

الابتكار المنهجي والبراعة التنظيمية (حالة شركة زين العراق للاتصالات) Systematic innovation and organizational ingenuity (the case of Zain Iraq Telecom Company)

الباحث / د. مازن مسعود

أستاذ مساعد بكلية إدارة الأعمال جامعة الجنان طرابلس

mazen.masoud@jinan.edu.lb

الباحث / حسين علي جميل

جامعة الجنان / كلية إدارة الأعمال / طرابلس - لبنان

10204488@students.jinan.edu.lb

ABSTRACT

Theoretical Framework: Innovation is a crucial driver of organizational success. Innovation requires a clear and well-defined strategy. Organizations cannot focus solely on innovation to succeed. They must also be able to maintain their core business while exploring new opportunities. The latter is the upstream of organizational ambidexterity as a concept.

Purpose: This article explores the influence of systemic innovation, organizational ambidexterity, and critical strategies for success. It aims to evaluate the impact of innovative approaches to marketing, innovative methods to technology, innovative techniques to competition, innovative systems to service strategy, and the research and development on organizational ambidexterity.

Methodology/approach: the quantitative approach centered on a structured questionnaire was adopted. To this end, 171 valid questionnaires were collected using the convenience sampling procedure at Zain telecommunication company Iraq. Data collection was done through the traditional face-to-face method.

Findings: systemic innovation is an upstream to organizational ambidexterity. Results have verified that an innovative approach to competition significantly influences organizational ambidexterity. An

innovative Approach to Competition increase by ٨٧% was perceived to lead to an increase in organizational ambidexterity by ٩٣%.

Practical and Social Implications: By fostering a culture of innovation, investing in technology and tools, and having effective innovation management processes, companies can improve their organizational ambidexterity and secure future success.

Originality/Value: Organizations investing in innovation succeed in becoming ambidextrous by maintaining their core business while exploring new opportunities and seizing future opportunities.

Keywords: Systemic Innovation, Organizational Ambidexterity, Competition

١. INTRODUCTION

Managers today are exposed to the growing complexity of a fast-paced, globalized, interconnected, and hyper-competitive world. In such an increasingly unpredictable environment, structuring an organization and designing an ambidextrous organizational strategy balancing short-term profitability and long-term survival becomes increasingly complex (van Lieshout et al., ٢٠٢١). An ambidextrous approach is an innovative strategy for managing conflicting objectives (Chen et al., ٢٠١٨). Therefore, innovation in all its types is considered an antecedent to procedures of organizational ambidexterity. Strategies of Innovation are therefore essential. Innovation leads to creating a sustainable competitive advantage and strengthening it to ensure performance and corporate sustainability (Jia, Hu, & LI, ٢٠٢٢). The innovation aims to provide value. The reasons justifying the organizational need to innovate are multiple. These reasons are not limited to the increasing number of competitors, rapidly changing trends, and market instability. Organizations are investing in their capacity for innovation to detect and seize new opportunities and hence, gain a competitive advantage (Lindskog & Magnusson, ٢٠٢١). Implementing innovation and organizational ambidexterity strategies can be challenging for organizations. Three significant barriers can hinder the implementation of these strategies. First, corporate cultures can often delay the innovation process and organizational ambidexterity. Organizations need to create a culture that encourages innovation and risk-taking. Second, organizations may lack the resources to implement

effective organizational ambidexterity and innovation strategies.

Organizations must allocate adequate resources to support these initiatives (Alamsjah, ٢٠٢٢). Third, organizations may encounter resistance to change when implementing plans for innovation and organizational ambidexterity. Organizations should communicate the benefits of these strategies and involve employees in the process (Balarezo & Nielsen, ٢٠٢٢). Consequently, two questions arise in this study: How do systemic Innovation approaches affect organizational ambidexterity in the Zain telecommunication organization? What is the influence of Innovative approaches to marketing, technology, competition, service strategy, and research and development on organizational ambidexterity?

However, the relationship between systemic innovation and organizational ambidexterity is complex. The influence of systemic innovation approaches on organizational ambidexterity has not been addressed concretely (Ren & Xu, ٢٠٢٢). The scarcity of past studies highlights an empirical gap in organizational ambidexterity. Therefore, this paper aims to assess the effect of systemic innovation approaches on organizational ambidexterity. The objective is two-fold. The first objective is to measure the influence of each systemic innovation approach on organizational ambidexterity. The second objective is to provide metrics evaluating the influence of innovative techniques to marketing, innovative approaches to technology, innovative approaches to competition, innovative approaches to service strategy, and the research and development on organizational ambidexterity.

This paper, therefore, aims to fill a double theoretical gap. First, it seeks to enrich the literature. Second, it reinforces the notion of systemic innovation and organizational ambidexterity and its significant contributions to modern organizations. The theoretical review brings additional knowledge to the management of systemic innovation. The practical significance stems from its application in the Zain organization as the field of study representing the telecommunications sector in Iraq.

After the introduction, four sections are detailed respectively. The second section presents the literature review. It aims to define the research variables and construct the conceptual framework. The third section explains the research methodology. A questionnaire was adopted representing the opinions of employees working at zain

telecommunications. The empirical team aims to conduct Hypothesis testing. This fourth section describes the statistical influence between variables through analytical analysis. The last section presents the conclusion and recommendations.

٢. LITERATURE REVIEW

Innovation strategy allows organizations to create new processes. The innovation strategy follows a particular procedure allowing organizational development (Tian et al., ٢٠٢٠). Before being transformed into an innovative service or product, any idea begins with an observation phase of the potential market. It starts with a positioning strategy. It defines marketing framework and communication actions, translating the ideal position on the market. Ochie et al. (٢٠٢٢); Andriopoulos & Lewis (٢٠٠٩) came up with five primary forms of innovation. However, innovation types vary in the corporate world according to the organization (Buchheim, Krieger, & Arndt, ٢٠٢٠).

- **Strategic innovation:** this mainly affects the business model and the company's growth strategy and can therefore include a disruptive strategy
- **Incremental Innovation:** These are regular, low-risk, minor improvements. This type of innovation is the most common in innovation strategy.
- **Innovation-value:** a principle of the blue ocean, which means that innovation is not necessarily linked to technology, but it must create value in the eyes of the customer.
- **Adjacent innovation is associated with exploring** new horizons or uses for an existing product or service to extend its lifespan.
- **Disruptive innovation:** initiated by the competition and driven by change, technological, for example, often triggered by competitors. As its name suggests, this innovation breaks with the existing business model.
- **Radical innovation:** comes with a "more daring" concept. It involves significant risk since it involves creating a new need that profoundly modifies the uses of an existing product or service (García-Piqueres et al., ٢٠٢٠; Kogabayev & Maziliauskas, ٢٠١٧).

The objective of an Innovation strategy is to provide tangible solutions to consumers. Incremental or radical innovation is integrated into a complex process characterized by interactions and feedback (Forés & Camisón, ٢٠١٦). An innovative organization is a dynamic system composed of diversified skills. By acquiring, combining, and mobilizing skills, innovation approaches based on marketing, technology, competition, service strategy, and research and development lead to improving organizational ambidexterity. It explains the importance of design, application, and development management in implementing an innovation process (Nguyen, ٢٠١٨). Systematic innovation and its approaches are presented (Midgley & Lindhult, ٢٠٢١).

٢.١. Systemic Innovation

Systemic innovation aims to assist organizations in identifying opportunities to innovate in a complex environment. Systemic innovation is born from the socio-technical system of innovation (Janssen, Bogers, & Wanzenböck, ٢٠٢٠). This innovation is increasing due to incremental intra- and inter-sectoral innovations. Related Subsidiary disruptive innovations lead to the realization of combinations of innovations, called “systemic innovations” (marketing, procedures, technology, research and development, and service strategies) (Koivisto, Pohjola, & Pitkänen, ٢٠١٥; Lindgren & Emmitt, ٢٠١٧). In other words, systemic innovations are combined approaches to diffuse breakthrough innovation. The latter introduces the change in the socio-technical system and breaks the robustness of organizations’ routines (Lindgren, ٢٠١٦).

To effectively manage innovation strategy (marketing, management), the organizational method involves developing a culture of innovation. In other words, organizations exploring innovation and cultivating an innovative spirit can emerge creativity and ambidexterity (Turner et al., ٢٠١٧). It eases the creation of blue ocean strategies to eliminate competitiveness from the sector. Hence, systemic innovation involves introducing new methods and approaches into organizational elements (structure, functions, environment, marketing, and technology) to adapt to its environment (Janssen, Bergek, & Wesseling, ٢٠٢٢).

Systemic innovation embraces numerous advantages (Vecchio et al., ٢٠٢٢). It allows resource adaptability implied to innovative project specificities. It solicits stakeholders’ expertise and involves all resources in

achieving operational objectives (Kao, Nawata, & Huang, ٢٠١٩). It endorses durable project integration in the organization allowing hierarchical support and team adhesion.

٢.٢. Approaches To Systemic Innovation

Systemic innovation is grounded on many approaches to understanding organizational complexity (Rödl, Boons, & Spekkink, ٢٠٢٢; Gudelytė, ٢٠٢١). Systemic approaches embrace the definition of operational, structural, and functional aspects. Those aspects describe the system structure and the arrangement of its various components. These features clarify the relationships between system components. It simplifies and traces the system's evolution (Ferone et al., ٢٠١٨).

Innovation is an organizational approach since it solicits all types of resources that compose it (man, machine, process, organization). Therefore, systemic innovation approaches leading to organizational ambidexterity are innovative approaches to marketing, technology, competition, service strategy, research, and development (Blomkamp, ٢٠٢٢). The systemic analysis evaluates innovation potential using a SWOT analysis, highlighting strengths and weaknesses concerning the innovation requirement (Colvin et al., ٢٠١٤; Hall, Algiers, & Levitt, ٢٠١٨; Larrue, ٢٠٢١).

٢.٢.١. Innovative Approach to Marketing

Innovation approaches marketing aim to create a culture of customer-centricity and adaptive strategies. Innovation in marketing involves researching customer needs, identifying new trends, and developing innovative strategies to address consumers' needs better and wants and convince them to trust the organization and purchase (Meera & Vinodan, ٢٠٢٢).

Marketing innovation approaches can take various methods, from creative storytelling techniques to new avenues to connect with customers (Sheriakov, ٢٠٢٠). It can embrace an effective content strategy, leveraging the power of data analytics and innovative technologies like artificial intelligence and machine learning to personalize campaigns and make them more impactful. Furthermore, organizations leverage digital marketing innovations by empowering interactions through platforms to achieve more profound engagement with the target audience and alter

consumer experience (Aladayleh et al., ٢٠٢٠). Ultimately, the key to practical marketing innovation is using modern tools and strategies to transform a brand's story into life.

Innovation is a vital element of a successful marketing strategy. Innovation approaches to marketing are based on differentiation strategies.

Innovation offers new and unique products or services to attract prospects and retain existing customers. Innovative products or services stimulate sales by meeting customer needs or creating new markets (principle of market disruption) (Islam, ٢٠٢٢).

٢,٢,٢. Innovative Approaches to Technology

Approaches to technological innovation in business are crucial in an ever-changing competitive market. Technological innovations come from research and development. Technological innovation involves creating or integrating new or improved technology (Susantono & Berawi, ٢٠١٨).

Innovative approaches to technology combine new information technologies to meet market needs and anticipate future needs.

Implementing innovative procedures to technology can reduce the workload, increase team cohesion and decrease employee turnover.

Innovative technological approaches aim to create a revolutionary technical response to change and evolution (Sciarelli et al., ٢٠٢٢).

Technological innovations can be minor, incremental, significant, radical, or disruptive. Technological innovation can force a difference in the business model. Technological innovations improve productivity, advance knowledge, or simplify everyday office life. But above all, they must be geared toward the company's performance (Huda et al., ٢٠٢٢).

٢,٢,٣. Innovative Approaches to Service Strategy

Innovative approaches to service strategies include creating an improved version of service characteristics. It includes enhancing services' intangibility and perishability and creating new market values. Service innovations include significant service provision improvements in efficiency or speed. It can embrace new functions or features in addition to existing services or introduce innovative services on the market (Esposito et al., ٢٠٢٢; Li et al., ٢٠٢١). The innovation of services processes corresponds to

new techniques implementation or the improvement of techniques for producing services. It includes the development or adoption of new or improved production and service methods, but also logistics. Innovative approaches to service strategies can denote alterations introduced in using or consuming services. Implementing the new ease of use to meet market needs or anticipate future needs. Service innovation is creating or improving a product or service offering that develops new or additional value for the market (Truong et al., ٢٠٢٠).

٢.٢.٤. Research And Development

Innovative approaches to research and development are based on creating creative activities (Gustiani, ٢٠١٩). The impact of innovative approaches to research and development expenditure is very significant. Large organizations like Zain Telecommunication have substantial financial resources to invest in research and development expenditures systematically. However, due to these expenses, organizations can increase their turnover in new products protected by patents and their productivity levels. Patents are a source of profit when these privately owned brands are resold to other organizations. Research and development expenditure has thus become fundamental in large organizations because it provides them with a high source of growth (Sarpong et al., ٢٠٢٢).

٢.٣. Organizational Ambidexterity

Organizational ambidexterity was studied as a prerequisite for corporate survival and success. Organizational studies have long viewed reconciling internal organizational tensions with the often-conflicting demands of the environment as an impossible compromise until the advent of recent work that has presented managerial solutions to create and sustain ambidexterity (Weiss & K. Kanbach, ٢٠٢٢). Ambidexterity is the ability to use both hands equally, with equal ease. Transposed to the organizational context means that the company pursues two disparate objectives, which go in two different directions: standardization, differentiation, lower costs, global integration, and local responsiveness (Posch & Garaus, ٢٠٢٠). Organizational ambidexterity can be defined as the ability to effectively manage the current demands of its activity while simultaneously being

adaptive to environmental changes (Kassotaki, ٢٠٢٢). Research has recognized two critical elements of organizational ambidexterity: exploitation and exploration (Maclean et al., ٢٠٢١).

Long-term corporate success depends on its ability to exploit its current capabilities while exploring fundamentally new skills. The definition of organizational ambidexterity benefits from a certain consensus. Thus, Wilms, Winnen, & Lanwehr (٢٠١٩) consider it as the ability of a firm to simultaneously benefit from incremental and systemic innovation through the combination of structures and procedures. Similarly, Ojiako et al. (٢٠٢٣); Paliokaite & Pačesa (٢٠١٥) define organizational ambidexterity as an organization's ability to manage daily activities efficiently and simultaneously adapt to environmental changes. For Kiss et al. (٢٠٢٠), ambidexterity has been widely used to refer to an organization's capacity to simultaneously carry out different and often competing strategic acts, such as pursuing pro-profit and pro-growth strategies. Organizational ambidexterity requires leaders to perform two critical tasks. First, they should be able to accurately sense changes in their competitive environment, including potential changes in technology, competition, customers, and regulation. Second, they must be able to act on marketing, research, and development opportunities and threats, therefore, seize them by reconfiguring tangible and intangible assets to face new challenges (Weigel, Derfuss, & Hiebl, ٢٠٢٣; Gschwantner & Hiebl, ٢٠١٦).

٢.٤. The Influence of Systemic Innovation on Organizational Ambidexterity

Systemic innovation influences the organization's ability and agility to generate appropriate valuable knowledge for its adaptation and development process. Agility refers to the organizational capacity and dynamism to demonstrate responses to identify environmental changes and seize opportunities (R. Li, Fu, & Liu, ٢٠٢٠). Systemic innovation is upstream of research and development (R&D), increasing organizational ambidexterity. Hwang, Lai, & Wang (٢٠٢١) showed that organizational ambidexterity requires innovative and creative skills to be applied to the design process. Based on the results of Hwang et al. (٢٠٢١); Mattes & Ohr (٢٠١٣); Alamayreh, Sweis, & Obeidat (٢٠٢١), the leading hypothesis can be formulated.

H₁: Systemic innovation has a statistical influence on organizational ambidexterity.

Innovation approaches to marketing are goal-oriented and flexible to face consumers' changes in habits and interests. Through innovative marketing techniques, businesses can have the ability to access and explore unique opportunities for personalization within their target market. Integrating innovation into a marketing strategy can help differentiate your business in the market, increase sales, improve brand image, maintain a competitive advantage, and improve overall profitability. Based on the results of Muhammad et al. (٢٠٢١); Esposito et al. (٢٠٢٢), the second hypothesis can be formulated.

H₂: Innovation approaches to marketing has a statistical influence on organizational ambidexterity.

Innovative approaches to technology propose a new product on the market, offer a revolutionary service to professionals or individuals, and modernize or transform an existing product that now meets the standards of use and technological and social advances. The third hypothesis can be formulated based on Ferone et al.'s (٢٠١٨); Kassotaki (٢٠٢٢) results.

H₃: Innovation approaches to technology has a statistical influence on organizational ambidexterity.

Innovation can take many forms, from improving existing processes to creating new services. Organizations that consistently innovate strengthen their ambidexterity by increasing their agility and resilience to market changes. Amazon is an example of a leading organization that has successfully practiced systemic innovation and organizational ambidexterity. The company started as an online bookstore but has since branched into other industries like electronics and streaming services. The customer-centric approach leads to increasing organizational ambidexterity. Using customer data improves existing services while exploring new opportunities (Wang, Yang, & Zhang, ٢٠٢; Müller, Päske, & Rodil, ٢٠١٩). Therefore, the fourth hypothesis was deduced.

H٤: Innovative Approaches to Service Strategy statistically influence organizational ambidexterity.

Organizations can promote innovation by creating a solid culture, investing in research and development, encouraging collaboration, and using tools and technologies to help manage the innovation process. Therefore, organizations investing in research and development explore opportunities while optimizing existing processes to maximize profits. Thus, research and development can enhance organizational ambidexterity (Esposito et al., ٢٠٢٢; Truong et al., ٢٠٢٠). Therefore, the Fifth hypothesis is deduced.

H٥: Research and development have a statistical influence on organizational ambidexterity.

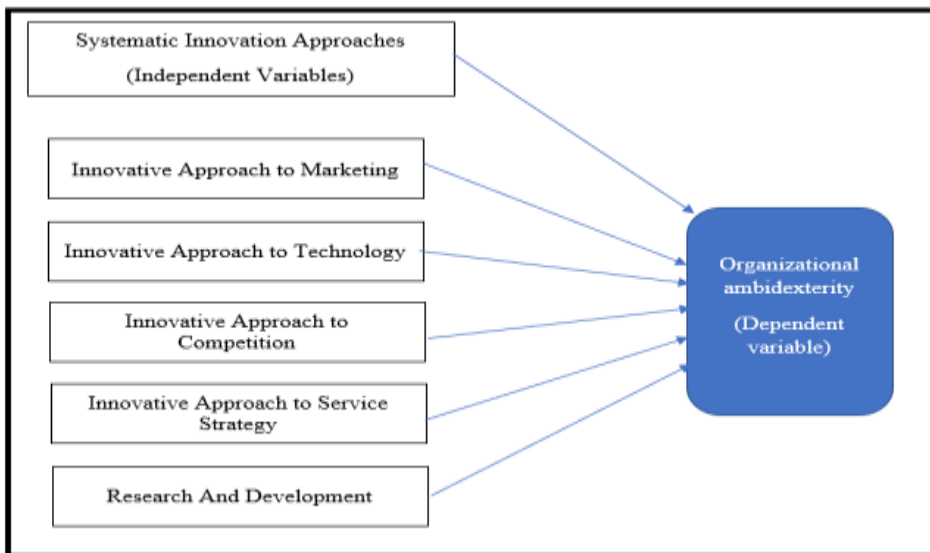


Figure ١: Conceptual Framework (Hotho & Champion, ٢٠١٠; Song, Jin, & Zhao, ٢٠١٩; Obeidat, Alamayreh, & Sweis, ٢٠١٩)

٣. RESEARCH METHODOLOGY

It contributes to the study of organizational ambidexterity by emphasizing the stimulating factors of systemic innovation in the context of organizational behavior. The main objective is to identify the influence of innovative approaches to marketing, innovative approaches to technology, innovative approaches to competition, innovative approaches to service strategy, and the research and development on organizational

ambidexterity. The quantitative approach centered on a structured questionnaire was adopted to achieve this objective.

The positivism philosophy endorses this logic. It is based on a realistic ontological hypothesis. The latter postulates that the reality of systemic innovation approaches and organizational ambidexterity exists independently. The principle of objectivity rests on this independence. The validity criteria associated with positivism are precise and universal. This philosophy retains empirical verification in a statistical logic. Therefore, using the quantitative method seems essential to explain the nature of the systemic approaches to innovation influencing organizational ambidexterity. This study grasps causal links between explanatory and presented variables of the phenomenon by processing large sets of data on representative and significant portions of the population. Consequently, it confers greater objectivity due to the rigor and precision of the SPSS statistical techniques and offers more guarantees on the reliability and validity of the data collection tool.

As part of this paper, the choice of measuring instrument was based on the questionnaire. The questionnaire relied on the five points of the Likert scale as a measurement. Statements for each construct were drawn from the literature or are primarily inspired by it. The choice of Likert scales was previously tested by Colvin et al. (٢٠١٤); Ferone et al. (٢٠١٨) to measure systemic approaches to innovation and organizational ambidexterity. It analyzes the perceptions of respondents concerning the different dimensions. The notion of systemic innovation and its techniques has been studied by Turner et al. (٢٠١٧); Vecchio et al. (٢٠٢٢) using Likert scales. At the same time, the statements of organizational ambidexterity were borrowed from the study of Nguyen (٢٠١٨); (Midgley & Lindhult, ٢٠٢١) and Yoshikuni et al. (٢٠١٨).

Data collection was done through the traditional face-to-face collection method. To this end, ١٧١ valid questionnaires were collected using convenience sampling. Data was collected at Zain telecommunication company Iraq. The questionnaire was developed from a literature review of previous studies, and the research instrument was validated on six participants. This questionnaire was presented to a group of marketing professors to test its ability to collect data. In return, they gave many tips and advice for modifications, and unnecessary items were removed.

٤. FINDINGS AND INTERPRETATIONS

The fourth section deals with the quantitative study analysis. Before starting more in-depth analyses, it is necessary to check the validity and reliability of the measurement scales chosen, using Cronbach's alpha in particular. Pearson's correlation coefficient is used to determine whether the increase in the value of one of the independent variables is related to the increase or decrease in the value of the dependent variable.

٤.١. The Normality Distribution

The (Kolmogorov-Smirnov) test was adopted to clarify and explain whether systematic approaches to innovation and organizational ambidexterity possess a normal distribution. These tests are shown in Table (١) and Figure (٢).

Table ١: Kolmogorov - Smirnov Test

Variables	Dimensions	Statistic	Df	Sig.
systematic innovation approaches	Innovative approaches to Marketing	٠,٨١	١٧١	٢٠٠
	Innovative approaches to technology	٠,٨٠	١٧١	٢٠٠
	Innovative approaches to competition	٠,٨٢	١٧١	٢٠٠
	Innovative approaches to service strategy	٠,٨٠	١٧١	٢٠٠
	Research and development	٠,٨٢	١٧١	٢٠٠
Organizational ambidexterity		٠,٧٦	١٧١	٢٠٠

The results prove that systematic approaches to innovation and organizational ambidexterity adapt to the normal distribution of responses. Standard statistics tests are used to display statistics.

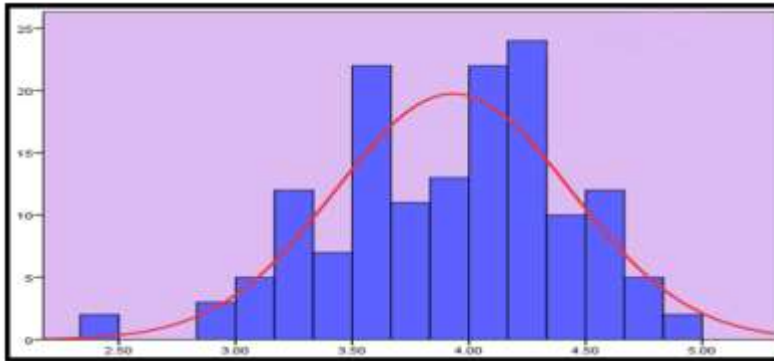


Figure ٢: Data Normal Distribution

As an explanation for these figures, the test results proved that the level of statistical significance reached (.١٧٣). Systemic approaches to innovation and organizational ambidexterity reached the international threshold of relevance). Any value lower than ٠,٠٥ as a value indicates that the data is not normally distributed and that the results are not significant.

Table ٢: VIF and Tolerance

Variables	Dimensions	VIF	Tolerance
Systematic Innovation Approaches	Innovative approaches to Marketing	١,١١٣	٠,٩٧٦
	Innovative approaches to technology	١,١٠٤	٠,٩١٠
	Innovative approaches to competition	١,١١٣	٠,٩٩٢
	Innovative approaches to service strategy	١,١٤٥	٠,٨٥٧
	Research and development	١,٠٣٧	٠,٩٦٦
Organizational ambidexterity		١,١١٢	٠,٩٤٠

The variance inflation factor (V.I.F.) was calculated to test for multiple linear relationships between the variables. A VIF factor of less than ٥% or ١٠% leads to the conclusion that no linear association exists between the dimensions that make up the variables. Tolerance is less than one.

Systematic approaches to innovation and organizational ambidexterity resulted in a normal distribution.

٤.٢. Reliability and Validity

The KMO assessed the sampling adequacy while Cronbach's alpha measured internal consistency ("reliability"). Theoretically, the KMO and Cronbach's alpha results in ٠ to ١. The value of these coefficients for the whole variable and each dimension after its measure is shown in Table (٣). The generally accepted rule of thumb is that an α of ٠,٦ indicates an acceptable level of validity and reliability, and ٠,٨ or higher is excellent.

Table ٣: Reliability and Validity

Variables	Dimensions	Number of Items	Alpha Cronbach	KMO	KMO for the questionnaire	Sig.
systematic innovation approaches	Innovative Approach to Marketing	٨	٠,٨٦١	٠,٨٥١	٠,٩٥٠	٠,٠٠٠
	Innovative Approach to technology	٤	٠,٧٢٠	٠,٧٠٩		٠,٠٠٠
	Innovative Approach to competition	٥	٠,٨٢٤	٠,٨١١		٠,٠٠٠
	Innovative Approach to service strategy	٥	٠,٨٠٧	٠,٧٧٩		٠,٠٠٠
	Research and development	٤	٠,٧٢٧	٠,٧١٠		٠,٠٠٠
Organizational ambidexterity		٦	٠,٨١٣	٠,٨٠١		٠,٠٠٠

The KMO coefficient for the questionnaire reached (٠,٩٥٠). The innovative approach to marketing variable has reached (KMO= ٠,٨٥١, α = ٠,٨٦١), while the organizational ambidexterity has reached (KMO= ٠,٨٠١, α = ٠,٨١٣). To summarize Table (٣), indices are more remarkable than (٠,٦٠), which indicates that the study scale is highly valid and reliable.

٤,٣. Multiple Linear Regression

Table ٤: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
١	.٩٨٨ ^a	.٩٧٧	.٩٧٦	.٠٨٣٥٤

Table No. (٢١) showed that the R^2 statistic has a value of ٠,٩٧٧. The R^2 is the slope predictor. The R^2 (٠,٩٧٧) is the value of R squared (R multiplied by itself) and represents the proportion of variance in organizational ambidexterity as the dependent variable. Hence, systemic approaches to innovation explain changes in organizational ambidexterity. An R^2 value of ٠,٩٧٧ indicates that ٩٧% of the variance in organizational ambidexterity can be explained by the model containing systemic approaches to innovation. This change value is significant. Therefore, the predictions from the regression equation are reliable.

Table ٥: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.	
١	Regression	١١٢,٣٨٣	٥	٢٢,٤٧٧	٣٢٢٠,٢٧٥	.٠٠٠ ^b
	Residual	٢,٦٨٠	٣٨٤	.٠٠٧		
	Total	١١٥,٠٦٣	٣٨٩			
a. Dependent Variable: Organizational ambidexterity						

Table (٢١) showed a value of (F = ٣٢٢٠,٢٧٥), and this value is statistically significant because the significance amounted to (٠,٠٠٠). The latter is minor than (٠,٠٥). It indicates that systemic approaches to innovation have a substantial direct effect on organizational ambidexterity.

Table ٦: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
١	(Constant)	.٤٦٤	.٠٤٧		٩,٩٣٨	.٠٠٠
	Innovative Approach to Marketing	.٠٤٢	.٠٠٦	.٠٥٤	٦,٥٨٣	.٠٠٠
	Innovative approach to technology	.١١٥	.٠٠٩	.١٣٥	١٢,٢٢٧	.٠٠٠
	Innovative approach to competition	.٨٧٨	.٠١٠	.٩٣٦	٨٩,٠٩٩	.٠٠٠
	Innovative approach to service strategy	.١١٧	.٠١٦	.٠٩٨	٧,٥١٦	.٠٠٠
	Research and development	.٢٠١	.٠٠٩	.١٨٣	٢٢,١٠٦	.٠٠٠

a. Dependent Variable: Organizational Ambidexterity

- Innovative Approach to Marketing and organizational ambidexterity:** The regression coefficient ($\beta = ٠,٠٤٢$) indicates that a ٤% increase in an innovative approach to Marketing leads to an increase in organizational ambidexterity by ٥%. The (t) test calculated for coefficient (β) amounted to (١٣,٧٣٩), more significant than its tabular value (١,٩٦). Its significance reached (٠,٠٠٠). This value is smaller than the threshold of (٠,٠٥). It indicates that an innovative marketing approach significantly influences organizational ambidexterity.
- Innovative Approach to Technology and Organizational Ambidexterity:** ($U\beta = ٠,١١٥$, ($S\beta = ٠,١٣٥$, $t = ١٢,٢٢٧$, and a ($P = ٠,٠٠٠$, $< ٠,٠٥$). Therefore, the influence is statistically significant. In other words, a change (increase) in technology by ١١% leads to an increase in organizational ambidexterity by ١٣%. Therefore, the hypothesis was validated.
- Innovative Approach to Competition and Organizational Ambidexterity:** ($U\beta = ٠,٨٧٨$, ($S\beta = ٠,٩٣٦$, $t = ٨٩,٠٩٩$, and a ($P = ٠,٠٠٠$, $< ٠,٠٥$). Therefore, the influence is statistically significant. In other words, a change (increase) in Innovative Approach to

Competition by ٨٧% leads to an increase in organizational ambidexterity by ٩٣%. Therefore, the hypothesis was validated.

- **Innovative Approach to Service Strategy and Organizational Ambidexterity:** $(U\beta) = ٠,١١٧$, $(S\beta) = ٠,٠٩٨$, $t = ٧,٥١٦$, and a $(P = ٠,٠٠٠, < ٠,٠٥)$. Therefore, the influence is statistically significant. In other words, a change (increase) in the Innovative Approach to service strategy by ١١% leads to an increase in organizational ambidexterity by ٩%. Therefore, the hypothesis was validated.
- **Research and Development and Organizational Ambidexterity:** $(U\beta) = ٠,٢٠١$, $(S\beta) = ٠,١٨٣$, $t = ٢٢,١٠٦$, and a $(P = ٠,٠٠٠, < ٠,٠٥)$. Therefore, the influence is statistically significant. In other words, a change (increase) in research and development by ٢٠% leads to an increase in organizational ambidexterity by ١٨%. Therefore, the hypothesis was validated.

The regression equation for the predicted changes in organizational ambidexterity is summarized as follows:

Predicted change = $٠,٤٦٤ + (\text{Innovative approach to Marketing} * ٠,٠٤٢) + (\text{Innovative approach to technology} * ٠,١١٥) + (\text{Innovative approach to competition} * ٠,٨٧٨) + (\text{Innovative approach to service strategy} * ٠,١١٧) + (\text{Research and development} * ٠,٢٠١)$.

٤.٤. Results Interpretations

Systemic innovation provides practical approaches to explore and develop alternative innovations to improve the facets of organizational ambidexterity. Results have verified the five hypotheses. All five approaches to innovation (marketing, technology, competition, service strategy, research, and development) have a positive statistical influence on organizational ambidexterity. However, it was proven that innovative approaches to competition had the most significant effect. An innovative Approach to Competition increase by ٨٧% was perceived to lead to an increase in organizational ambidexterity by ٩٣%. Therefore, Zain Telecommunication should consider adopting a blue ocean strategy to eliminate competition through systemic innovation. Zain company should reinforce its brand image with consumers to be perceived as a dynamic, creative establishment. Systemic innovation maintains a competitive edge by offering innovative products and approaches to service strategies. The latter has a higher margin rate because they are considered to have a high

added value compared to their production costs. The critical elements of an ambidextrous business include a strong culture of innovation, committed leadership, a flexible organizational structure, and an ability to manage risk. Companies must be willing to invest in innovation and experiment with new ideas. Leaders must be committed to innovation and ready to take risks.

◦. CONCLUSION AND RECOMMENDATIONS

In conclusion, systemic approaches to innovation should not be neglected. Systemic innovation can take many forms, from new processes and technologies to new ways of getting closer to consumers. Innovative approach to competition had the most decisive influence on organizational ambidexterity. Therefore, it is essential to constantly innovate against the competition to keep pace with changing market trends while securing the rewards of differentiated products and services. Innovation strategies can take various forms. Whatever system is chosen, the organization must have a clear vision of what it wants and how it will get there. Innovation strategies must be aligned with the organization's overall objectives and consider its resources and skills.

To achieve organizational ambidexterity, companies must also establish a culture of innovation. Managers should encourage a culture of innovation by providing incentives to explore new ideas. This culture means encouraging and rewarding risk-taking, experimentation, and creativity. Organizations should also encourage collaboration and exchange ideas between different departments to drive innovation.

Innovation and organizational ambidexterity are essential for long-term business success. Organizations are balancing innovative approaches to leverage technology for innovation and ambidexterity. Managers must have effective innovation management processes that turn ideas into successful products and services. Besides, training and encouraging employees to explore new opportunities is critical. Finally, monitoring the results and closely modifying the strategy if necessary is essential.

Organizations must also be prepared for common challenges associated with implementing innovation and organizational ambidexterity strategies. By overcoming these challenges, companies can innovate consistently and stay competitive. It is vital to measure the effectiveness of

organizational ambidexterity to know if the methods are effective. Several metrics can be used, including market share, profitability, and customer satisfaction. Monitoring these measures closely and changing the strategy if necessary is crucial.

Organizational ambidexterity is vital to long-term business success in an ever-changing economic environment. Organizations can improve their ambidexterity and secure future success by fostering a culture of innovation, investing in technology and tools, and having effective innovation management processes. It is essential to closely monitor the results and modify the strategy to ensure the company remains competitive in a rapidly changing market. Organizational ambidexterity has become crucial for companies looking to stay competitive in an ever-changing environment. Organizations must be willing to invest in innovation, experiment with new ideas, and manage the risk of exploring new opportunities. Organizations succeeding in becoming ambidextrous are better equipped to meet today's challenges and prepare for the future. They can maintain their core business while exploring new opportunities and seizing future opportunities.

This research is not free of limitations that can become opportunities for future research. The main limitation of this study is related to time. The cross-sectional time limitation has reduced the number of valid collected questionnaires. However, the sample validity and reliability were tested using Cronbach's alpha and KMO to ensure sampling adequacy and internal consistency. The second limitation is related to the questionnaire language. The initial version of the questionnaire was created in Arabic. Therefore, the English-translated version was face validated by marketing experts.

Avenues for future research can be suggested. Additional variables can be added to systemic innovation to broaden the scope of this study. This study can be enlarged by adding moderating variables such as the trust and support of top management and the flexibility and autonomy of employees and teams. Besides, organizational ambidexterity was studied as a one-dimensional variable. Future research should investigate the two dimensions of ambidexterity: exploitation and exploration. It can deepen the elements of organizational ambidexterity. Finally, a qualitative study would be helpful to understand the approaches to the systemic innovation

process better. The future researcher can consider investigating the influence of blue ocean strategies on ambidextrous marketing in international organizations through the raised contribution of this study. Therefore, the following research question is: How do blue ocean strategies influence ambidextrous marketing in international organizations?

References

- Aladayleh, K., Mendoza Alvarado, L. E., & Jafaari, A. (٢٠٢٠). Innovative marketing approach in project management: A market orientation perspective. *Journal of Innovations in Digital Marketing*. <https://doi.org/10.51300/jidm-2020-14>
- Alamayreh, E. M., Sweis, R. J., & Obeidat, B. Y. (٢٠٢١). The relationship between organisational ambidexterity and organisational performance: The mediating role of innovation. *International Journal of Business Excellence*. <https://doi.org/10.1504/ijbex.2021.114716>
- Alamsjah, F. (٢٠٢٢). Ambidextrous Leadership of Publicly Listed Companies during Turbulent Times: The Importance of Agility and Alliance Capability. *Global Business and Finance Review*. <https://doi.org/10.17049/gbfr.2022,27,3,41>
- Andriopoulos, C., & Lewis, M. W. (٢٠٠٩). Exploitation-exploration tensions and organizational ambidexterity: Managing paradoxes of innovation. *Organization Science*. <https://doi.org/10.1287/orsc.1080.0406>
- Balarezo, J. D., & Nielsen, B. B. (٢٠٢٢). Microfoundations of Organizational Ambidexterity: An Analysis of the Design, Actors, and Decisions at a Multinational Biotech Firm. *IEEE Transactions on Engineering Management*. <https://doi.org/10.1109/TEM.2020.2990184>
- Blomkamp, E. (٢٠٢٢). Systemic design practice for participatory policymaking. *Policy Design and Practice*. <https://doi.org/10.1080/20741292.2021.1887076>
- Buchheim, L., Krieger, A., & Arndt, S. (٢٠٢٠). Innovation types in public sector organizations: a systematic review of the literature. *Management Review Quarterly*. <https://doi.org/10.1007/s11301-019-00174-0>
- Chen, Z., Huang, S., Liu, C., Min, M., & Zhou, L. (٢٠١٨). Fit between organizational culture and innovation strategy: Implications for innovation

performance. *Sustainability (Switzerland)*.

<https://doi.org/10.3390/su10103378>

Colvin, J., Blackmore, C., Chimbuya, S., Collins, K., Dent, M., Goss, J., ...

Seddaiu, G. (٢٠١٤). In search of systemic innovation for sustainable development: A design praxis emerging from a decade of social learning inquiry. *Research Policy*. <https://doi.org/10.1016/j.respol.2013.12.010>

Esposito, B., Sessa, M. R., Sica, D., & Malandrino, O. (٢٠٢٢). Service innovation in the restaurant sector during COVID-١٩: digital technologies to reduce customers' risk perception. *TQM Journal*.

<https://doi.org/10.1108/TQM-01-2022-0016>

Ferone, E., Pietroni, D., Petroccia, S., & Antonio Alberto, A. (٢٠١٨).

Organizational innovation: a systemic approach*. *International Review of Sociology*. <https://doi.org/10.1080/03966701.2018.1529072>

Forés, B., & Camisón, C. (٢٠١٦). Does incremental and radical innovation performance depend on different types of knowledge accumulation capabilities and organizational size? *Journal of Business Research*.

<https://doi.org/10.1016/j.jbusres.2015.07.006>

García-Piqueres, G., Serrano-Bedia, A. M., López-Fernández, M. C., &

Pérez-Pérez, M. (٢٠٢٠). Relatedness in the adoption of different innovation types: product, process, organisational and commercial innovations.

Technology Analysis and Strategic Management.

<https://doi.org/10.1080/09537325.2019.1632822>

Gschwantner, S., & Hiebl, M. R. W. (٢٠١٦). Management control systems and organizational ambidexterity. *Journal of Management Control*.

<https://doi.org/10.1007/s00187-016-0236-3>

Gudelyté, L. (٢٠٢١). On the failure and systemic risk of innovation cluster: Copula approach. *Business, Management and Economics Engineering*.

<https://doi.org/10.3846/bmee.2021.12708>

Gustiani, S. (٢٠١٩). Research and Development (R&D) Method As a Model Design in Educational Research and Its Alternatives. *Holistics Journal*.

Hall, D. M., Algiers, A., & Levitt, R. E. (٢٠١٨). Identifying the Role of Supply Chain Integration Practices in the Adoption of Systemic Innovations.

Journal of Management in Engineering.

[https://doi.org/10.1061/\(asce\)me.1943-0479,0000660](https://doi.org/10.1061/(asce)me.1943-0479,0000660)

- Hotho, S., & Champion, K. (٢٠١٠). "We are always after that balance" - Managing innovation in the new digital media industries. *Journal of Technology Management and Innovation*. <https://doi.org/10.4067/S0718-27242010000300003>
- Huda, S., Alyahya, S., Pan, L., & Al-Dossari, H. (٢٠٢٢). Combining Innovative Technology and Context based Approaches in Teaching Software Engineering. *International Journal of Advanced Computer Science and Applications*. <https://doi.org/10.14569/IJACSA.2022.0131037>
- Hwang, B. N., Lai, Y. P., & Wang, C. (٢٠٢١). Open innovation and organizational ambidexterity. *European Journal of Innovation Management*. <https://doi.org/10.1108/EJIM-06-2021-0303>
- Islam, M. S. (٢٠٢٢). Marketing for Hospitality and Tourism. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4138643>
- Janssen, M. J., Bergek, A., & Wesseling, J. H. (٢٠٢٢). Evaluating systemic innovation and transition programmes: Towards a culture of learning. *PLOS Sustainability and Transformation*. <https://doi.org/10.1371/journal.pstr.0000008>
- Janssen, M. J., Bogers, M., & Wanzenböck, I. (٢٠٢٠). Do systemic innovation intermediaries broaden horizons? A proximity perspective on R&D partnership formation. *Industry and Innovation*. <https://doi.org/10.1080/13662716.2019.1618701>
- Jia, R., Hu, W., & LI, S. (٢٠٢٢). Ambidextrous leadership and organizational innovation: the importance of knowledge search and strategic flexibility. *Journal of Knowledge Management*. <https://doi.org/10.1108/JKM-07-2020-0544>
- Kao, Y. S., Nawata, K., & Huang, C. Y. (٢٠١٩). Evaluating the performance of systemic innovation problems of the IoT in manufacturing industries by novel MCDM methods. *Sustainability (Switzerland)*. <https://doi.org/10.3390/su11184970>
- Kassotaki, O. (٢٠٢٢). Review of Organizational Ambidexterity Research. *SAGE Open*. <https://doi.org/10.1177/21582444221082127>
- Kiss, A. N., Libaers, D., Barr, P. S., Wang, T., & Zachary, M. A. (٢٠٢٠). CEO cognitive flexibility, information search, and organizational ambidexterity. *Strategic Management Journal*. <https://doi.org/10.1002/smj.3192>

- Kogabayev, T., & Maziliauskas, A. (٢٠١٧). The definition and classification of innovation. *HOLISTICA – Journal of Business and Public Administration*. <https://doi.org/10.1515/hjbpa-2017-0005>
- Koivisto, J., Pohjola, P., & Pitkänen, N. (٢٠١٥). Systemic innovation model translated into public sector innovation practice. *Innovation Journal*.
- Larrue, P. (٢٠٢١). The design and implementation of mission-oriented innovation policies: A systemic policy approach to address societal challenges. *OECD Science, Technology and Industry Policy Papers*.
- Li, B., Zhong, Y. Y., Zhang, T., & Hua, N. (٢٠٢١). Transcending the COVID-١٩ crisis: Business resilience and innovation of the restaurant industry in China. *Journal of Hospitality and Tourism Management*. <https://doi.org/10.1016/j.jhtm.2021.08.024>
- Li, R., Fu, L., & Liu, Z. (٢٠٢٠). Does openness to innovation matter? The moderating role of open innovation between organizational ambidexterity and innovation performance. *Asian Journal of Technology Innovation*. <https://doi.org/10.1080/19771097,2020,1734037>
- Lindgren, J. (٢٠١٦). Diffusing systemic innovations: influencing factors, approaches and further research. *Architectural Engineering and Design Management*. <https://doi.org/10.1080/174502007,2015,1092942>
- Lindgren, J., & Emmitt, S. (٢٠١٧). Diffusion of a systemic innovation A longitudinal case study of a Swedish multi-storey timber housebuilding system. *Construction Innovation*. <https://doi.org/10.1108/CI-11-2015-0061>
- Lindskog, C., & Magnusson, M. (٢٠٢١). Ambidexterity in Agile software development: a conceptual paper. *Journal of Organizational Effectiveness*. <https://doi.org/10.1108/JOEPP-07-2019-0068>
- Maclean, M., Harvey, C., Golant, B. D., & Sillince, J. A. A. (٢٠٢١). The role of innovation narratives in accomplishing organizational ambidexterity. *Strategic Organization*. <https://doi.org/10.1177/1477127019897234>
- Mattes, F., & Ohr, R.-C. (٢٠١٣). Balancing Innovation Via Organizational Ambidexterity – Part ١. *Innovation Management*.
- Meera, S., & Vinodan, A. (٢٠٢٢). Innovative approach and marketing skill: a case study of artisan entrepreneurs of India. *Journal of Entrepreneurship in Emerging Economies*. <https://doi.org/10.1108/JEEE-03-2022-0105>
- Midgley, G., & Lindhult, E. (٢٠٢١). A systems perspective on systemic innovation. *Systems Research and Behavioral Science*. <https://doi.org/10.1002/sres.2819>

- Muhammad, F., Ikram, A., Jafri, S. K., & Naveed, K. (٢٠٢١). Product innovations through ambidextrous organizational culture with mediating effect of contextual ambidexterity: An empirical study of it and telecom firms. *Journal of Open Innovation: Technology, Market, and Complexity*. <https://doi.org/10.3390/joitmc7010009>
- Müller, S. D., Páske, N., & Rodil, L. (٢٠١٩). Managing ambidexterity in startups pursuing digital innovation. *Communications of the Association for Information Systems*. <https://doi.org/10.17705/1CAIS.04418>
- Nguyen, D. Q. (٢٠١٨). The impact of intellectual capital and knowledge flows on incremental and radical innovation: Empirical findings from a transition economy of Vietnam. *Asia-Pacific Journal of Business Administration*. <https://doi.org/10.1108/APJBA-03-2018-0044>
- Obeidat, B. Y., Alamayreh, E. M., & Sweis, R. J. (٢٠١٩). The relationship among innovation, organisational ambidexterity and organisational performance. *International Journal of Business Innovation and Research*. <https://doi.org/10.1504/ijbir.2019.10023208>
- Ochie, C., Nyuur, R. B., Ludwig, G., & Cunningham, J. A. (٢٠٢٢). Dynamic capabilities and organizational ambidexterity: New strategies from emerging market multinational enterprises in Nigeria. *Thunderbird International Business Review*. <https://doi.org/10.1002/tie.22266>
- Ojiako, U., Petro, Y., Marshall, A., & Williams, T. (٢٠٢٣). The impact of project portfolio management practices on the relationship between organizational ambidexterity and project performance success. *Production Planning and Control*. <https://doi.org/10.1080/09537287,2021,1909168>
- Paliokaite, A., & Pačesa, N. (٢٠١٥). The relationship between organisational foresight and organisational ambidexterity. *Technological Forecasting and Social Change*. <https://doi.org/10.1016/j.techfore.2014.03.004>
- Posch, A., & Garaus, C. (٢٠٢٠). Boon or curse? A contingent view on the relationship between strategic planning and organizational ambidexterity. *Long Range Planning*. <https://doi.org/10.1016/j.lrp.2019.03.004>
- Ren, D., & Xu, H. (٢٠٢٢). Influence of entrepreneurial ambidextrous leadership on ambidextrous innovation: An integrated model construction of “cognitive/affective” composite perspective in Chinese context. *Human Systems Management*. <https://doi.org/10.3233/HSM-210004>

- Rödl, M. B., Boons, F., & Spekkink, W. (٢٠٢٢). From responsible to responsive innovation: A systemic and historically sensitive approach to innovation processes. *Technological Forecasting and Social Change*. <https://doi.org/10.1016/j.techfore.2021.121231>
- Sarpong, D., Boakye, D., Ofosu, G., & Botchie, D. (٢٠٢٢). The three pointers of research and development (R&D) for growth-boosting sustainable innovation system. *Technovation*. <https://doi.org/10.1016/j.technovation.2022.102081>
- Sciarelli, M., Prisco, A., Gheith, M. H., & Muto, V. (٢٠٢٢). Factors affecting the adoption of blockchain technology in innovative Italian companies: an extended TAM approach. *Journal of Strategy and Management*. <https://doi.org/10.1108/JSMA-02-2021-0054>
- Sheriakov, O. O. (٢٠٢٠). Innovative Approaches to Positioning in Marketing. *Interactive Science*. <https://doi.org/10.21661/i-029946>
- Song, B., Jin, P., & Zhao, L. (٢٠١٩). Incentive Mechanism of R&D Firms' Collaborative Innovation Based on Organisational Ambidexterity. *Discrete Dynamics in Nature and Society*. <https://doi.org/10.1155/2019/6750123>
- Susantono, B., & Berawi, A. (٢٠١٨). Improving the Sustainable Infrastructure Development through Innovative Approaches in Technology, Management and Financial Aspects. *CSID Journal of Infrastructure Development*. <https://doi.org/10.327883/csijd-jid.v1i1.0>
- Tian, H., Dogbe, C. S. K., Pomegbe, W. W. K., Sarsah, S. A., & Otoo, C. O. A. (٢٠٢٠). Organizational learning ambidexterity and openness, as determinants of SMEs' innovation performance. *European Journal of Innovation Management*. <https://doi.org/10.1108/EJIM-05-2019-0140>
- Truong, N. T., Dang-Pham, D., McClelland, R. J., & Nkhoma, M. (٢٠٢٠). Service innovation, customer satisfaction and behavioural intentions: a conceptual framework. *Journal of Hospitality and Tourism Technology*. <https://doi.org/10.1108/JHTT-02-2019-0030>
- Turner, J. A., Klerkx, L., White, T., Nelson, T., Everett-Hincks, J., Mackay, A., & Botha, N. (٢٠١٧). Unpacking systemic innovation capacity as strategic ambidexterity: How projects dynamically configure capabilities for agricultural innovation. *Land Use Policy*. <https://doi.org/10.1016/j.landusepol.2017.07.054>
- van Lieshout, J. W. F. C., van der Velden, J. M., Blomme, R. J., & Peters, P. (٢٠٢١). The interrelatedness of organizational ambidexterity, dynamic

capabilities and open innovation: a conceptual model towards a competitive advantage. *European Journal of Management Studies*.

<https://doi.org/10.1108/ejms-01-2021-0007>

Vecchio, Y., Francescone, M., Adinolfi, F., & De Rosa, M. (٢٠٢٢).

“Ambidexterity”: trump card for farm’s innovativeness and competitiveness.

British Food Journal. <https://doi.org/10.1108/BFJ-03-2021-0264>

Wang, T., Yang, J., & Zhang, F. (٢٠٢١). The effects of organizational

controls on innovation modes: An ambidexterity perspective. *Journal of*

Management and Organization. <https://doi.org/10.1017/jmo.2018.30>

Weigel, C., Derfuss, K., & Hiebl, M. R. W. (٢٠٢٣). Financial managers and

organizational ambidexterity in the German Mittelstand: the moderating

role of strategy involvement. *Review of Managerial Science*.

<https://doi.org/10.1007/s11846-022-00534-8>

Weiss, L., & K. Kanbach, D. (٢٠٢٢). Toward an integrated framework of

corporate venturing for organizational ambidexterity as a dynamic

capability. *Management Review Quarterly*. [https://doi.org/10.1007/s11301-](https://doi.org/10.1007/s11301-021-00223-y)

[021-00223-y](https://doi.org/10.1007/s11301-021-00223-y)

Wilms, R., Winnen, L. A., & Lanwehr, R. (٢٠١٩). Top Managers’ cognition

facilitates organisational ambidexterity: The mediating role of cognitive

processes. *European Management Journal*.

<https://doi.org/10.1016/j.emj.2019.03.006>

Yoshikuni, A. C., Favaretto, J. E. R., Albertin, A. L., & de Souza Meirelles,

F. (٢٠١٨). The influences of strategic information systems on the

relationship between innovation and organizational performance. *Brazilian*

Business Review. <https://doi.org/10.10728/bbr.2018.10.5.3>