, and primary data were collected using structured questionnaires. Validity was ensured through expert review, and reliability was assessed using Cronbach's alpha. Data were analyzed using descriptive statistics, correlation analysis, and multiple regression analysis, and the results were presented in tables and figures.

Findings: The study concluded that broadening visitor facing services, strengthening digital systems, expanding revenue sources, and deepening stakeholder partnerships can significantly enhance revenue outcomes and financial resilience in protected areas.

Unique Contribution to Theory Practice and Policy: KWS should adopt a deliberate and strategic approach to broadening and managing revenue streams. This can be achieved by expanding and professionalizing concessions, leases and licensing arrangements for tourism.

Keywords: *Product Diversification, Revenue Generation, Wildlife Tourism, Tourism Development*

INTRODUCTION

Revenue generation is fundamental to the sustainability and performance of organizations because it determines their ability to finance operations, implement strategic priorities, and fulfil institutional mandates. According to Richard (2012), organizations with stable revenue streams are better positioned to maintain stakeholder confidence and achieve long-term strategic objectives. However, increasing environmental uncertainty, market volatility, and rising stakeholder expectations have exposed the limitations of relying on single-source funding models. As noted by the World Bank (2021), conservation institutions are increasingly shifting towards diversified revenue portfolios that combine tourism receipts, public funding, private investment, and market-based financing mechanisms. Product diversification, defined by Ansoff (2017) as the expansion of products, services, and value-creation mechanisms, has therefore emerged as a strategic approach for reducing financial risk and enhancing organizational resilience, although its success depends on effective implementation and strategic alignment (Duho & Onumah, 2019).

The importance of revenue diversification is particularly evident in the tourism and conservation sector, where financial performance is highly vulnerable to external shocks such as economic downturns, pandemics, security concerns, and changing travel preferences. Following the COVID-19 pandemic, the United Nations World Tourism Organization (UNWTO, 2024) reported an unprecedented decline in international tourism, demonstrating the vulnerability of tourism-dependent institutions. In Kenya, the Ministry of Tourism and Wildlife (2025) observed that the pandemic significantly reduced tourist arrivals and tourism earnings despite the sector's substantial contribution to employment and national income. Although tourism performance has improved, the World Travel and Tourism Council (WTTC, 2025) projects that the sector will continue to face periodic volatility, highlighting the need for tourism organizations to adopt diversified products and innovative revenue models that strengthen financial resilience.

Within this context, the Kenya Wildlife Service (KWS) is mandated to conserve wildlife while ensuring the financial sustainability of Kenya's national parks. Historically, KWS has relied heavily on gate fees and visitor-related income, making its revenue highly susceptible to fluctuations in tourism demand. According to the Tourism Research Institute (2021), park visitation declined from over 2.2 million visitors in 2019 to approximately 913,000 in 2020, resulting in a corresponding decline in gate revenue. In response, KWS has prioritised product diversification through expanded visitor services, digital innovations, diversified revenue streams, and strategic partnerships, as outlined in the Kenya Wildlife Service (2024) Business Plan. However, despite these strategic initiatives, there remains limited empirical evidence on how specific product diversification strategies influence revenue generation within KWS-managed national parks. This study therefore seeks to address this gap by examining the effect of product

diversification strategies on revenue generation in Kenya Wildlife Service-managed national parks.

Statement of Problem

Despite the strong recovery and continued growth of Kenya's tourism sector, revenue generation within Kenya Wildlife Service (KWS)-managed national parks is expected to be financially stable and resilient to support conservation activities and long-term sustainability. However, this expectation has not been fully realized because park revenues remain heavily dependent on gate entry fees and visitor numbers, making them highly vulnerable to external shocks. While international tourist arrivals increased to approximately 2.4 million in 2024 and tourism earnings rose from KSh 377.49 billion in 2023 to about KSh 452.20 billion in 2024 and nearly KSh 0.5 trillion in 2025 (Ministry of Tourism and Wildlife, 2025; Tourism Research Institute, 2025), KWS reports that nearly four-fifths of park revenue is generated by only a few flagship parks, with most parks continuing to rely predominantly on gate receipts (Kenya Wildlife Service, 2023; Kenya Wildlife Service, 2024). This revenue concentration exposes KWS to financial instability while affecting its ability to adequately finance critical conservation functions such as anti-poaching operations, ecological monitoring, habitat management, infrastructure maintenance, and human–wildlife conflict mitigation.

Previous studies suggest that product diversification can enhance financial resilience by expanding revenue sources and reducing dependence on a single income stream (Markowitz, 1952). However, existing empirical research has largely focused on private-sector firms, financial institutions, and tourism enterprises, with limited attention given to public conservation agencies such as KWS (Sun et al., 2017). Furthermore, few studies have examined how specific dimensions of product diversification including service diversification, digital diversification, revenue stream diversification, and ecosystem diversification, influence objective measures of revenue generation within protected areas, particularly in Sub-Saharan Africa (Farmaki, 2015; Shkurti & Kushi, 2024). Consequently, this study seeks to fill this empirical gap by examining the effect of product diversification strategies on revenue generation in Kenya Wildlife Service-managed national parks, thereby providing evidence to guide KWS managers and policymakers in developing more resilient and sustainable revenue models.

LITERATURE REVIEW

Theoretical Framework

This study is anchored on four complementary theories that collectively explain how product diversification strategies influence revenue generation in Kenya Wildlife Service (KWS)-managed

national parks. The Resource-Based View (Wernerfelt, 1984; Barney, 1991) provides the foundation by asserting that organizations achieve superior performance through the effective deployment of valuable and unique internal resources and capabilities. In this study, these capabilities enable KWS to develop and manage diversified products and services that enhance revenue generation. The Technology Acceptance Model (Davis, 1989) complements this perspective by explaining how the successful adoption of digital innovations, such as online booking platforms, cashless payment systems, and digital marketing tools, depends on users' perceptions of their usefulness and ease of use, thereby improving revenue collection and operational efficiency. Diversification Strategy Theory (Ansoff, 1957; Rumelt, 1974) further explains that expanding revenue sources and product offerings reduces dependence on a single income stream, spreads financial risk, and strengthens long-term financial sustainability.

Stakeholder Theory (Freeman, 1984) completes the theoretical foundation by emphasizing that sustainable organizational performance depends on collaboration with multiple stakeholders, including local communities, private tourism operators, development partners, and conservation organizations. Such partnerships facilitate ecosystem diversification by expanding tourism products, attracting investment, and enhancing visitor experiences, which ultimately contribute to increased revenue generation. Collectively, these four theories provide a comprehensive explanation of how internal organizational capabilities, technology adoption, strategic diversification, and stakeholder collaboration interact to support the implementation of product diversification strategies. Together, they offer a strong theoretical basis for examining how service diversification, digital diversification, revenue stream diversification, and ecosystem diversification influence revenue generation in Kenya Wildlife Service-managed national parks.

Conceptual Framework

The conceptual framework links the independent variables to the dependent variable. The independent variables of the study comprise service diversification, digital diversification, revenue stream diversification, and ecosystem diversification. The dependent variable is revenue generation. Figure 1 presents the conceptual framework that is adopted in the study.

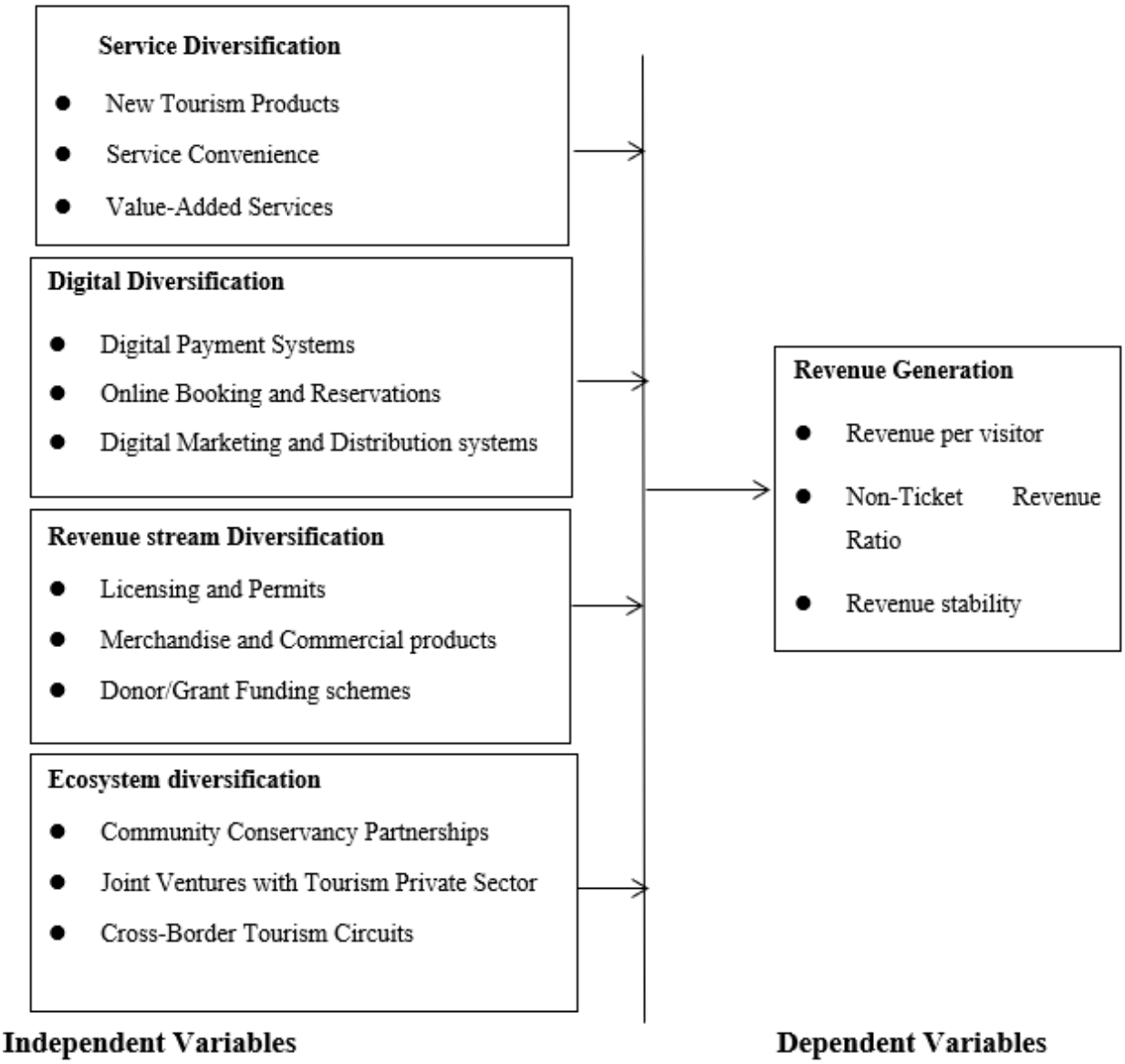

Figure 1: Conceptual Framework

Empirical Review

Empirical studies generally show that service diversification enhances revenue generation by broadening tourism offerings and improving visitor experiences. For instance, Bolea and Cosma (2022) found that diversified tourism products improved destination competitiveness, while Lorde

et al. (2023) reported that destinations offering a wider range of tourism experiences generated higher and more stable tourism receipts. Similarly, the World Bank (2023) observed that protected areas combining wildlife viewing with complementary services such as guided walks and cultural experiences achieved higher revenue per visitor and longer visitor stays. However, Naidoo et al. (2019) cautioned that diversification only yields financial benefits where adequate infrastructure, staff capacity, and market access exist. Despite these contributions, most studies were conducted at destination or cross-country level rather than within state-managed protected areas, and they did not examine specific service diversification dimensions such as new tourism products, service convenience, and value-added services against park-level revenue indicators. The current study addresses this contextual and conceptual gap by examining how service diversification influences revenue generation in Kenya Wildlife Service (KWS)-managed national parks.

Studies on digital diversification indicate that digital technologies improve revenue generation by enhancing visitor convenience, operational efficiency, and revenue accountability. Mollik and Tabash (2026), established that perceived usefulness and ease of use significantly influenced the adoption of e-ticketing systems, resulting in more predictable ticketing revenue, while Islam (2023) found that digital ticketing reduced revenue leakages and improved traceability of gate receipts. Similarly, Lemon and Verhoef (2016) argued that digital touchpoints across booking, payment, and post-visit experiences increase customer spending and repeat visitation. Nevertheless, these studies also acknowledge that digital systems only generate financial benefits where users trust the technology and where supporting infrastructure and connectivity are adequate. Moreover, existing evidence is largely drawn from hotels, heritage sites, and urban attractions in Asia, with limited research conducted in African wildlife tourism settings. The current study fills this contextual gap by investigating the effect of digital payment, booking, and marketing systems on revenue generation in KWS-managed national parks.

Research on revenue stream diversification consistently demonstrates that organizations with multiple income sources experience greater financial stability than those relying on a single revenue source. Carroll and Stater (2009), found that non-profit organizations with diversified income portfolios experienced lower revenue volatility, while Kim (2017) reported that diversified revenue enhanced the financial health of arts organizations. Similarly, Khieng and Dahles (2015) and Qu (2019) established that diversified funding improved organizational resilience during periods of financial uncertainty, although diversification also increased administrative costs. Despite these findings, the literature has primarily focused on non-profit organizations, government finance, and NGOs rather than state-managed conservation agencies. Furthermore, previous studies have not examined specific revenue sources such as licensing, merchandising, concession fees, and donor funding in relation to park-level revenue indicators including revenue stability and non-ticket income. This study addresses these conceptual and contextual gaps by

assessing the influence of revenue stream diversification on revenue generation in KWS-managed national parks.

Empirical evidence further suggests that ecosystem diversification, through partnerships and collaborative conservation models, contributes to both conservation outcomes and revenue generation. Nthiga et al. (2015), found that partnerships between communities and tourism enterprises in Kenya increased local incomes and conservation benefits, while Harrison et al. (2015) argued that the effectiveness of such collaborations depends on fairness, transparency, and stakeholder engagement. Studies on community conservancies also indicate that partnerships with tourism operators generate stable income and strengthen conservation efforts. However, much of this evidence is based on community conservancies and qualitative case studies rather than state-managed national parks, limiting the generalizability of the findings. In addition, few studies have quantitatively measured the depth of partnerships and statistically linked ecosystem diversification to park-level revenue outcomes. The present study fills this methodological and contextual gap by examining how community partnerships, private-sector collaborations, and cross-border tourism initiatives influence revenue generation in KWS-managed national parks.

METHODOLOGY

The study adopted a cross-sectional research design, enabling the collection of both primary and secondary data from the selected Kenya Wildlife Service (KWS)-managed national parks without manipulating the study environment. Methodological triangulation was employed by integrating survey data from KWS staff with secondary financial data to enhance the validity of the findings. The target population comprised 10 KWS-managed national parks and 667 staff involved in tourism operations, revenue management, and partnership activities across top, middle, and operational management levels. Secondary data were obtained from KWS financial and administrative records covering the 2020/2021–2024/2025 financial years to generate objective measures of revenue generation, including revenue per visitor, non-ticket revenue ratio, and revenue stability (Kenya Wildlife Service, 2025). A stratified random sampling technique was used to classify respondents according to management level, after which simple random sampling was applied within each stratum to select individual participants. The sample size was determined using Yamane's (1967) formula at a 95% confidence level and a 5% margin of error. Primary data were collected using semi-structured questionnaires, while secondary data were obtained through a structured data extraction sheet. Prior to data collection, the researcher obtained ethical and administrative approvals from Jomo Kenyatta University of Agriculture and Technology (JKUAT), the National Commission for Science, Technology and Innovation (NACOSTI), KWS headquarters, and the respective park management offices. Participation was voluntary, and respondents were assured of confidentiality and the use of data solely for academic purposes. Data

were analysed using both descriptive and inferential statistics. Pearson product-moment correlation analysis was conducted to determine the strength and direction of the relationships between product diversification strategies and revenue generation indicators, while multiple regression analysis was used to examine the effect of service diversification, digital diversification, revenue stream diversification, and ecosystem diversification on revenue generation in KWS-managed national parks and to test the study hypotheses.

The results were presented using tables and graphs. The following was the overall regression model:

$$Y = \beta o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \quad \text{..... (i)}$$

RESULTS

Descriptive Statistics

Service Diversification

Respondents were presented with statements relating to the introduction, enhancement, and convenience of visitor-facing services and were requested to indicate their level of agreement on a five-point Likert scale. The findings presented in Table 1 show that respondents strongly agreed that service diversification practices are widely implemented in KWS-managed national parks and are positively perceived by staff. This is indicated by the composite mean of service diversification items, which was approximately 4.20 with an average standard deviation of about 1.04.

Table 1: Descriptive Statistics for Service Diversification

Statement	Mean	Std. Dev
The park has introduced new tourism products or experiences in the last three years	4.53	1.289
The park regularly updates or redesigns its tourism products to respond to changing visitor preferences	4.13	1.133
The park offers packages or bundled services that make it easier for visitors to plan and purchase their visit	4.09	0.931
Park operating hours, access arrangements, and booking options are convenient for the main visitor segments we serve	4.21	1.026
The park provides value-added services that significantly enhance overall visitor satisfaction	4.33	0.984
The park has invested in additional visitor amenities that improve the overall visitor experience	3.89	0.875
Average	**4.20**	**1.04**

Digital Diversification

Respondents were presented with statements relating to the use of digital payment systems, online booking and reservation platforms, and digital marketing and information channels, and were requested to indicate their level of agreement on a five-point Likert scale. The findings presented in Table 2 show that the digital diversification items recorded a composite mean of approximately 4.04 with an average standard deviation of about 0.89. This indicates that respondents had a positive perception of the extent and effectiveness of digital initiatives in KWS-managed national parks, with moderate variability in responses.

Table 2: Descriptive Statistics for Digital Diversification

Statement	Mean	Std. Dev
Digital payment systems are in place and actively used for most visitor transactions in this park	3.99	1.09
A large proportion of visitor payments are processed through official electronic or cashless channels rather than cash	3.89	1.001
An online booking or reservation system is available for park entry and related services	3.98	0.856
The availability of online booking and reservation options has improved the efficiency and accuracy of visitor management	4.35	0.787
Digital marketing platforms are used consistently to promote this park's tourism products and offers	3.99	0.838
Information shared through the park's digital channels is timely, accurate and useful for visitor planning and decision-making	4.02	0.752
Average	**4.04**	**0.89**

Revenue Stream Diversification

Respondents were presented with statements relating to the diversification of revenue sources and were requested to indicate their level of agreement on a five-point Likert scale. The findings presented in Table 3 show that revenue stream diversification items recorded a composite mean of approximately 4.17 with an average standard deviation of about 0.75, indicating a generally high level of agreement with relatively low dispersion in responses. These findings suggest that KWS-managed national parks have made notable progress in broadening their revenue base beyond traditional gate fees.

Table 3: Descriptive Statistics for Revenue Stream Diversification

Statement	Mean	Std. Dev
This park generates a significant portion of its income from licenses and permits related to tourism or conservation activities	4.15	0.877
Procedures for developing and managing license and permit-based revenue opportunities are well established in this park	4.36	0.748
Merchandise and other commercial products linked to this park are actively promoted as a source of additional revenue	4.14	0.801
Income from merchandise and other commercial products makes a noticeable contribution to this park's total revenue	3.89	1.004
The park has secured donor, grant, or project funding that directly supports its tourism or conservation activities	4.25	0.512
Non-ticket revenue sources, such as concessions, licenses, merchandising, and donor or project funding, are increasingly important for this park's financial sustainability	4.21	0.541
Average	**4.17**	**0.75**

Ecosystem Diversification

Respondents were presented with statements relating to partnerships and collaborative arrangements with communities, private tourism operators, and wider tourism circuits, and were requested to indicate their level of agreement on a five-point Likert scale. The findings presented in Table 4 show that ecosystem diversification items recorded a composite mean of approximately 4.30 with an average standard deviation of about 0.89, indicating a high level of agreement and moderate variability in responses. These findings suggest that collaborative arrangements with communities, private sector partners, and regional tourism networks are well embedded in KWS-managed national parks and are perceived as important for enhancing product offerings, market reach, and revenue generation.

Table 4: Descriptive Statistics for Ecosystem Diversification

Statement	Mean	Std. Dev
There are formal partnerships between this park and neighboring communities or conservancies that support tourism or conservation activities	4.08	0.936
Collaborative arrangements with local communities have contributed to new or improved tourism products linked to this park	3.99	0.739
The park has active joint ventures or long-term collaborations with private tourism operators	4.29	1.133
Collaborations with private tourism operators have helped this park reach new visitor segments or markets	4.79	0.914
This park is integrated into wider tourism circuits or routes that link it with other parks or cross-border destinations	4.51	0.829
Participation in wider tourism circuits or regional initiatives has increased the visibility and attractiveness of this park	4.12	0.813
Average	**4.30**	**0.89**

Revenue Generation

This subsection presents descriptive results for the three revenue generation indicators used in the study: revenue per visitor, the non-ticket revenue ratio, and revenue stability across KWS-managed national parks over the period 2020–2024.

Revenue per Visitor Bands

As shown in table 5 below, revenue per visitor across KWS-managed national parks improved steadily between 2020 and 2024. The proportion of parks earning below KSh 5,000 per visitor declined from 50% (5 out of 10 parks) in 2020 to 10% (1 park) in 2024, while the number of parks generating KSh 20,000 or more per visitor increased from none in 2020 to three (30%) by 2024. Parks in the middle revenue bands (KSh 5,000–9,999 and KSh 10,000–19,999) remained relatively stable, indicating a gradual upward shift in overall revenue performance rather than abrupt changes. These findings suggest that KWS-managed parks have progressively enhanced their revenue-generating capacity, likely reflecting improvements in service offerings, pricing strategies, tourism product diversification, and the recovery of the tourism sector following the COVID-19 pandemic.

Table 5: Distribution of Parks by Revenue per Visitor Bands

Year	Below Band (< KSh 5,000)	Band 2 (KSh 5,000–9,999)	Band 3 (KSh 10,000–19,999)	Above Band (≥ KSh 20,000)
2020	5	3	2	0
2021	4	3	2	1
2022	3	3	3	1
2023	2	3	3	2
2024	1	3	3	3

Note: Bands are based on average revenue per visitor at park level for each year.

Non-Ticket Revenue Ratio

The non-ticket revenue ratio showed a steady improvement across KWS-managed national parks between 2020 and 2024, indicating reduced reliance on gate collections. The proportion of parks deriving less than 10% of their revenue from non-ticket sources declined from 60% (6 out of 10 parks) in 2020 to 20% (2 parks) in 2024, while the number of parks generating more than 31% of their revenue from non-ticket sources increased from one park to five, including two parks where non-ticket income exceeded 50% of total revenue. This is shown in Table 6 below. These trends demonstrate a gradual expansion of alternative revenue streams, such as concessions, licences, accommodation, merchandising, and donor-funded projects, highlighting the growing role of revenue diversification in strengthening the financial resilience of KWS-managed national parks.

Table 6: Distribution of Parks by Non-Ticket Revenue Ratio

Year	Below Band (< 10%)	Band 2 (10–30%)	Band 3 (31–50%)	Above Band (> 50%)
2020	6	3	1	0
2021	5	3	2	0
2022	4	3	2	1
2023	3	3	3	1
2024	2	3	3	2

Note: Bands are based on the share of total park revenue derived from non-ticket sources in each year

Revenue Stability Categories

Table 7 shows the results. Revenue stability across KWS-managed national parks improved considerably between 2020 and 2024, reflecting greater financial resilience over time. In 2020, five out of ten parks experienced high revenue variability while only two had low variability, largely due to disruptions caused by the COVID-19 pandemic. By 2024, the number of parks with

low revenue variability had increased to five, whereas those with high variability had declined to two, with three parks exhibiting moderate variability. This trend indicates that parks have become more resilient to revenue fluctuations, likely due to strengthened revenue structures and increased diversification of income sources, thereby enhancing their long-term financial sustainability.

Table 7: Revenue Stability Categories across Parks

Year	Low Variability	Moderate Variability	High Variability
2020	2	3	5
2021	3	3	4
2022	3	4	3
2023	4	4	2
2024	5	3	2

Note: Categories are based on the coefficient of variation of annual park revenue over the review period.

Correlation Analysis

The Pearson correlation analysis revealed that all four product diversification strategies had positive and statistically significant relationships with revenue generation. Digital diversification exhibited the strongest association with revenue generation ($r = 0.539$, $p < 0.001$), followed by revenue-stream diversification ($r = 0.403$, $p < 0.001$), ecosystem diversification ($r = 0.246$, $p = 0.006$), and service diversification ($r = 0.195$, $p = 0.009$). These findings indicate that improvements in service offerings, digital initiatives, revenue source diversification, and ecosystem partnerships are all associated with higher revenue generation in KWS-managed national parks, with digital diversification demonstrating the strongest relationship.

Table 8: Correlation Analysis

	Service Diversification	Digital Diversification	Revenue-Stream Diversification	Ecosystem Diversification	Revenue Generation
Service Diversification	1.000				
Sig. (2-tailed)					
Digital Diversification	0.061	1.000			
Sig. (2-tailed)	0.093				
Revenue-Stream Diversification	0.262*	0.326*	1.000		
Sig. (2-tailed)	0.016	0.019			
Ecosystem Diversification	0.324**	0.347**	0.234**	1.000	
Sig. (2-tailed)	0.002	0.000	0.000		
Revenue Generation	0.195**	0.539**	0.403**	0.246**	1.000
Sig. (2-tailed)	0.009	0.000	0.000	0.006	
N	208	208	208	208	208

Regression Analysis

A multiple regression analysis was conducted to determine the combined effect of service diversification, digital diversification, revenue-stream diversification, and ecosystem diversification on revenue generation. The results indicate a strong relationship between the independent variables and revenue generation ($R = 0.786$), with the model explaining 61.8% of the variation in revenue generation ($R^2 = 0.618$). This suggests that the four product diversification strategies jointly make a substantial contribution to revenue generation in KWS-managed national parks.

Table 9: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.786a	0.618	0.544	0.21965

a. Predictors: (Constant), Service Diversification, Digital Diversification, Revenue-Stream Diversification, Ecosystem Diversification

b. Dependent Variable: Revenue Generation

The ANOVA results were used to assess the overall significance of the regression model. The findings show that the model is statistically significant (F = 18.199, p = 0.021), indicating that the independent variables collectively provide a good explanation of variations in revenue generation and that the regression model is appropriate for predicting the dependent variable.

Table 10: ANOVA (Model Significance)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	349.72	4	87.43	18.199	0.021b
Residual	979.94	203	4.827		
Total	1329.66	207			

a. Dependent Variable: Revenue Generation

b. Predictors: (Constant), Service Diversification, Digital Diversification, Revenue-Stream Diversification, Ecosystem Diversification

The regression coefficients indicate that all four product diversification strategies have positive and statistically significant effects on revenue generation. Digital diversification exerts the strongest influence ($\beta = 0.442$, $B = 0.538$, $p < 0.001$), followed by revenue-stream diversification ($\beta = 0.361$, $B = 0.411$, $p < 0.001$), ecosystem diversification ($\beta = 0.284$, $B = 0.329$, $p < 0.001$), and service diversification ($\beta = 0.176$, $B = 0.213$, $p = 0.009$). These results demonstrate that improvements in digital capabilities, diversified revenue sources, ecosystem partnerships, and service offerings each contribute significantly to enhanced revenue generation.

Table 11: coefficients

Predictors	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	0.719	0.633		1.136	0.000
Service Diversification	0.213	0.141	0.176	1.511	0.009
Digital Diversification	0.538	0.108	0.442	4.982	0.000
Revenue-Stream Diversification	0.411	0.121	0.361	3.397	0.000
Ecosystem Diversification	0.329	0.132	0.284	2.492	0.000

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary of Findings

The study examined the effect of service diversification, digital diversification, revenue-stream diversification, and ecosystem diversification on revenue generation in KWS-managed national parks using both primary survey data and secondary financial indicators. The findings revealed that all four product diversification strategies positively and significantly influenced revenue generation. Service diversification enhanced visitor experiences through improved tourism products and services, contributing to higher revenue performance. Digital diversification emerged as the strongest predictor of revenue generation by improving payment systems, online bookings, marketing, and revenue collection efficiency. Revenue-stream diversification strengthened financial sustainability by expanding non-ticket income sources, reducing dependence on gate fees, and enhancing resilience during periods of fluctuating visitation. Ecosystem diversification, through partnerships with communities, tourism operators, and other stakeholders, also contributed significantly to improved revenue outcomes by supporting product development, market access, and stable revenue growth. Overall, the findings demonstrate that adopting diverse product diversification strategies is critical for improving revenue generation and enhancing the long-term financial sustainability of KWS-managed national parks.

Conclusions

The study concludes that product diversification strategies significantly enhance revenue generation in KWS-managed national parks. Specifically, service diversification improves visitor experiences and increases revenue through the introduction and enhancement of tourism products and services, while digital diversification strengthens operational efficiency, customer convenience, and market reach through digital payment systems, online booking, and digital marketing. Revenue-stream diversification reduces dependence on gate fees by expanding alternative income sources, thereby improving financial stability and resilience against fluctuations in visitor numbers. Ecosystem diversification also contributes positively by fostering partnerships with communities, private tourism operators, and conservation stakeholders to support product development, market access, and resource mobilization. Overall, the study concludes that these four dimensions of product diversification jointly account for a substantial proportion of the variation in revenue generation, demonstrating that effective diversification is a critical strategy for enhancing the long-term financial sustainability of KWS-managed national parks.

Recommendations

The study recommends that KWS strengthen product diversification strategies to enhance revenue generation and financial sustainability across its managed national parks. Specifically, KWS should expand and regularly update tourism products and visitor services to meet changing market needs, while improving visitor amenities and promoting bundled tourism packages. The organization should also scale up digital transformation by enhancing digital payment systems, online booking platforms, and digital marketing to improve operational efficiency and market reach. Additionally, KWS should diversify its revenue base by expanding concessions, licensing, merchandising, and exploring innovative financing mechanisms to reduce reliance on gate fees. Finally, KWS should strengthen partnerships with local communities, private tourism operators, conservation organizations, and regional tourism bodies to support product development, broaden market access, and enhance the long-term resilience and sustainability of park revenues.

Suggested Area for Further Research

Future research should extend the analysis beyond KWS-managed national parks to include other protected areas such as national reserves, community conservancies, and privately managed wildlife areas to determine whether similar relationships exist across different governance contexts. Researchers should also examine additional factors influencing revenue generation, including pricing strategies, branding, visitor satisfaction, infrastructure quality, governance, and macroeconomic conditions, to explain the variation not captured by the current study. Furthermore, longitudinal or panel studies are recommended to evaluate the long-term effectiveness and sustainability of product diversification strategies in enhancing revenue generation within conservation and tourism institutions.

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