

# Structural Ambidexterity and Firm Performance: The Moderating Role of Dynamic Capabilities in Chartered Private Universities in Kenya

Harriet Kinya Mwenda\*<sup>1</sup>, Beatrice Ombaka<sup>2</sup>, Wanjau Kenneth Lawrence<sup>3</sup>

<sup>1</sup>Business and Economics Department, School of Business, Karatina University, Kenya

<sup>2</sup>Department of Human Resource Development, School of Business, Karatina University.

<sup>3</sup>Department of Business and Economics, School of Business, Karatina University.

\*Correspondence Author

DOI: <https://doi.org/10.47772/IJRISS.2026.100400386>

Received: 10 April 2026; Accepted: 15 April 2026; Published: 11 May 2026

## ABSTRACT

In the contemporary Kenyan higher education landscape, institutions are increasingly challenged by technological shifts and the implementation of the 2025 New Funding Model. These pressures necessitate a strategic shift toward organizational ambidexterity as the ability to balance operational efficiency with innovative exploration. The study examined the relationship between structural ambidexterity (SA) and institutional performance in chartered private universities in Kenya, while assessing the moderating role of dynamic capabilities (DC). Grounded in the Resource-Based View (RBV) and Dynamic Capabilities Theory (DCT), the research employed a cross-sectional survey design. Data were collected from 195 senior management respondents across 27 chartered private universities. The analysis utilized partial least squares structural equation modeling (PLS-SEM) via Advanced Analysis of Network Composites (ADANCO 2.3.2) software. SA was modeled as a higher-order formative composite, and moderation was tested using the product indicator approach. The results indicated a significant positive relationship between SA and perceived institutional performance ( $p < 0.001$ ), supporting H<sub>1</sub>. Moreover, DC significantly moderated the relationship between SA and perceived performance ( $p < 0.001$ ) of private universities, supporting H<sub>2</sub>. The moderation effect demonstrated a significant medium effect size ( $f^2 = 0.1926$ ), indicating that the interaction term contributed meaningfully to performance over and above the direct effects of the predictor variables. The moderated model explains 29.21% of perceived university performance. It is concluded that, balancing exploration and exploitation, supported by strong DC, appears essential for enhancing performance in Kenyan chartered private universities. Accordingly, university governing boards should strengthen DC among senior management and adopt structural designs that support innovation alongside traditional academic functions, while policymakers create a regulatory environment that promotes institutional agility and diversification.

**Keywords:** Structural ambidexterity, Dynamic Capabilities, Institutional Performance, PLS-SEM, Private Universities

## INTRODUCTION

Ambidexterity refers to an organization's ability to be equally proficient at two different, and often conflicting, activities: of Exploitation and Exploration (Alshaketheep et al., 2026). Exploitation is about the baseline activities of an institution in an efficient way. It focuses on refinement, efficiency, implementation, and execution. It targets short-term profits and stability. It includes normal activities such as improving its current revenue collection system. However, the Exploration (Innovation) pillar is about doing something new. It focuses on search, variation, risk-taking, and discovery. It targets long-term survival and growth (Ghina et al., 2025) (e.g., researching and piloting a completely new digital economy framework). That means, an ambidextrous university

explores and exploits technologies and markets efficiently, developing new competencies in conjunction with existing ones.

Empirically, the strategic importance of organizational ambidexterity as a driver of institutional performance is well-documented in contemporary management literature. Meta-analytic evidence confirms a positive and significant relationship between ambidextrous configurations and overall performance across diverse organizational settings (Junni et al., 2013). Within the specific context of higher education, this capability allows entrepreneurial universities to maintain a productive balance between research and teaching, directly enhancing their competitive standing (García-Hurtado et al., 2024). Furthermore, the application of ambidextrous strategies extends to institutional branding, where it has been shown to improve brand performance and foster deeper stakeholder commitment (García-Hurtado et al., 2024). Collectively, these studies suggest that the ability to simultaneously pursue exploration and exploitation is a fundamental requirement for universities seeking to thrive in increasingly complex environments.

Theoretically, ambidexterity functions as a high-level DC that enables institutions to navigate the tension between resource exploitation and market exploration. By balancing the optimization of current revenue streams with the pursuit of entrepreneurial opportunities, organizations avoid the stagnation of a success trap. This dual-processing capacity allows for the continuous refinement of core competencies while simultaneously fostering innovation and venture growth. Consequently, ambidextrous institutions achieve superior performance by maintaining operational stability while proactively capturing first-mover advantages in a volatile educational landscape trap (O'Reilly & Tushman, 2004).

In times of rapid change, a structural approach is preferred and within SA, the balance between exploration and exploitation is achieved through directing simultaneous efforts towards both areas (Clauss et al., 2021). Moreover, within SA, institutions create separate units or teams dedicated to exploration (innovation) and exploitation (efficiency). These units operate independently yet align toward shared goals. This separation allows universities to explore new academic and administrative practices while maintaining operational excellence. This allows the different business units to adopt different strategies and structures to appropriately fit the business unit focus on either exploration or exploitation (Weiss & Kanbach, 2022). Clauss et al., (2021) points out that firms create dual structures that separate the contradictory tasks and functions within one organization. This structural separation creates the necessary flexibility to react to the conflicting task environments and creates ownership of the individual tasks (Schulze & Pinkow, 2020). SA, where organizations create separate units for exploration and exploitation, has proven effective in managing the distinct processes required for innovation and efficiency.

In the field of strategic management, dynamic capabilities represent an organization's ability to purposefully adapt its resource base to respond to rapidly changing environments (Mele et al., 2024). While ordinary capabilities allow a firm to produce a product or provide a service, DC are the higher-level functions that allow the organization to change how it makes a living (Ghina et al., 2025). DC, essential for adaptation, allow these universities to embrace digital technologies and innovative pedagogical approaches. Performance metrics in this context include not only student enrollment and academic quality but also community engagement, social impact, and responsiveness to local challenges, emphasizing the need for a balance between innovation and core educational values.

In the face of technological shifts, the 2026 New Funding Model, and rising enrollment, universities are moving beyond traditional management to embrace SA (Kolster, 2021). These institutions aim to remain competitive as they balance operational efficiency (exploitation) with innovation in digital pedagogy and diverse revenue streams (exploration). Success now hinges on DC integrating market-oriented programs, industry partnerships, and AI adoption to improve graduate outcomes while navigating a student-centered funding landscape prone to tuition arrears and infrastructure strain (Jurksiene & Pundziene, 2016; Kolster, 2021). It should also be noted that, SA is widely regarded as the most practical and very promising form of creating an ambidextrous organization (Kafetzopoulos, 2020). While public discourse often focuses on the macro-economic crises of the sector, there is limited understanding of how internal organizational configurations allow some universities to

thrive while others face stagnation. This study has been conducted to examine the influence of SA and dynamic capabilities on the operational and strategic performance of chartered private universities in Kenya.

This paper contributes to the dynamic capability and firm performance literature in several ways. First, it integrates SA into the conceptual framework to explore new insights into how SA fits within an organization's dynamic capabilities and performance strategy. Second, it expands the current understanding of dynamic capabilities and SA and interrelates the different elements of dynamic capabilities (sensing, seizing and transforming capabilities) with SA and firm performance. Third, we connect the organizations transformation capability with their exploration and exploitation efforts. Fourth, we offer a conceptual model that visualizes the relationships between SA, firm performance, and the micro foundational activities of dynamic capabilities that underpin the organization's strategy and process for securing a competitive advantage. The research also provides an empirical foundation for institutional leaders to navigate the complexities of the current educational landscape.

## **THEORETICAL FRAMEWORK**

### **Resource-based view theory**

The Resource-Based View (RBV), introduced by Birger Wernerfelt (1984) and refined by Jay Barney (1991a), posits that a firm's competitive advantage stems from its unique resources and capabilities, particularly those that are valuable, rare, inimitable, and non-substitutable (VRIN) (Purba et al., 2023). RBV emphasizes leveraging internal strengths to exploit existing opportunities and explore new ones (Philbin, 2012).

In the context of SA, RBV suggests that, chartered private universities in Kenya can strategically allocate resources to simultaneously pursue exploration developing innovative programs aligned with emerging trends and exploitation refining and enhancing existing academic offerings (Mbithi, 2024). Unique resources such as faculty expertise, curriculum strengths, and alumni networks can be reconfigured to support both dimensions, ensuring that universities remain agile while maintaining core competencies (Utkirov, 2024). Strategic partnerships, targeted faculty development, and investment in educational technologies further enable institutions to balance exploration and exploitation effectively, reinforcing sustained competitive advantage in the evolving Kenyan higher education sector (Philbin, 2012).

### **Dynamic capabilities theory**

Dynamic Capabilities Theory (DCT), pioneered by Teece et al. (1991b), extends the Resource-Based View by arguing that competitive advantage stems not just from possessing resources, but from an organization's ability to "integrate, build, and reconfigure" them in volatile environments. DCT is operationalized through three primary clusters: sensing environmental shifts, seizing opportunities through strategic investments, and transforming (reconfiguring) organizational structures to maintain alignment with market demands Wang (2007)

In the context of Kenyan chartered private universities, DCT provides the theoretical lens to understand how institutions navigate the "success trap" of exploitation while pursuing exploratory innovation. While SA provides the formal framework for balancing these dualities, DC act as the catalytic mechanism that allows university leadership to act swiftly on identified opportunities (Leih & Teece, 2016). Specifically, high-order capabilities in sensing and reconfiguring ensure that the transition between exploration (e.g., AI-driven pedagogy) and exploitation (e.g., core program efficiency) is seamless, thereby moderating the impact of ambidextrous configurations on overall institutional performance (Sarta et al., 2021).

### **Hypotheses Development**

#### **Structural ambidexterity and Performance**

Structural ambidexterity balances exploration and exploitation through separate units to execute these conflicting innovation strategies (O'Reilly and Tushman, 2008; Raisch and Birkinshaw, 2008). SA consists of two organizational forms: spatial separation and parallel structures (Raisch et al., 2009). Most researchers view

spatial separation as the autonomous structural separation of units for exploitation and exploration, with an overarching vision to enable exploration and exploitation, whereby the internal resources are leveraged to support both units and create synergies (Jansen et al., 2009; O'Reilly et al., 2009; Smith and Tushman, 2005). Within SA, also parallel structures have been studied in the functional domain of internationalization, alliancing, project teams or networks and mergers and acquisitions (e.g. Lavie et al., 2011; Lavie and Rosenkopf, 2006; Lucena and Roper, 2016; Raisch and Birkinshaw, 2008).

Structural ambidexterity achieves balance between exploration and exploitation by creating separate, dedicated units for each activity, which operate independently but align toward shared organizational goals (Úbeda-García et al., 2020). This separation allows institutions to pursue innovative academic and administrative practices while maintaining operational efficiency, effectively managing the inherent tensions between exploration and exploitation (Dranev et al., 2020). The organization of exploration and exploitation in two completely different and independent subunits, SA leads to an increased demand on top management skills, as the top management needs to internally align and coordinate the completely different subunits with their individual strategies, structures, competencies, cultures and systems in order to create ambidexterity for the firm.

In universities, effective performance measurement systems have been implemented to monitor progress and outcomes. These systems are designed to support both innovative projects and ongoing operations, ensuring that performance metrics are regularly reviewed and updated to reflect current priorities and goals (Bibi et al., 2021).

Zimmermann, Raisch and Birkinshaw (2015), state that, strategic priorities are the resources allocated to support both exploration and exploitation efforts as well as the leadership commitment to properly balance these dual aims. Together with encouraging creativity and adaptability, these principles support the ongoing operations' efficiency. Firms create these dual structures to separate conflicting tasks and functions within one organization, providing the necessary flexibility to react to different task environments and creating ownership of individual tasks (Sarangee et al., 2022). This structural separation also necessitates increased top management skills to internally align and coordinate the completely different subunits with their individual strategies, structures, competencies, cultures, and systems in order to create ambidexterity for the firm (Úbeda-García et al., 2020). Based on these insights, the following hypothesis is proposed:

**H<sub>1</sub>:** Structural ambidexterity has positive influence on institutional performance of chartered private universities in Kenya.

### **Dynamic Capabilities as a Moderator of Structural Ambidexterity and Performance**

Dynamic capabilities is about an organization's ability to integrate, build, and reconfigure internal and external competencies to respond to rapidly changing environments (Heaton et al., 2023). They are widely recognized as shaping the effectiveness of organizational ambidexterity in influencing performance outcomes (Souza & Takahashi, 2019). The core components of DC of sensing, seizing, and transforming capabilities enable organizations to identify opportunities, mobilize resources, and adapt operational processes to sustain competitive advantage. Capabilities allow institutions to align faculty expertise, curriculum design, and administrative systems with emerging educational trends and policy changes. This in turn makes them escalate ambidexterity capabilities and their ability to innovate. It also makes them do their routine activities efficiently. These DC enable ambidextrous institutions to simultaneously innovate academic offerings while maintaining operational efficiency, improving both institutional performance and responsiveness to market demands (Ferreira et al., 2021). Empirical findings demonstrate that dynamic capabilities positively moderate the relationship between intellectual capital and organizational performance, suggesting that firms with stronger adaptive capabilities better leverage knowledge resources to enhance performance (Awwad, 2025). Similarly, DC significantly improved competitive advantage and firm performance through innovation, while organizational learning capability further strengthened these relationships (Ferreira et al., 2021). According to Barreto (2010), the processes of dynamic capabilities are either directly linked to an organizational competitive advantage or indirectly, by altering the organization's operational capabilities or altering its knowledge base, thus improving the organizations' performance. However, it is less clear how these dynamic capabilities impact the

organization’s explorative or exploitative innovation strategy and competitive advantage through sensing, seizing and transforming capabilities. Thus, it is proposed in this study that:

**H2:** Dynamic capabilities moderate the effect of SA on performance

**Figure 1:** is the results visual diagram of analytic model. It shows how ambidexterity activities, supported by DC, are expected to influence the performance of chartered private universities in Kenya

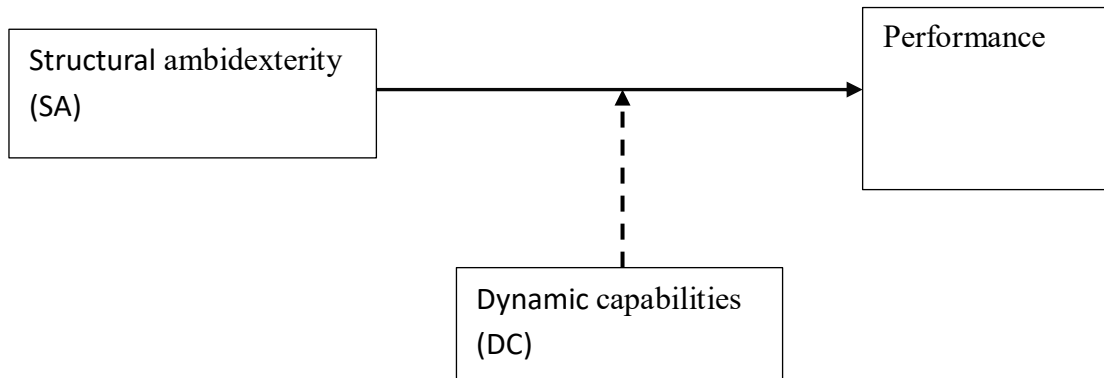


Figure 1: Conceptual framework

## METHODOLOGY

### Research Design

A cross-sectional survey was used in this study because it described features of samples that differ on a key characteristic, measured at a single point in time (Harland & Heller, 2026; Maier et al., 2023). In addition, the cross-sectional survey enables assessing relationships between variables and it provides opportunity to identify moderators between variables. The approach is viewed as simple, practical and economical, provides results that are timely and overcomes the problem of loss of subjects due to attrition. (Hunziker & Blankenagel, 2024) .

### Population of the study

The study focused on 27 chartered private universities in Kenya, using a purposive sample of senior management respondents, including Registrars (Academic Affairs and Planning and Administration), Deans of Schools, and Directors of Quality Assurance, Research, and Extension. While the research is situated within an institutional context, the unit of analysis was set at the individual level to capture the nuanced perceptions of these key managers. This approach reflects the understanding that organizational phenomena are enacted through the strategic decisions and professional insights of senior leaders. In this context, the capacity to sense, seize, and transform institutional operations is contingent upon managers’ ability to navigate the tensions between exploration and exploitation effectively. Adopting a census approach, the study targeted all 27 chartered private universities in Kenya. A purposive cluster of nine key informants was identified per institution including Registrars, Deans, and Directors of Quality Assurance, Research, and Extension yielding a total respondent base of 243.

### Research Instrument

The study utilized a structured questionnaire to collect primary data, employing validated scales from strategic management literature that were contextualized to align with the unique environment of chartered private universities in Kenya. The instrument was organized into distinct sections to capture the multidimensional nature of the variables, utilizing a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The study adopted the framework developed by Jansen (Jansen et al., 2006) to measure SA. This instrument assesses the organization’s dual ability to pursue exploration and exploitation, with items such as: "Our department frequently updates existing curricula to improve current student learning outcomes" (exploitative focus) and

"Our university frequently experiments with new, AI-driven pedagogical methods" (exploratory focus). The moderating variable, DC was operationalized using the Kump(Kump et al., 2019)scale, which captures institutional agility through sensing, seizing, and transforming. Representative items include: "We proactively scan the Kenyan education landscape to identify emerging student and industry needs" (sensing) and "The university effectively reconfigures its academic resources and personnel to remain competitive when external policies change" (transforming). Finally, Institutional Performance was assessed using the student completion rate, employee engagement and research output

**Data Analysis**

The study employed PLS-SEM to test the hypothesized relationships, utilizing Advanced Analysis of Composite (ADANCO 2.3.2) software (Henseler, 2020). ADANCO is one of the PLS-SEM based tool that models construct as composites. It aligns with the theoretical conceptualization of SA as a strategic capability formed by the integration of its underlying dimensions. Furthermore, PLS-SEM provides a robust framework for testing complex moderation, allowing for the estimation of the interaction between ambidexterity and DC without the strict distributional assumptions of normality required by traditional regression techniques. In analyzing the data, the ADANCO proved a great utility for carrying out confirmatory composite analysis (CCA) an exceptional strength in modern PLS-SEM (Jhantasana, 2023). Equation 1 shows the mathematical formulation of the study. But, Figure 2 provides a visual representation of the study model and its associated hypotheses

$$PERFORMANCE = \beta_0 + \beta_1(SA) + \beta_2(DC) + \beta_3(SA \times DC)$$

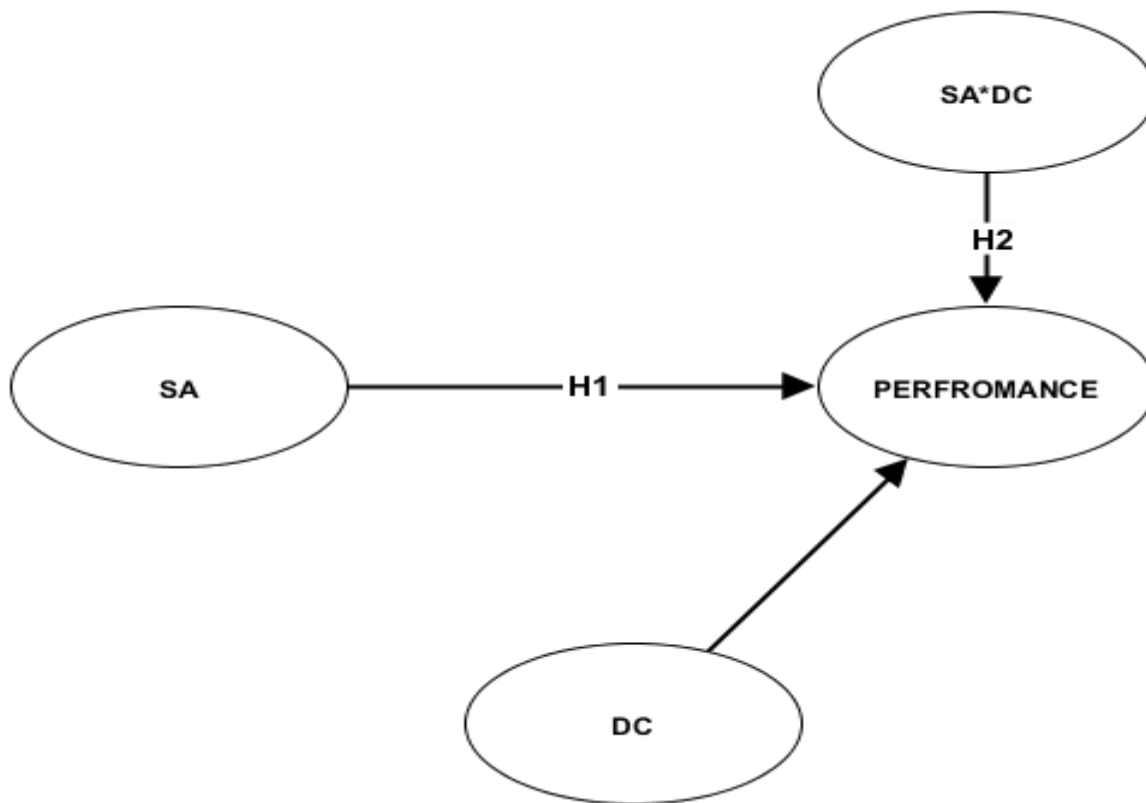


Figure 2: graphical representation of analytical regression model

**Measurement Model Assessment**

In this measurement stage, the measurement model is evaluated for reliability and validity of constructs and indicators. Next, thee model fit.

Construct Reliability is determined using Dijkstra-Henseler’s rho and Jöreskog’s composite reliability (rho) with both requiring a threshold above 0.70 to confirm internal consistency (Dijkstra & Henseler, 2015).

Convergent validity is established via the Average Variance Extracted (AVE) which should be less than 0.50 (Hair Jr et al., 2020). Finally, Discriminant validity is assessed using the HTMT ratio. All constructs should fall below the conservative threshold of 0.85, confirming that they capture distinct strategic phenomena (Henseler & Chin, 2010). These procedures were adhered to in this study.

### Structural Model Assessment

In this second stage, the structural model is assessed using a non-parametric bootstrapping procedure with commonly recommended 5,000 sub-samples to determine the statistical significance of the hypothesized paths (Becker et al., 2023). Evaluation criteria include path coefficients (beta), t-statistics, p-values, and the coefficient of determination (R<sup>2</sup>).

Additionally, in SEM, the effect of the exogenous construct is assessed using the Cohen's (Cohen, 1988) effect size (f<sup>2</sup>). It provides a robust evaluation of the predictor's contribution to the endogenous construct. The f<sup>2</sup> statistic measures the change in the coefficient of determination (R<sup>2</sup>) when a specific predictor is included versus excluded from the model (Samartha, 2020). In moderation analysis, this approach enables the assessment of the practical significance of the interaction term beyond statistical significance. The f<sup>2</sup> effect size is computed based on the change in R<sup>2</sup>;

$$f^2 = \frac{R^2_{included} - R^2_{excluded}}{1 - R^2_{included}} \quad 1$$

In this analysis, the f<sup>2</sup> was computed by comparing the explained variance of the model with the interaction term to that of the model without the interaction term. Table 1 is the interpretation criteria proposed by Cohen (Cohen, 1988)

Table 1: Effect size threshold

f <sup>2</sup> Value range	Effect Size	Interpretation
< 0.02	None	The predictor has no practical predictive power for the endogenous construct.
0.02 < f <sup>2</sup> < 0.15	Small	The predictor has a weak but statistically noticeable impact on the outcome.
0.15 < f <sup>2</sup> < 0.35	Medium	The predictor has a moderate and significant practical impact on the outcome.
f <sup>2</sup> > 0.35	Large	The predictor has a dominant and substantial practical impact on the outcome.

Source: Cohen (Cohen, 1988). Statistical Power Analysis for the Behavioral Sciences. Routledge.

### Modeling Strategy

The choice of optimal order is critical and is sometimes not given adequate attention in SEM related. It is data-driven and it has serious estimation consequences if not well addressed. Studies in model order explains that a higher-order model is only "optimal" if the first-order factors are highly correlated (usually > 0.70) and if the higher-order structure provides a more parsimonious explanation of the data (Koufteros et al., 2009). At this phase, we examined the Intercorrelations between the constructs first order constructs. Strong correlations among these constructs provide support for the formation of higher-order construct. Example, ambidexterity the first order latent factors are exploitation activities and exploration activities. The correlation between the primary exploitation and exploration guided the choice of the order of the constructs.

Furthermore, researchers distinguish between latent (reflective) and formative (emergent) constructs, as this is essential for construct validity. In reflective constructs, indicators reflect the underlying construct, whereas in formative constructs, indicators collectively form the construct (Finn & Wang, 2014; Freeze & Raschke, 2007). This distinction is important because ADANCO applies different estimation procedures: reflective constructs are modeled as common factors, while formative constructs are treated as composites (Venturini et al., 2023). This dual capability enables robust modeling of complex theoretical frameworks.

In this study, the three constructs were modeled as a second-order formative construct composed first-order reflective dimensions and then second order formative indicators. SEM studies recommend that, each first-order construct be modeled as reflective multiple indicators, and then formative in the higher order. So, the study adopted the recommended reflective–formative hierarchical modeling approach in the construction of the analytic SEM model (Figure 3 and 4)

## RESULTS

### Preliminary analysis results

At the initial stage of the analysis, data was coded and cleaned using IBM SPSS Statistics. Preliminary analyses were conducted to prepare the data for structural equation modeling (SEM). SPSS facilitated initial item refinement through Exploratory Factor Analysis (EFA) prior to conducting confirmatory analysis within the SEM framework. The data were subsequently evaluated using the intraclass correlation coefficient (ICC) to assess the level of agreement among respondents within universities and to determine the appropriate unit of analysis. As shown in Table 1, the ICC results were low (ICC (1) = 0.032; ICC (2) = 0.184), indicating limited agreement among respondents within universities. Consequently, the individual respondent was retained as the unit of analysis for SEM. Conducting these initial assessments, including the ICC, reflects a rigorous methodological approach aimed at avoiding potential analytical missteps.

Table 2: Interclass correlation results

Model	Type	ICC	F	df1	df2	Sig.	LCI	UCI
Two-Way Random	Single Measures	0.032	1.15	26	168	0.152	-0.010	0.080
Two-Way Random	Average Measures	0.184	1.15	26	168	0.152	0.020	0.370

### Descriptive statistics

#### Descriptive statistics of Respondents

As reported in Table 3, a total of 195 respondents participated in the study out of the 243 targeted. The sample comprised more males than females, and the majority of participants were aged between 31 and 50 years. Most respondents held a master’s degree, while a smaller proportion had bachelor’s or doctoral qualifications. Experience levels varied, with over one-third of participants reporting more than ten years of service. The institutions represented ranged widely in size, with the largest groups drawn from medium-sized student populations.

Table 3 : Descriptive results of respondents

Category	Sub-category	n	Percent (%)
Office	Registrar Academics & Planning and Administration	48	88.9
	Dean of School	103	76.3

	Quality Assurance Officer	24	88.9
	Director Research and Innovation	20	74.1
Gender	Male	116	59.5
	Female	79	40.5
Age group	0-30 years	25	12.8
	31-50 years	132	67.7
	Above 50 years	38	19.5
Education level	Bachelor's degree	23	11.8
	Master's degree	99	50.8
	PhD	73	37.4
Experience	Less than 1 year	2	1.0
	1-3 years	29	14.9
	4-6 years	53	27.2
	7-10 years	44	22.6
	More than 10 years	67	34.4
No. of Students	Less than 1000	10	5.1
	1000-4000	57	29.2
	4001-8000	56	28.7
	8001-12000	36	18.5
	12001-16000	27	13.8
	Above 16000	9	4.6

### Descriptive Results of Study Variables

The mean and standard deviation provide an initial overview of the variables and are critical for understanding their distribution prior to modeling. Table 3 shows that respondents perceived the presence of SA ( $M = 3.86$ ,  $SD = 0.84$ ) and DC ( $M = 3.69$ ,  $SD = 0.87$ ) in their institutions as moderately high, whereas performance ( $M = 3.24$ ,  $SD = 0.82$ ) was perceived at a moderate level. This indicates that while institutions are generally seen to exhibit ambidextrous and DC, overall performance is viewed as less pronounced.

**Table 4: Descriptive results of study variables**

Variables	Mean	Std. Dev
SA	3.86	0.838

<b>Performance</b>	<b>3.24</b>	<b>0.818</b>
<b>DC</b>	<b>3.69</b>	<b>0.874</b>

**Modeling Strategies and Steps**

**Evaluation of the Measurement Model**

In the measurement model stage, the primary purpose is to assess the reliability and validity of the constructs. Subsequently, model fit is evaluated to determine how well the data fit the proposed model.

First, the focus is on the model reliability and validity. In this step, the measurement model has been evaluated through a series of tests to ensure the reliability and validity of the latent constructs and their associated indicators (Hair Jr et al., 2020). Figure 2 depicts the factor loadings of all indicators, while Table 5 presents the reliability and validity results. Construct reliability has been determined using Dijkstra-Henseler’s rho ( $\rho_A$ ) and Jöreskog’s composite reliability ( $\rho_c$ ), with all values exceeding the required 0.70 threshold. Convergent validity is established via the AVE, confirming that each construct explains at least 50% of the variance in its indicators ( $AVE > 0.50$ ). Finally, discriminant validity is confirmed using the HTMT ratio, applying a conservative threshold of less than 0.85 to ensure that each construct is empirically distinct and captures a unique strategic phenomenon.

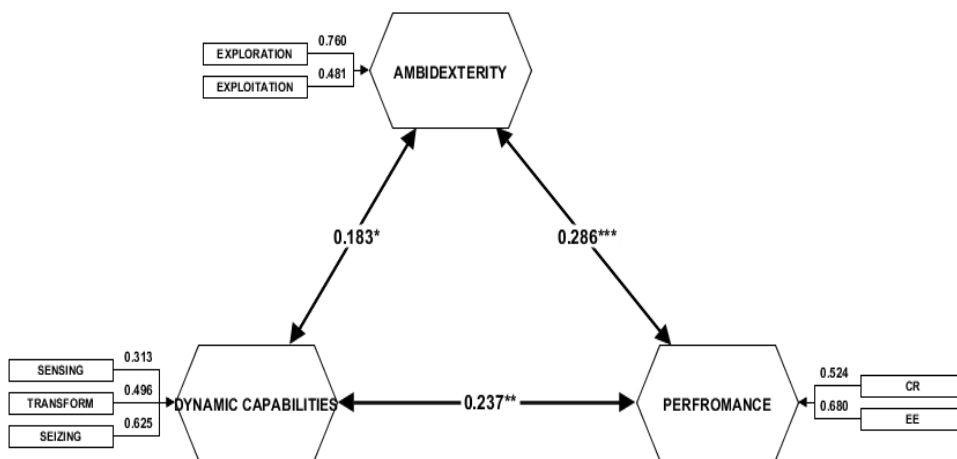


Figure 3: Assessment of the Measurement Model: Standardized Indicator Weights and Inter-Construct Correlations.

**Construct Reliability and Convergent Validity**

As shown in Table 5, all the constructs demonstrate strong internal consistency and reliability. Dijkstra-Henseler’s rho ( $\rho_A$ ) ranges from 0.7679 to 0.8926, which is well above the recommended threshold of 0.70. Similarly, Jöreskog’s composite reliability ( $\rho_c$ ) and Cronbach’s alpha values consistently exceed 0.75, further suggesting the reliability of the measurement scales. Convergent validity was assessed using the AVE. An AVE value of 0.50 or higher indicates adequate convergent validity. The results show that all constructs met the recommended threshold. These results suggest that the indicators explain more than 50% of the variance in their respective constructs, thereby establishing a robust foundation for the structural analysis.

Table 5: Construct Reliability and Convergent Validity results

Construct	Dijkstra-Henseler’s $\rho_A$	Jöreskog’s $\rho_c$	Cronbach’s $\alpha$	AVE
<b>Performance</b>	<b>0.8926</b>	<b>0.8923</b>	<b>0.8927</b>	<b>0.7343</b>
<b>Ambidexterity</b>	<b>0.8600</b>	<b>0.8528</b>	<b>0.8524</b>	<b>0.6603</b>

<b>DC</b>	<b>0.7679</b>	<b>0.7566</b>	<b>0.7535</b>	<b>0.5121</b>
<b>Interaction</b>	<b>1.0000</b>	<b>1.0000</b>	<b>1.0000</b>	<b>1.0000</b>

Note: Interaction term results of 1.00 are expected as it is a single-item composite product.

Discriminant validity has been evaluated using the HTMT ratio, where a value of less than 0.85 indicates that the constructs are empirically distinct. As shown in Table 6, the highest HTMT value is 0.4262 (between SA and Performance), which is well below the conservative threshold of 0.85.

Table 6: Discriminant Validity

Construct	Performance	Ambidexterity	Dyn. Capability	Interaction
Performance	—			
Ambidexterity	0.4262	—		
Dyn. Capability	0.4203	0.3883	—	
Interaction	0.2916	0.2820	0.1505	—

**Goodness of model fit**

The second part of the model assessment is about the fit assessment which includes the Standardized Root Mean Square Residual (SRMR) and exact fit tests based on squared Euclidean distance (d<sub>ULS</sub>) and geodesic distance (d<sub>G</sub>), indicate a high degree of model adequacy. Specifically, the SRMR of 0.0348 falls well below the conservative 0.08 threshold recommended by Henseler et al. (2016). The reported values for d<sub>ULS</sub> (0.0436 < HI95 = 0.0823) and d<sub>G</sub> (0.0121 < HI95 = 0.0174) demonstrate that the model-implied covariance matrix does not significantly deviate from the empirical data. Because all discrepancy values remain within the 95% and 99% bootstrap CI, the null hypothesis of correct model specification has been supported. Collectively, these findings provide a robust foundation for the subsequent structural path analysis and hypothesis testing.

Table 7: Goodness of model fit (saturated model)

Fit type	Value	HI95	HI99
<b>SRMR</b>	0.0348	0.0478	0.0636
Euclidean distance (d <sub>ULS</sub> )	0.0436	0.0823	0.1457
Geodesic distance (d <sub>G</sub> )	0.0121	0.0174	0.0254

Lastly on the measurement model evaluation, Table 8 presents the Variance Inflation Factor (VIF) values, which have been assessed to detect potential collinearity issues in the exogenous variables in the model. All reported VIF values range from 1.0000 to 1.1641, falling well below the conservative threshold of 3.3 (Hair et al., 2022). These results indicate that the indicators for SA, DC and Institutional Performance are conceptually distinct and do not suffer from multicollinearity. Consequently, the independence of the measurement items has been established, ensuring the statistical stability of the structural path estimates.

Table 8: Indicator Multicollinearity

Indicator	Performance	Ambidexterity	Dynamic capabilities	Interaction
<b>Exploration</b>		<b>1.0290</b>		

<b>Exploitation</b>		<b>1.0290</b>		
<b>Sensing</b>			<b>1.1641</b>	
<b>Transform</b>			<b>1.1393</b>	
<b>Seizing</b>			<b>1.0965</b>	
<b>CR</b>	<b>1.1455</b>			
<b>EE</b>	<b>1.1455</b>			
<b>Interaction score</b>				<b>1.0000</b>

With the measurement model having met most of the common required psychometric properties for reliability and validity, the analysis demonstrates a high degree of fit between the empirical data and the theoretical constructs. The next step tests the structural model to evaluate hypotheses and the moderating effect of DC in Kenyan chartered private universities.

### Structural model analysis

Figure 2 illustrates the measurement model, where the indicator weights have been evaluated to determine the specific contribution of each indicator to its respective construct. The interaction term is introduced as a product of DC and ambidexterity scores. The moderation test is implemented via the two-stage approach because, simulation studies have shown that two-stage approach excels in terms of parameter recovery and statistical power (e.g., (Becker et al., 2018), (Henseler & Chin, 2010).

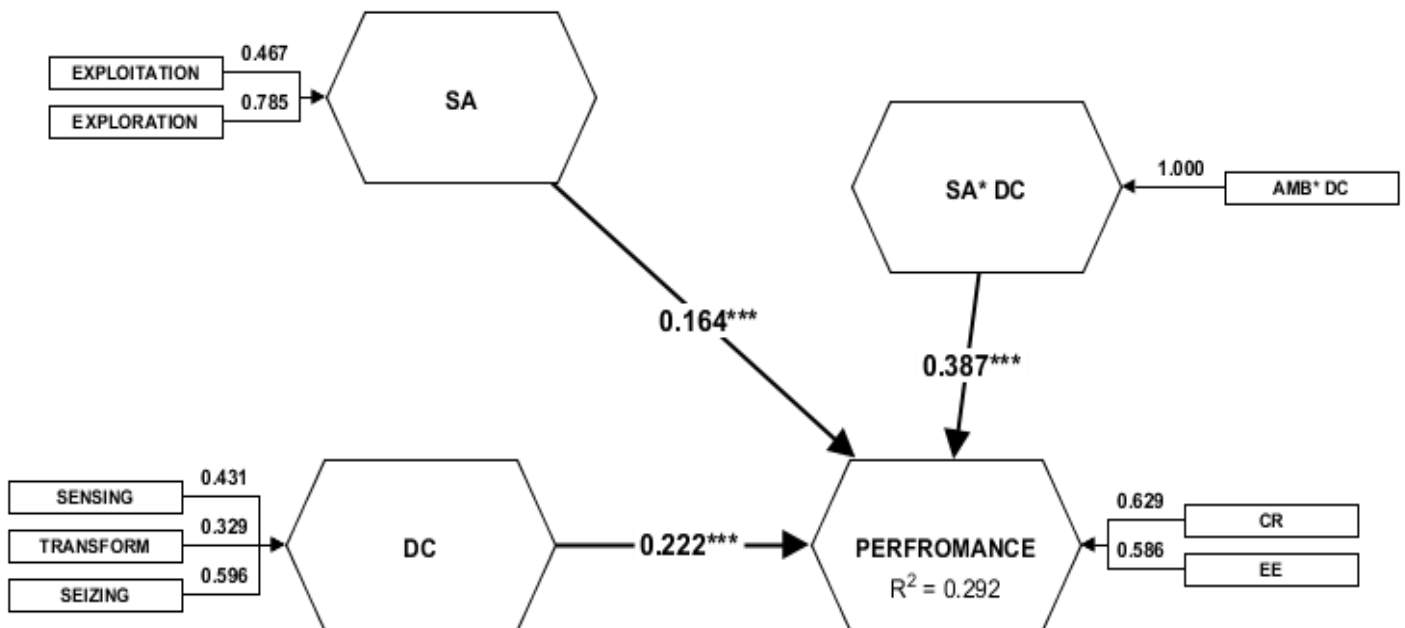


Figure 4: PLS-SEM structural model results for the moderating effect of DC on SA and performance nexus. CR: completion Rate, EE: Employee Engagement

Table 9 presents the original as well as the bootstrap results for the standardized regression coefficient of the structural paths used to test the study hypotheses. The results indicate that SA has a positive and statistically significant relationship with perceived institutional performance ( $\beta = 0.164$ ,  $p < 0.001$ , CI: 0.1083-0.2511), thus supporting hypothesis H1. This suggests that respondents who reported higher levels of SA also reported higher levels of institutional performance. Most notably, the results support hypothesis H2, which proposed a moderating role of DC in the relationship between SA and performance. As shown, the interaction (SA\*DC) is positive and statistically significant ( $\beta = 0.387$ ,  $p < .001$ , CI: 0.2886-0.4118). This indicates that respondents

reporting higher levels of DC also reported a stronger relationship between SA and perceived institutional performance.

Regarding effect size, the interaction term yielded  $f^2 = 0.1926$ , which according to Cohen criteria, it is medium effect. This effect size results together with the significance results, implies that the moderator would account for a significant higher variance in perceived institutional performance over and above the direct effects of the predictor variables. According to Cohen Thus, the  $f^2$  value of 0.1926 reflects that the DC is associated with enhanced model’s explanatory power.

The findings suggest that the joint presence of ambidextrous structures and DC, as perceived by respondents, provides a stronger explanation for variations in performance than either construct considered independently. The moderated model accounts for 29,2% variance in perceived university performance.

Table 9: Hypothesis test results

Paths effect	Standard bootstrap results							
	Original $\beta$	Mean $\beta$	SE	t	p	LCI	UCI	$f^2$
SA → PERFROMANCE	0.164	0.164	0.0312	6.1003	0.0000	0.1083	0.2511	0.0240
DC → PERFROMANCE	0.106	0.106	0.0309	3.4410	0.0006	0.0364	0.1747	0.0445
SA*DC → PERFROMANCE	0.383	0.387	0.0256	14.5518	0.0000	0.2886	0.4118	0.1926

NOTE: LCI; lower Confidence Interval, UCI: Upper Confidence Interval, SE: Standard Error

Figure 5: shows the moderation plots results for probing the moderation effect visually. Moderation is said to occur when the plots are not parallel. As shown in the results, the plots are not parallel. This non-parallel pattern provides visual evidence of a moderation effect, suggesting that the strength of the primary relationship is contingent upon respondents’ reported levels of DC.

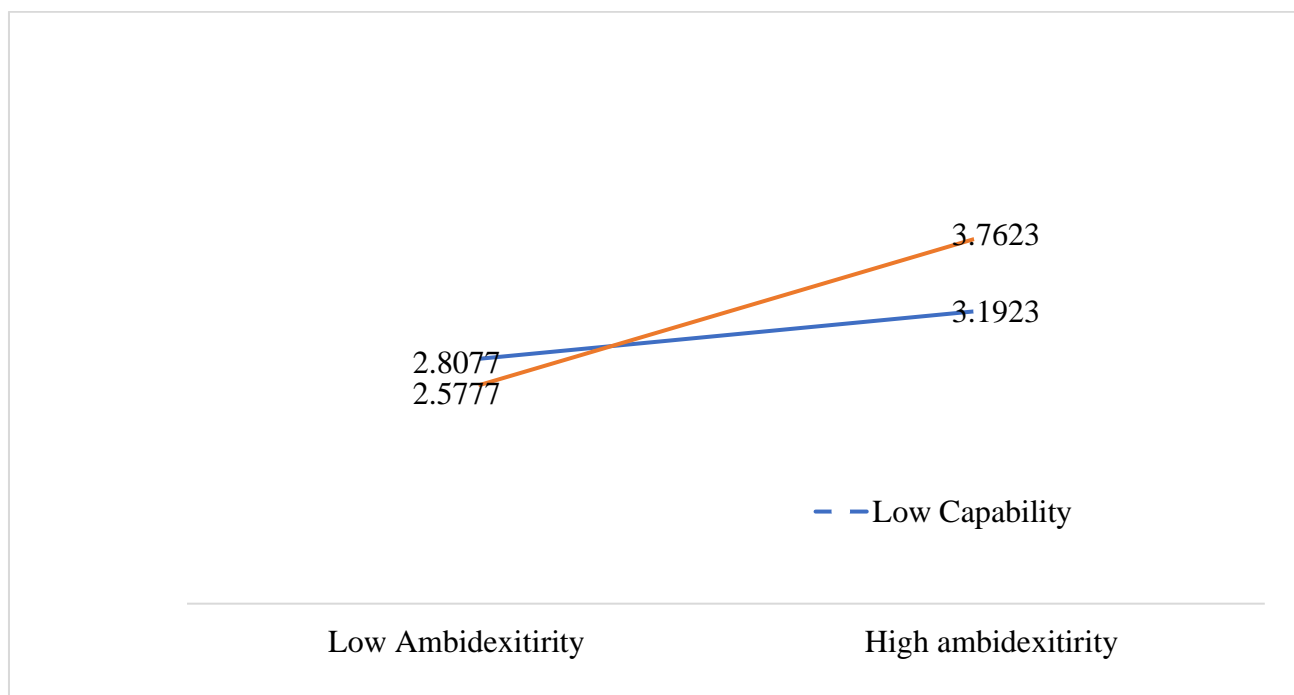


Figure 5; Moderation analysis plot

---

## DISCUSSION

The findings of this study reveal that SA is positively and significantly associated with perceived performance in Kenyan chartered private universities, suggesting that respondents reporting higher levels of exploration and exploitation also reported better performance outcomes. Most notably, the interaction between ambidexterity and DC demonstrated a significant moderating effect, indicating that respondents reporting higher levels of DC also reported a stronger relationship between SA and performance. This finding suggests that the perceived performance benefits associated with SA are greater when supported by stronger adaptive and integrative capacities. All the research hypotheses were supported.

From a theoretical perspective, this study contributes to the scholarship in strategic management by providing empirical evidence linking SA, DC, and perceived organizational performance in higher education, an area that has received limited attention in emerging economies. By demonstrating the moderating role of DC, the study extends ambidexterity theory by suggesting that the relationship between SA and performance varies across different levels of adaptive and integrative capacities. Scholars can build upon this model to investigate similar mechanisms in other sectors or regions, thereby enriching the literature on innovation management and strategic entrepreneurship.

In practical terms, the results offer insights for policymakers and university leaders. The findings suggest the potential value of investing in initiatives that strengthen DC, such as faculty development programs, resource mobilization strategies, and organizational routines that support both exploration and exploitation. Policies that encourage adaptive capacity, timely resource allocation, and strategic agility may be associated with improved performance outcomes. For academia, these findings provide a framework to assess and benchmark innovation strategies, guiding evidence-informed decision-making in curriculum design, research initiatives, and operational excellence.

Methodologically, this study stands out for its use of advanced PLS-SEM, incorporating exact fit criteria, bootstrapped confidence intervals, and interaction analysis. This approach allows for the simultaneous estimation of latent constructs and their indicators, offering a nuanced understanding of complex relationships. The model captures both statistical significance and practical relevance through effect size measures, ensuring that the findings are robust and substantively meaningful. By applying this analytical framework in a higher education context, the study demonstrates the value of rigorous approaches for exploring innovation and performance dynamics.

While this study provides a robust foundation using PLS-SEM via ADANCO, it is limited by its cross-sectional design, which restricts the ability for causal inference and to infer temporal relationships among the variables. Future research should consider longitudinal approaches to examine how the relationship between SA and perceived performance evolves as even the New Funding Model matures. Additionally, further studies could also seek to explain in more depth how sensing, seizing and transforming capabilities influence an organization's sustainable competitive advantage. Additional in-depth research could reveal how top management implements these sensing, seizing and transformation capabilities in practice, and how these combined capabilities strengthen the organization's strategic management.

## CONCLUSION

Structural ambidexterity was found to be positively and significantly associated with perceived institutional performance. Respondents reporting higher levels of structural arrangements that support both innovative exploration and operational efficiency also reported better strategic outcomes. This suggests that, within Kenyan private universities, balancing stability and change may be linked to improved performance perceptions.

Dynamic Capabilities demonstrated an important positive moderation effect of the relation of SA on performance. Respondents who reported stronger sensing, seizing, and transforming capacities also reported a stronger association between SA and performance. This indicates that adaptive leadership capabilities may

reinforce the perceived benefits of ambidextrous configurations, particularly in the context of the 2025 New Funding Model and the shift toward digital pedagogy.

Based on these findings, it is important that university governing boards consider strengthening DC among senior management. Practically, universities may benefit from exploring structural designs that allow innovation-oriented units to operate alongside traditional academic functions. For policymakers and the Ministry of Education, the results highlight the potential value of a regulatory environment that supports institutional agility, enabling universities to diversify revenue streams and adopt emerging pedagogical approaches while maintaining core educational standards.

This research contributes to the growing body of literature by interrelating SA with DC and firm performance in a conceptual mode. The study concludes that, DC are a fundamental concept, and that this concept acknowledges that SA is an integrated process that enables chartered private universities in Kenya to adapt to dynamic environments.

The study experienced some limitations. For example, the nuances and similarities within the literature, together with the elements that make up the three perspectives, all reflect the complex and challenging task of interrelating perspectives. Another limiting factor was the lack of articles that evaluate the interrelatedness between the theories of organizational SA, DC and firm performance.

## ACKNOWLEDGEMENT

The authors sincerely acknowledge the support and contributions of the management and staff of the 27 chartered private universities in Kenya who participated in this study. Their cooperation and insights were invaluable to the successful collection of primary data. We are grateful to the faculty and colleagues at Karatina University for their guidance and constructive feedback throughout the research process. Special thanks go to our research assistants for their dedication in data collection and entry.

## Conflict of Interest

The authors declare that they have no conflicts of interest related to this study.

## Ethical Statement

This research was conducted in strict accordance with the ethical standards for social science research, including obtaining the necessary administrative clearance from the relevant university authorities and the National Commission for Science, Technology and Innovation (NACOSTI) in Kenya. Participation was entirely voluntary, and informed consent was secured from all respondents prior to data collection.

## ORCID

Harriet Kinya Mwenda  0000-0002-3146-5324

Beatrice Ombaka  0000-0002-0174-1949

Kenneth Lawrence Wanjau  0000-0002-3146-5324

## REFERENCES

1. Alshaketheep, K., Al-Ahmed, H., Zraquat, O., & Deeb, A. (2026). How organizational ambidexterity converts intellectual capital and digital knowledge management into strategic performance in universities. *Journal of Intellectual Capital*, 1–25. <https://www.emerald.com/jic/article/doi/10.1108/JIC-09-2025-0391/1349408>
2. Baía, E. P., & Ferreira, J. J. (2024). Dynamic capabilities and performance: How has the relationship been assessed? *Journal of Management & Organization*, 30(1), 188–217.

- <https://www.cambridge.org/core/journals/journal-of-management-and-organization/article/dynamic-capabilities-and-performance-how-has-the-relationship-been-assessed/0358B6321818FA9A6B5EE160F94BC55E>
3. Barreto, I. (2010), “Dynamic capabilities: a review of past research and an agenda for the future”, *Journal of Management*, Vol. 36 No. 1, pp. 256-280.
  4. Barney, J. (1991a). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
  5. Barney, J. (1991b). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
  6. Becker, J.-M., Cheah, J.-H., Gholamzade, R., Ringle, C. M., & Sarstedt, M. (2023). PLS-SEM’s most wanted guidance. *International Journal of Contemporary Hospitality Management*, 35(1), 321–346. <https://www.emerald.com/ijchm/article/35/1/321/127124>
  7. Bibi, G., Padhi, M., & Dash, S. S. (2021). Theoretical necessity for rethinking knowledge in knowledge management literature. *Knowledge Management Research & Practice*, 19(3), 396–407.
  8. Becker, J.-M., Ringle, C. M., & Sarstedt, M. (2018). Estimating Moderating effects in PLS-SEM and PLSc-SEM: Interaction term generation\* data treatment. *Journal of Applied Structural Equation Modeling*, (2), 1–21. <https://epub.ub.uni-muenchen.de/96102/>
  9. Ceptureanu, S. I., Ferraro, G., Ceptureanu, E. G., & Georgescu, B. (2025). Individual learning ambidexterity behavior and individual job performance in services: The role of organizational structure. *Review of Managerial Science*, 19(8), 2457–2492. <https://doi.org/10.1007/s11846-024-00819-0>
  10. Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. (No Title). <https://cir.nii.ac.jp/crid/1370285712602755592>
  11. Corchuelo Martínez-Azúa, B., Dias, A., & Sama-Berrocal, C. (2025). Exploring the importance of innovation ambidexterity on performance: Insights from NCA and IPMA analysis. *International Journal of Innovation Science*, 17(5), 1278–1300. <https://www.emerald.com/ijis/article/17/5/1278/1250347>
  12. Clauss, T., Kraus, S., Kallinger, F. L., Bican, P. M., Brem, A., & Kailer, N. (2021). Organizational ambidexterity and competitive advantage: The role of strategic agility in the exploration-exploitation paradox. *Journal of Innovation & Knowledge*, 6(4), 203-213.
  13. Dijkstra, T. K., & Henseler, J. (2015). Consistent partial least squares path modeling1. *MIS Quarterly*, 39(2), 297–316. <https://misq.umn.edu/misq/article/39/2/297/428>
  14. Dranev, Y., Izosimova, A., & Meissner, D. (2020). Organizational Ambidexterity and Performance: Assessment Approaches and Empirical Evidence. *Journal of the Knowledge Economy*, 11(2), 676–691. <https://doi.org/10.1007/s13132-018-0560-y>
  15. Dynamic Capabilities—An overview | ScienceDirect Topics. (n.d.). Retrieved April 7, 2026, from <https://www.sciencedirect.com/topics/economics-econometrics-and-finance/dynamic-capabilities>
  16. Ferreira, J., Cardim, S., & Coelho, A. (2021). Dynamic capabilities and Mediating Effects of Innovation on the Competitive Advantage and Firm’s Performance: The Moderating Role of Organizational Learning Capability. *Journal of the Knowledge Economy*, 12(2), 620–644. <https://doi.org/10.1007/s13132-020-00655-z>
  17. Finn, A., & Wang, L. (2014). Formative vs. reflective measures: Facets of variation. *Journal of Business Research*, 67(1), 2821–2826. <https://www.sciencedirect.com/science/article/pii/S0148296312002147>
  18. Freeze, R., & Raschke, R. L. (2007). An assessment of formative and reflective constructs in IS research. <https://aisel.aisnet.org/cgi/viewcontent.cgi?article=1025&context=ecis2007>
  19. García-Hurtado, D., Devece, C., Zegarra-Saldaña, P. E., & Crisanto-Pantoja, M. (2024). Ambidexterity in entrepreneurial universities and performance measurement systems. A literature review. *International Entrepreneurship and Management Journal*, 20(1), 345–366. <https://doi.org/10.1007/s11365-022-00795-5>
  20. Ghina, A., Herliana, S., Eka Kiswardani, W., & Indiyati, D. (2025). Entrepreneurial mindset and ambidextrous capabilities in university start-ups: Exploratory study of business model innovation paths. *Journal of the International Council for Small Business*, 1–49. <https://doi.org/10.1080/26437015.2025.2562186>

21. Guerrero, M., & Menter, M. (2024). Driving change in higher education: The role of Dynamic capability in strengthening universities' third mission. *Small Business Economics*, 63(3), 1321–1337. <https://doi.org/10.1007/s11187-024-00869-4>
22. Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101–110. <https://www.sciencedirect.com/science/article/pii/S0148296319307441>
23. Harland, T. A., & Heller, R. S. (2026). Cross-sectional study: Design, measures, classic example. In *Translational Neurosurgery* (pp. 139–142). Elsevier. <https://www.sciencedirect.com/science/chapter/edited-volume/pii/B9780323905091000400>
24. Heaton, S., Teece, D., & Agronin, E. (2023). and governance: An empirical investigation of financial performance of the higher education sector. *Strategic Management Journal*, 44(2), 520–548. <https://doi.org/10.1002/smj.3444>
25. Henseler, J. (2020). *Composite-based structural equation modeling: Analyzing latent and emergent variables*. Guilford Publications.
26. Henseler, J., & Chin, W. W. (2010). A Comparison of Approaches for the Analysis of Interaction Effects Between Latent Variables Using Partial Least Squares Path Modeling. *Structural Equation Modeling: A Multidisciplinary Journal*, 17(1), 82–109. <https://doi.org/10.1080/10705510903439003>
27. Hunziker, S., & Blankenagel, M. (2024). Cross-Sectional Research Design. In S. Hunziker & M. Blankenagel, *Research Design in Business and Management* (pp. 187–199). Springer Fachmedien Wiesbaden. [https://doi.org/10.1007/978-3-658-42739-9\\_10](https://doi.org/10.1007/978-3-658-42739-9_10)
28. Jansen, J. J. P., Van Den Bosch, F. A. J., & Volberda, H. W. (2006). Exploratory Innovation, Exploitative Innovation, and Performance: Effects of Organizational Antecedents and Environmental Moderators. *Management Science*, 52(11), 1661–1674. <https://doi.org/10.1287/mnsc.1060.0576>
29. Jhantasana, C. (2023). Reviewing ADANCO 2.3. 1 for a modern partial least squares structural equation model to be used in online education during the COVID-19 pandemic. *Asia Social Issues*, 16(4), e255152–e255152. <https://so06.tci-thaijo.org/index.php/asi/article/view/255152>
30. Junni, P., Sarala, R. M., Taras, V., & Tarba, S. Y. (2013). Organizational Ambidexterity and Performance: A Meta-Analysis. *Academy of Management Perspectives*, 27(4), 299–312. <https://doi.org/10.5465/amp.2012.0015>
31. Kafetzopoulos, D. (2020). Organizational ambidexterity: Antecedents, performance and environmental uncertainty. *Business Process Management Journal*, 27(3), 922–940.
32. Jurksiene, L., & Pundziene, A. (2016). The relationship between Dynamic capability and firm competitive advantage: The mediating role of organizational ambidexterity. *European Business Review*, 28(4), 431–448. <https://www.emerald.com/eb/article-abstract/28/4/431/91077>
33. Kafetzopoulos, D. (2021). Organizational ambidexterity: Antecedents, performance and environmental uncertainty. *Business Process Management Journal*, 27(3), 922–940. <https://www.emerald.com/bpmj/article/27/3/922/257400>
34. Kolster, R. (2021). Structural ambidexterity in higher education: Excellence education as a testing ground for educational innovations. *European Journal of Higher Education*, 11(1), 64–81. <https://doi.org/10.1080/21568235.2020.1850312>
35. Koufteros, X., Babbar, S., & Kaighobadi, M. (2009). A paradigm for examining second-order factor models employing structural equation modeling. *International Journal of Production Economics*, 120(2), 633–652. <https://www.sciencedirect.com/science/article/pii/S0925527309001236>
36. Kump, B., Engelmann, A., Kessler, A., & Schweiger, C. (2019). Toward a Dynamic capability scale: Measuring organizational sensing, seizing, and transforming capacities. *Industrial and Corporate Change*, 28(5), 1149–1172. <https://academic.oup.com/icc/article-abstract/28/5/1149/5245299>
37. Lucena, A. and Roper, S. (2016), “Absorptive capacity and ambidexterity in R&D: linking technology alliance diversity and firm innovation”, *European Management Review*, Vol. 13 No. 3, pp. 159-178.
38. Lavie, D., Kang, J. and Rosenkopf, L. (2011), “Balance within and across domains: the performance implications of exploration and exploitation in alliances”, *Organization Science*, Vol. 22 No. 6, pp. 1517-1538.
39. Rosenkopf, L. and Nerkar, A. (2001), “Beyond local search: boundary-spanning, exploration, and impact in the optical disk industry”, *Strategic Management Journal*, Vol. 22 No. 4, pp. 287-306.

40. Leih, S., & Teece, D. (2016). Campus Leadership and the Entrepreneurial University: A Dynamic capability Perspective. *Academy of Management Perspectives*, 30(2), 182–210. <https://doi.org/10.5465/amp.2015.0022>
41. Maier, C., Thatcher, J. B., Grover, V., & Dwivedi, Y. K. (2023). Cross-sectional research: A critical perspective, use cases, and recommendations for IS research. In *International Journal of Information Management* (Vol. 70, p. 102625). Elsevier. <https://www.sciencedirect.com/science/article/pii/S0268401223000063>
42. Martínez-Falcó, J., Marco-Lajara, B., Zaragoza-Sáez, P., & Sánchez-García, E. (2024). The effect of organizational ambidexterity on sustainable performance: A structural equation analysis applied to the Spanish wine industry. *Agribusiness*, 40(4), 773–803. <https://doi.org/10.1002/agr.21846>
43. Mbithi, M. N. (2024). Operational Capabilities, Sponsorship and Performance of Private Chartered Universities in Kenya [PhD Thesis, KeMU]. <http://41.89.31.5:8080/handle/123456789/1833>
44. Mele, G., Capaldo, G., Secundo, G., & Corvello, V. (2024). Revisiting the idea of knowledge-based Dynamic capability for digital transformation. *Journal of Knowledge Management*, 28(2), 532–563. <https://www.emerald.com/jkm/article/28/2/532/1238333>
45. O'Reilly, C. A., & Tushman, M. L. (2008). Ambidexterity as a dynamic capability: Resolving the innovator's dilemma. *Research in Organizational Behavior*, 28, 185–206.
46. O'Reilly, C.A. and Tushman, M.L. (2008), "Ambidexterity as a dynamic capability: resolving the innovator's dilemma", *Research in Organizational Behavior*, Vol. 28, pp. 185-206.
47. Philbin, S. P. (2012). Resource-based view of university-industry research collaboration. 2012 Proceedings of PICMET'12: Technology Management for Emerging Technologies, 400–411. <https://ieeexplore.ieee.org/abstract/document/6304061/>
48. Purba, J. T., Gumulya, D., Hariandja, E., & Pramono, R. (2023). Valuable, Rare, Inimitable, Non-Substitutable of Resources in Building Innovation Capability for Sustainable Development: Evidence from Creative Social Enterprises. *International Journal of Sustainable Development & Planning*, 18(2). [https://www.researchgate.net/profile/Evo-Hariandja-2/publication/370442095\\_Valuable\\_Rare\\_Inimitable\\_Non-Substitutable\\_of\\_Resources\\_in\\_Building\\_Innovation\\_Capability\\_for\\_Sustainable\\_Development\\_Evidence\\_from\\_Creative\\_Social\\_Enterprises/links/645073d75762c95ac3677bb8/Valuable-Rare-Inimitable-Non-Substitutable-of-Resources-in-Building-Innovation-Capability-for-Sustainable-Development-Evidence-from-Creative-Social-Enterprises.pdf](https://www.researchgate.net/profile/Evo-Hariandja-2/publication/370442095_Valuable_Rare_Inimitable_Non-Substitutable_of_Resources_in_Building_Innovation_Capability_for_Sustainable_Development_Evidence_from_Creative_Social_Enterprises/links/645073d75762c95ac3677bb8/Valuable-Rare-Inimitable-Non-Substitutable-of-Resources-in-Building-Innovation-Capability-for-Sustainable-Development-Evidence-from-Creative-Social-Enterprises.pdf)
49. Raisch, S. and Birkinshaw, J. (2008), "Organizational ambidexterity: antecedents, outcomes, and moderators", *Journal of Management*, Vol. 34 No. 3, pp. 375-409.
50. Raisch, S. and Birkinshaw, J. (2008), "Organizational ambidexterity: antecedents, outcomes, and moderators", *Journal of Management*, Vol. 34 No. 3, pp. 375-409.
51. Samartha, V. (2020). Measuring the effect size of coefficient of determination and predictive relevance of exogenous latent variables on endogenous latent variables through PLS-SEM. *International Journal of Pure and Applied Mathematics*.
52. Sarta, A., Durand, R., & Vergne, J.-P. (2021). Organizational Adaptation. *Journal of Management*, 47(1), 43–75. <https://doi.org/10.1177/0149206320929088>
53. Sarangee, K., Schmidt, J. B., Srinath, P. B., & Wallace, A. (2022). Agile transformation in dynamic, high-technology markets: Drivers, inhibitors, and execution. *Industrial Marketing Management*, 102, 24–34.
54. Schulze, J. H., & Pinkow, F. (2020). Leadership for Organisational Adaptability: How Enabling Leaders Create Adaptive Space. *Administrative Sciences*, 10(3), Article 3.
55. Smith, W.K. and Tushman, M.L. (2005), "Managing strategic contradictions: a top management model for managing innovation streams", *Organization Science*, Vol. 16 No. 5, pp. 522-536.
56. Souza, C. P. da S., & Takahashi, A. R. W. (2019). Dynamic capability , organizational learning and ambidexterity in a higher education institution. *The Learning Organization*, 26(4), 397–411. <https://www.emerald.com/tlo/article/26/4/397/381470>
57. Úbeda-García, M., Claver-Cortés, E., Marco-Lajara, B., & Zaragoza-Sáez, P. (2020). Toward a dynamic construction of organizational ambidexterity: Exploring the synergies between structural differentiation, organizational context, and interorganizational relations. *Journal of Business Research*, 112, 363–372. <https://www.sciencedirect.com/science/article/pii/S014829631930637X>

- 
58. Utkirov, A. (2024). Enhancing alumni employability: Aligning higher education quality with workforce expectations. Available at SSRN 4948534. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4948534](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4948534)
  59. Venturini, S., Mehmetoglu, M., & Latan, H. (2023). Software Packages for Partial Least Squares Structural Equation Modeling: An Updated Review. In H. Latan, J. F. Hair, & R. Noonan (Eds.), *Partial Least Squares Path Modeling* (pp. 113–152). Springer International Publishing. [https://doi.org/10.1007/978-3-031-37772-3\\_5](https://doi.org/10.1007/978-3-031-37772-3_5)
  60. Wang, C. L., & Ahmed, P. K. (2007). Dynamic capability : A review and research agenda. *International Journal of Management Reviews*, 9(1), 31–51. <https://doi.org/10.1111/j.1468-2370.2007.00201.x>
  61. Weiss, L., & K. Kanbach, D. (2022). Toward an integrated framework of corporate venturing for organizational ambidexterity as a dynamic capability. *Management Review Quarterly*, 72(4), 1129–1170.
  62. Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180. <https://doi.org/10.1002/smj.4250050207>
  63. Zimmermann, A., Raisch, S. and Birkinshaw, J. (2015), “How is ambidexterity initiated? The emergent charter definition process”, *Organization Science*, Vol. 26 No. 4, pp. 1119-1139.