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MARKETING | RESEARCH ARTICLE

Does innovation ambidexterity influence restaurant economic performance in the post-COVID-19 era? The mediating effect of customer orientation

Athuman Makona¹, Ruth Elias¹, Victoria Makuya¹ and Ismail Abdi Changalima^{1*}

Abstract: In the restaurant industry, innovation ambidexterity entails the organization's ability to successfully manage and blend exploratory and exploitative innovation endeavors with the goal of improving restaurant processes, products, or services. The current study investigates the direct and indirect effects of innovation ambidexterity on the economic performance of restaurant businesses in Tanzania after Coronavirus disease (COVID-19). Thus, the study examined the effect of exploitative and exploratory innovation on restaurant economic performance, as well as the mediating effect of customer orientation on the relationship between innovation ambidexterity and restaurant economic performance. The study collected data from 169 randomly selected restaurant managers in Dodoma, Tanzania, and analyzed it using partial least squares structural equation modelling. The

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PUBLIC INTEREST STATEMENT

The COVID-19 pandemic has had a profound impact on businesses across various industries, including restaurants. These businesses have not been immune to the negative consequences of the pandemic. Consequently, the “new normal” that emerged in the post-COVID-19 era calls for increased innovation in the business sector. This study examined the direct effects of innovation ambidexterity on the restaurant economic performance, as well as the indirect effects (via customer orientation). Based on data collected from various restaurants in Dodoma, Tanzania. Our study's findings demonstrate that both exploitative and exploratory innovations (innovation ambidexterity) have a significant and positive influence on the restaurant economic performance. Additionally, customer orientation plays a significant and positive mediating role in the relationship between innovation ambidexterity and restaurant economic performance. Therefore, our study highlights the critical role of innovation, particularly in the post-COVID-19 era, in enhancing restaurant performance. This influence occurs both directly and indirectly through customer orientation.

findings unveiled that innovation ambidexterity (exploitative and exploratory innovation) has a direct impact on restaurant economic performance. Furthermore, customer orientation was discovered to be a significant mediator of the relationship between innovation ambidexterity and restaurant economic performance. Based on the main findings, restaurants in the post-COVID-19 era should promote innovation and customer-centricity. This is because a workplace that values innovation can inspire creative thinking and new ideas. Also, customer-centricity is critical for understanding and meeting the changing needs of customers.

Subjects: Entrepreneurship and Small Business Management; Marketing; Hotel Management;

Keywords: Innovation ambidexterity; Exploitative innovation; Exploratory innovation; Customer orientation; Restaurant economic performance; Restaurant businesses; Post-COVID-19

1. Introduction

The restaurant industry is widely regarded as the most important contributor to national economies around the world in terms of job creation and income generation (Daries et al., 2021; Thommandru et al., 2023; S. Wang et al., 2023). According to recent reports, the restaurant industry accounts for a significant portion of global gross domestic product, with estimates indicating it to be around 4% (Lew, 2020). This highlights the importance of the restaurant industry as a crucial promoter of economic development particularly in emerging economies. Moreover, the benefits of restaurants extend beyond just economic advantages, as they provide social benefits to the communities they serve (Elias & Mwakujonga, 2019; Mahmood & Bashir, 2020). By dining at local restaurants, people can experience diverse culinary options and connect with others in their community, fostering a sense of belonging and promoting social cohesion (Amani & Ismail, 2022; Elias & Mwakujonga, 2019). Therefore, it is important to recognize the significant role that the restaurant industry within nations in ensuring development in different aspects such as economic and social aspects.

In the final months of 2019, Coronavirus disease (COVID-19) surfaced as a highly contagious illness which rapidly disseminated throughout the world, resulting in severe ramifications for multiple businesses (Amani & Ismail, 2022; Coccia, 2021a; Jiménez-Estévez et al., 2023; Ozili, 2022; Rubio-Andrés et al., 2023). Restaurants as part of tourism and hospitality industry have been among the business industry that took a major hit during COVID-19 pandemic (Amani, 2023b; Coccia, 2021b; Dube et al., 2021; Henseler et al., 2022; Madeira et al., 2020). During the lockdown many restaurants took a break and some strive to survive with unpredictable times and unclear policies. The COVID-19 impact to restaurants businesses has become critical to the functioning and economic performance because of sensitivity of the industry to the crises (Gomes et al., 2022). In 2020, experts predicted that due to the effects of lockdowns and customers avoiding public places because of the pandemic, approximately half of all restaurants would be unable to survive (Severson & Yaffe-Bellany, 2020). This is because the decrease in customers led to lower sales, and the subsequent job losses resulted in increased operating costs for restaurants (Holder et al., 2021; Singh et al., 2023; Vig & Agarwal, 2021). Despite the lifting of lockdown measures and the resumption of business operations, research indicates that restaurant businesses are still grappling with the negative impacts of the prolonged COVID-19 pandemic. This highlights the fact that even in the post-COVID-19 era, restaurant businesses continue to face challenges, underscoring the need for ongoing efforts to fully restore their economic functions and performance.

It is crucial to note that customers are at the heart of every successful restaurant business. To address the economic performance of restaurants after the pandemic, the literature emphasizes

the fact that customers' culture, preferences, and choices have undergone a significant transformation during and after the pandemic (Amani & Ismail, 2022). Consequently, it has been noted that consumers are looking for unique dining experiences and new flavors, thus, innovation is becoming increasingly important in the restaurant industry (Cho et al., 2020; E. Kim et al., 2021; H. Kim et al., 2023; Najib et al., 2020; Ngo, 2023). This underscores the need for restaurants to adapt to the evolving needs of their customers to remain competitive in the post-pandemic era. In simple terms, customers are the lifeblood of any business (Amani, 2023b; Ismail, 2023b; Kazungu & Kubenea, 2023). Thus, a business that can maintain a balance amongst exploiting existing ideas and exploring new ones to attract customers is likely to gain a competitive edge, increase sales, and improve its overall economic performance.

This entails the concept of "innovation ambidexterity" which emphasizes the need for organizations to devote more effort towards both exploiting their existing resources and exploring new ones (Alghamdi, 2018). In the context of restaurants, innovation ambidexterity refers to the restaurant's ability to use two distinct approaches to innovation: exploitative innovation and exploratory innovation (Cho et al., 2020). Utilizing the restaurant's existing resources and capabilities to improve short-term survival and performance is an example of exploitative innovation. Exploratory innovation, on the other hand, entails the development of new services and products tailored for new emerging markets, which is critical for success in the long-term and growth (Brion et al., 2010; Luqmani et al., 2017). Through innovation ambidexterity approach, businesses can enhance their economic performance by optimizing their current operations while also exploring new market opportunities and innovative solutions. Furthermore, a critical aspect of innovation is the recognition of the importance of prioritizing the needs and wants of the customer (Ismail, 2022b). By understanding and responding to the changing preferences of customers, businesses can remain relevant and competitive in the market (Amani, 2022, 2023a). Therefore, innovation efforts should be aligned with the customer's changing demands and preferences, allowing businesses to adapt to the evolving market conditions for the purpose of maintaining a sustainable competitive advantage (Cho et al., 2020; Coccia, 2017; Olazo, 2023). By applying innovation which focus on customer needs with a range of technological and creative solutions the restaurant business may regain economic performance (Fusté-Forné & Hussain, 2021).

Innovation has been proven to play a crucial role in meeting customers' needs across various business industries (Coccia, 2021c; Ismail, 2022b; Luqmani et al., 2017). As such, customer-oriented businesses are more likely to satisfy their customers by meeting their requirements. In the case of the restaurant business, it is critical to make a strategy to maintain consumer demand for its economic performance (Sigala, 2020). Given the problems existed in the COVID-19, most restaurant businesses will need to continue to adapt to new strategies to regain their economic performance in terms improving sales, profits and new market opportunities. Finding new strategies to improve the economic performance of the restaurant business is crucial for several reasons. Firstly, the restaurant industry is a significant contributor to the global economy, and continue to grow despite the challenges posed by the pandemic (Dube et al., 2021; Nhamo et al., 2020). Secondly, the restaurant industry is potential in providing employment to skilled and unskilled individuals, improve socialization, and serve individuals who work outside their homes, while also generating income for the owners and contributing to government revenue (Nhamo et al., 2020). Furthermore, the restaurant industry has experienced substantial economic destruction during COVID-19 (J. Kim & Lee, 2020; J. Kim et al., 2020).

Despite the acknowledged importance of innovation ambidexterity in enabling organizations to prioritize customer needs, there has been little research into its potential contributions to restaurant businesses in emerging economies, particularly in the post-COVID-19 era. To the best of our knowledge, no studies have yet explored the direct and indirect effects of innovation ambidexterity on restaurant economic performance in an emerging economy like Tanzania during this period. This research aims to fill this gap by investigating both the direct and indirect effects of innovation ambidexterity on the economic performance of restaurants in Tanzania. Being the third world

country, with a growing economy, Tanzania needs innovation in several business sectors to achieve fast development. Also, as we navigate towards a new normal in the post-COVID-19 era, restaurant businesses are proactively addressing customer needs and adapting to the changing environment through the implementation of innovative business practices. Consequently, the purpose of this study is to investigate the direct effect of innovation ambidexterity on restaurant economic performance, as well as its indirect effect through customer orientation. Therefore, the present study aims to address the following research questions.

RQ1: How does innovation ambidexterity affect the economic performance of restaurants in the post-COVID-19 era?

RQ2: Does customer orientation serve as a mediator of the relationship between innovation ambidexterity and economic performance of restaurants in the post-COVID-19 era?

To address the aforementioned research questions, this study utilizes a quantitative approach to investigate how exploitative innovation and exploratory innovation, i.e., innovation ambidexterity, affect the economic performance of restaurants. Additionally, the study explores whether customer orientation mediates the relationship between innovation ambidexterity and restaurant economic performance in Tanzania. The study aims to extend the existing literature on restaurant performance in the post-COVID-19 era by providing empirical evidence from Tanzania on the use of innovation ambidexterity in restaurant businesses for reviving economic performance. Furthermore, the study is expected to shed light on how restaurant businesses can recover from similar pandemics by implementing innovative practices in their operations so as to meet their customers' needs. The remainder of this paper is organized into five parts. The subsequent section contains the literature review and study's hypotheses, section three contains the methodology, and section four contains the main results. Sections five and six present discussion and conclusion, implications and limitations, respectively.

2. Literature review and study's hypotheses

2.1. *The ambidexterity theory*

This theory offers an extensive framework to comprehend the relationship between innovation ambidexterity, customer orientation, and restaurant economic performance (Cho et al., 2020; van Lieshout et al., 2021). It emphasizes the importance of balancing exploration and exploitation for long-term success and organizational performance (van Lieshout et al., 2021). The theory recognizes that organizations including restaurants need to simultaneously engage in both types of innovation to adjust to dynamic environments, exploiting existing capabilities and exploring new opportunities (Alghamdi, 2018). It provides valuable insights in understanding the dynamics at play between customer orientation and organizational economic performance (van Lieshout et al., 2021; Y. Wang et al., 2022). It therefore suggests that restaurants need to pursue both exploitative and exploratory innovation to prosper in a dynamic landscape (Cho et al., 2020). This balance enables them to simultaneously exploit their existing strengths and explore new opportunities. In the context of the post-COVID-19 era, where the restaurant industry like many other industries has faced significant downturns, innovation ambidexterity becomes even more critical.

Because of COVID-19, the business world has experienced changes in consumer behavior, consumers' safety concerns (Khayru, 2021), and consequently shifts in their dining preferences. To survive in this new landscape, restaurants need to adapt and innovate. Exploitative innovation can help organizations including restaurants improve their operations to meet health and safety concerns, improve efficiency in operations, and reduce costs of production (Cho et al., 2020). Exploratory innovation, on the other hand, can enable them to develop new products (Farzaneh et al., 2022), such as contactless ordering and delivery options, outdoor dining experiences, or virtual dining concepts. By striking a balance between exploitative and exploratory innovation,

restaurants can therefore effectively respond to growing needs of their customers, capitalize on evolving opportunities, and improve their economic performance. Nevertheless, achieving innovation ambidexterity is not without challenges. Balancing the exploration of new ideas with the exploitation of existing capabilities requires careful resource allocation, organizational flexibility, and a culture that supports innovation (Farzaneh et al., 2022).

2.2. Hypotheses development

2.2.1. Innovation ambidexterity and customer orientation

In many industries, the sources of innovation are unknown. According to Coccia (2017), innovation can emerge during technological advancements from the co-evolution of significant problems and the corresponding problem-solving activities. These findings may be relevant to the restaurant industry. The theory of ambidexterity emphasizes the fact that organizations that can balance exploitative and exploratory innovations are more likely to achieve long-term success (Cho et al., 2020; Farzaneh et al., 2022; Kortmann, 2015; Rodhiah & Hidayah, 2022). Therefore, an organization is said to have innovation ambidexterity if it is able to pursue and excel in both exploratory innovation (creating new ideas, experimenting with new technologies, and exploring new markets) and exploitative innovation (optimizing existing products, processes, and business models for maximum efficiency and profitability) at the same time (Cho et al., 2020). Exploratory innovation involves generating new ideas, experimenting with new technologies, and exploring new markets; exploitative innovation involves optimizing existing products, processes, and business models for maximum efficiency and profitability (Osiyevskyy & Dewald, 2015; Rodhiah & Hidayah, 2022).

Because of this, it is necessary to strike a balance between the requirements of exploring new opportunities and those of capitalizing on those that already exist. The idea of innovation ambidexterity recognizes that in order for businesses to flourish and be successful over the course of their existence, they need to have the ability to do both (Farzaneh et al., 2022). It is based on the idea that by aligning the characteristics of exploitative and exploratory innovation with the principles of customer orientation, restaurant businesses can create more innovative and customer-centric business operations (Cho et al., 2020). By leveraging exploitative and explorative innovation, a restaurant may enhance its customer orientation by offering a more tailored and satisfying experience to its customers. This can help to build customer loyalty and drive repeat business. The current study is on the premise that innovation ambidexterity may influence customer orientation in restaurant businesses, hence it is hypothesized that: -

H_{1a}. Exploitative innovation in restaurants has a positive effect on customer orientation

H_{1b}. Exploratory innovation in restaurants has a positive effect on customer orientation

2.2.2. Innovation ambidexterity and restaurant economic performance

Exploitative innovation may become important in restaurant economic performance because it may focus on improving existing food services. It enables restaurants to build on their existing strengths in service refinement and efficiency to increase the value of their products and services (Cho et al., 2020). Furthermore, exploitative innovation helps in implementation of current skills and processes in increasing the hidden prices that can be collected from inexperienced consumers. Exploitative innovation is incremental in nature, focusing on the demands of current customers and resulting in incremental product changes (Jansen et al., 2006). For example, optimizing the kitchen layout or streamlining the ordering process can help a restaurant improve efficiency and reduce costs. AlAbri et al., (2022) discovered that exploitative innovation has an impact on a firm's operational performance.

On the other hand, exploratory innovation can be a crucial factor in the economic success of restaurant businesses. This is particularly important in the current business environment which is

characterized by competitive, where staying ahead of the curve is essential for survival (Ismail, 2022a). By exploring new ideas, concepts, and approaches, restaurants can differentiate themselves from their competitors. Thus, exploratory innovation can be a substantial component in the long-term viability and growth of a restaurant business (Cho et al., 2020). Exploratory innovation has an impact on the underlying environment by generating novel products or services and identifying new markets. Available literature demonstrated that exploratory innovation provides inventive solutions and imaginative approaches to meet the demands of customers and the market (Moreira et al., 2022). Exploratory innovation allows restaurants to identify new opportunities and differentiate themselves from their competitors (Cho et al., 2020). For instance, by introducing novel and creative menu options and other innovative facilities for their customers, restaurants can differentiate themselves from their competitors. Based on this discussion, it is reasonable to hypothesize that

H_{2a}. Exploitative innovation has a positive effect on restaurant economic performance

H_{2b}. Exploratory innovation has a positive effect on restaurant economic performance

2.2.3. *Customer orientation and restaurant economic performance*

Customers are the lifeblood of most businesses because they generate revenue to fund operations (Amani, 2022; Ismail, 2023b; Yuk & Garrett, 2023). Hence, a considerable number of enterprises are dedicating substantial resources towards attaining optimal levels of customer satisfaction and loyalty. Prior research has indicated that companies that prioritize the satisfaction of their customers and strive to exceed their expectations exhibit superior performance compared to their rivals (Ismail, 2023b). Regarding this matter, maintaining a customer-centric approach is a crucial strategy for enterprises striving to attain outstanding success in their commercial activities. The concept of customer orientation entails comprehending the requirements, inclinations, and conduct of customers, thereby facilitating enterprises to customize their products in order to cater to those demands (Habel et al., 2020). This strategy offers a framework for companies to add value for their clients. Additionally, by continuously observing and adapting to the shifting needs and preferences of customers, customer orientation practices assist businesses in remaining competitive in the market (Rajagopal, 2023). Businesses can gain a competitive edge by doing this by creating new goods and services that address changing customer needs.

Despite the crucial role of customer orientation in ensuring the performance of businesses, there is limited evidence available on the topic in the restaurant businesses' context, particularly in the post-COVID-19 era from the perspective of developing countries. There is a wide variety of businesses, especially among SMEs which establishes significant results on the relationship between customer orientation and performance (Bamfo et al., 2019; Ismail, 2023b; Pekovic & Rolland, 2016; Racela & Thoumrungroje, 2020). Given the unique nature of restaurant businesses, which involves constant customer interaction and feedback on the services and goods provided (Elias & Mwakujonga, 2019; H. Kim et al., 2023), especially in the post-COVID-19 era (Dube et al., 2021), there is a critical need to examine the role of customer orientation in this industry. Therefore, this study aims to investigate the hypothesis that customer orientation can improve the economic performance of restaurant businesses in the post-COVID-19 era. In light of the above discussion, it is important to formulate the following hypothesis: -

H₃. Customer orientation has a positive effect on restaurant economic performance

2.2.4. *Customer orientation as a mediator*

In the post COVID-19 era, it is crucial for service-oriented businesses like restaurants to engage in innovation. However, amidst this focus on innovation, it remains essential to prioritize understanding and fulfilling customer needs and wants (H. Kim et al., 2023; Ngo, 2023). The changes

and experiences encountered by restaurant businesses during COVID-19 have made innovation a necessity in order to meet the evolving needs of customers. Therefore, when businesses innovate to regain economic performance, it is vital to consistently emphasize the importance of addressing customers' needs. For example, exploratory innovative approaches such as introducing a new menu that focuses on fitness and healthy food can greatly enhance customer satisfaction. Previous research has indicated that restaurant businesses that prioritize exploitative innovation are more likely to cater to the preferences and requirements of their customers (Cho et al., 2020). Hence, innovation plays a critical role in ensuring that restaurants successfully meet their customers' demands. In the post COVID-19 era, as restaurants adapt to new ways of life and a changing business environment, customer orientation, which centers on meeting customers' needs, becomes an important outcome of their innovative efforts.

On the other hand, previous studies have demonstrated that businesses that prioritize meeting and exceeding customer needs outperform their competitors (Ismail, 2023b). Therefore, by focusing on innovation, businesses can develop new products and services that cater to emerging customer demands, leading to desired performance outcomes (Cho et al., 2020). Furthermore, practicing customer orientation enables businesses to stay competitive in the market by continuously monitoring and responding to evolving customer needs and preferences. The literature reveals a wide range of businesses, particularly SMEs, that have established significant results regarding the relationship between customer orientation and performance (Bamfo et al., 2019; Ismail, 2023b; Pekovic & Rolland, 2016; Racela & Thoumrungroje, 2020). Similarly, there is evidence suggesting that customer orientation matters in the connection between innovation and performance within service-based businesses (Yuk & Garrett, 2023). Hence, exploitative and explorative innovation may lead to customer orientation, as both involve understanding and fulfilling customer needs and preferences. Additionally, businesses can achieve customer orientation by identifying new opportunities for growth and improvement, addressing customer pain points, and resolving areas of dissatisfaction (B. Y. Kim, 2008; Neneh, 2018).

Furthermore, innovation enables businesses to be flexible and responsive in meeting evolving customer demands, which ultimately leads to customer satisfaction (Ismail, 2022b; Widelska & Krot, 2021). Because restaurants operate in highly competitive and dynamic markets (Amani & Ismail, 2022; Elias & Mwakujonga, 2019), the concept of exploitative and explorative innovation is especially relevant to them (Cho et al., 2020). Restaurant businesses can better meet the needs of their customers by focusing on improving existing products or services through exploitative and explorative innovation. This, in turn, assists them in establishing a strong competitive advantage and achieving long-term economic success. Given the distinct nature of restaurant businesses, which involve continuous customer interaction and feedback on the services and goods provided (Elias & Mwakujonga, 2019), particularly in the context of the COVID-19 era (Dube et al., 2021). Thus, it is crucial to examine the role of continuous customer orientation in this service industry in post-COVID-19 era. In light of the above discussion, it is important to formulate the following hypotheses: -

H_{4a}. Customer orientation positively mediates the relationship between exploitative innovation and restaurant economic performance

H_{4b}. Customer orientation positively mediates the relationship between explorative innovation and restaurant economic performance

3. Methodology

3.1. Sample and data

The quantitative method was involved because the study focused on analyzing the relationships between variables and test their hypotheses. This approach was chosen for this study because it

allowed the researchers to systematically investigate and test hypotheses about the relationships to satisfy the main study's objective (Hair et al., 2020). This study examined the relationships between innovation ambidexterity, customer orientation, and restaurant economic performance. On the other hand, the study employed a cross-sectional survey design in which data from respondents was collected at a single point in time (Creswell & Creswell, 2018). This design is frequently used when researchers want to obtain a snapshot of a specific population or phenomenon without examining changes over time (Changalima et al., 2023). This design allowed researchers to collect a large amount of data quickly and efficiently. Therefore, data was collected from managers of the surveyed restaurants in Dodoma city, Tanzania. The area was chosen because after the relocation of government headquarters from Dar es Salaam (Changalima et al., 2021, 2022), the area experienced the highest rate of recent population growth and business opportunities, including the restaurant industry (Ismail, 2022b; Mashenene & Kumburu, 2020).

A-priori sample size calculator was utilized for establishing a sample size that detects the effect and model structure in structural equation models (Soper, 2020). The anticipated effect size was 0.3, with 80% statistical power and 4 latent variables and 18 observed variables at a 95% significance level. The calculator came up with 137 as the minimum required sample size to detect an effect, 88 as the minimum sample size for model structure, and 137 as the recommended minimum sample size. Finally, the study successfully obtained responses from 169 restaurants' managers in Dodoma, Tanzania which was deemed significant and satisfactory as it was more than the recommended sample size. This ensured that the responses from 169 restaurants increased the statistical power and compensated for potential missing data. Based on the research context and previous studies on restaurant businesses conducted in Dodoma, Tanzania, this sample size was deemed sufficient for generalizability. For example, Magese and Chindengwike (2021) used a sample size of 110 in the same location, which provided a foundation for determining the adequacy of the sample size in this study. Furthermore, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.858 (greater than 0.5) and Bartlett's Test of Sphericity at $p < 0.001$ indicated that sampling adequacy was not a concern in our study (Macharia et al., 2023; Pallant, 2020). Restaurant managers were chosen as the unit of inquiry of this study due to their expertise in managing operations within their establishments (Cho et al., 2019; Elias & Mwakujonga, 2019). They were selected as they possess the necessary information to comprehend innovation ambidexterity, customer orientation, and restaurant economic performance in the context of their businesses. Survey questionnaire was employed under which drop-off and pick-up technique was employed to ensure adequate response rate with a survey questionnaire included questions related to the main study's constructs.

3.2. Measures of variables

The construct measurements in this study were grounded from previous validated research, and thus this study used previously validated items to measure the constructs. To conceptualize innovation ambidexterity, the study used two constructs: exploitative innovation and exploratory innovation. All of these constructs for innovation ambidexterity were measured by using four items (for each construct) adapted from (Cho et al., 2020). For instance, *"implementation for small changes to our existing services"* is an example of exploitative innovation, while *"development for new menu items and services"* is an example of exploratory innovation. The mediating variable, customer orientation, was measured by using five items adapted from (B. Y. Kim, 2008). *"My restaurant strives to improve value we provide to our customers"* is an example of item used to measure customer orientation. On the other hand, restaurant economic performance was measured by using five items obtained from (Chiu & Hsieh, 2016; Rao & Holt, 2005), with one sample item being *"new market opportunities"* as presented in Table 1. All items were measured on a 5-point Likert scale.

3.3. Models and data analysis procedure

The direct and indirect relationships as presented in Figure 1 were analyzed using Partial Least Squares-Structural Equation Modelling (PLS-SEM) with the help of SmartPLS v.4, which is a more

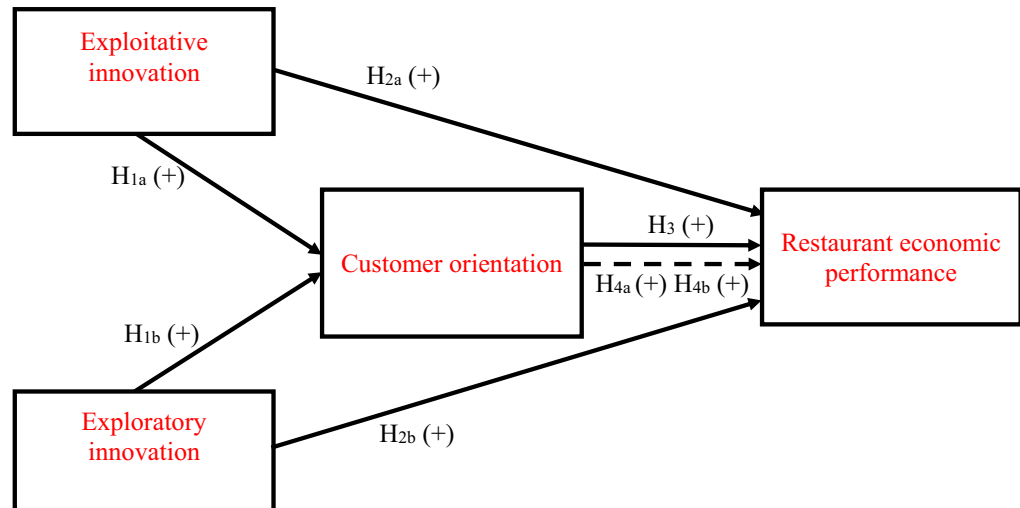
Table 1. Measurement model results

Constructs/indicators	Outer loadings	α	CR	AVE
<i>Exploitative innovation (EPTI)</i>		0.871	0.911	0.720
• Implementation for small changes to our existing services (EPTI1)	0.847			
• Improvement for the existing menu items and services based on the current business environmental conditions (EPTI2)	0.855			
• Seeking to improve upon the efficiency of our menu items and services (EPTI3)	0.880			
• Improvement for those menu items and services our existing customers seek (EPTI4)	0.811			
<i>Exploratory innovation (EPRI)</i>		0.847	0.895	0.682
• Development for new menu items and services (EPR11)	0.787			
• Development for new marketing and sales strategies (EPR12)	0.771			
• Being given information about new menu products from our suppliers (EPR13)	0.881			
• Seeking to and attract new customers from other markets (EPR14)	0.859			
<i>Customer orientation (CUOR)</i>		0.930	0.947	0.782
• My restaurant strives to improve value we provide to our customers (CUOR1)	0.852			
• Customer satisfaction is an important business objective (CUOR2)	0.921			
• My restaurant attempts to understand customer needs (CUOR3)	0.875			
• My restaurant measures customer satisfaction (CUOR4)	0.917			

(Continued)

Table 1. (Continued)					
Constructs/indicators	Outer loadings	α	CR	AVE	
• My restaurant pays close attention to customer service (CUOR5)	0.856				
Restaurant economic performance (REPF)		0.930	0.947	0.780	
• New market opportunities (REPF1)	0.886				
• Product price increase (REPF2)	0.894				
• Profit margin (REPF3)	0.910				
• Sales (REPF4)	0.890				
• Market share (REPF5)	0.835				

Figure 1. The proposed model.



effective method for analyzing complex relationships that involve both latent and observed variables (Hair et al., 2021). Therefore, PLS-SEM was relevant in the analysis due to its predictive power in analyzing complex causal-relationships even with a limited (small) sample size (Hair et al., 2019). The analysis comprised two stages. In the first stage, a reflective measurement model was assessed to evaluate the reliability, validity, and other requirements of the measurement model. The second stage involved the assessment of the structural model for testing study's hypotheses (direct and indirect effects). In this case, the first stage produces important outputs such as α values, outer loadings, Construct Reliability (CR) and cross loadings. In the second stage, collinearity was tested by using values of Variance Inflation Factor (VIF), whereas predictive power and relevance were assessed by values R^2 , f^2 and Q^2 . To establish the statistical relationships the values of path coefficients (β) and p-values were utilized (Hair et al., 2019).

4. Results

4.1. Common method variance

This study's data were collected using a self-reported questionnaire from a single restaurant manager in each organization surveyed. Concerns regarding socially desirable responses and bias are raised by this method. To address this issue, the researchers utilized Harman's single factor test to determine if a single factor explained the majority of the variance in the data, thereby indicating the presence of Common Method Variance (CMV) (Harman, 1967). The analysis revealed that a single factor accounted for only 38.76% of the variance, indicating that CMV is not a major issue (Podsakoff et al., 2003). The VIF values were also utilized to measure bias, and the results revealed that the VIF values for the primary constructs, exploitative innovation, exploratory innovation, and customer orientation, are 1.127, 1.193, and 1.265, respectively. This means that the data gathering processes did not create bias into the study's findings (Kock, 2015).

4.2. Assessing measurement model

The measurement model (PLS-SEM algorithm—factor) was used in this section as the first stage of PLS-SEM, and the results are shown in Figure A1 in Appendix 1. The measurement model results in PLS-SEM are usefully in order to assess the reliability and validity of the study, as recommended by (Hair et al., 2019). Specifically, all values of Cronbach alpha coefficient (α) and CR as presented in Table 1 exceed 0.7, indicating an adequate range of internal consistency and CR. Moreover, the factor outer loadings exceed 0.708, indicating a high degree of contribution for each item to respective construct and hence increase acceptability of item reliability (see Table 1 and Figure A1 in Appendix 1). Regarding convergent validity, the analysis shows that all values of Average

Table 2. Discriminant validity

Fornell-Larcker criterion				
Constructs	CUOR	EPRI	EPTI	REPF
CUOR	0.884			
EPRI	0.321	0.826		
EPTI	0.389	0.219	0.849	
REPF	0.426	0.332	0.333	0.883
HTMT matrix				
CUOR				
EPRI	0.348			
EPTI	0.427	0.250		
REPF	0.454	0.349	0.365	

Note(s): EPTI - Exploitative innovation, EPRI - Exploratory innovation, CUOR - Customer orientation, and REPF - Restaurant economic performance

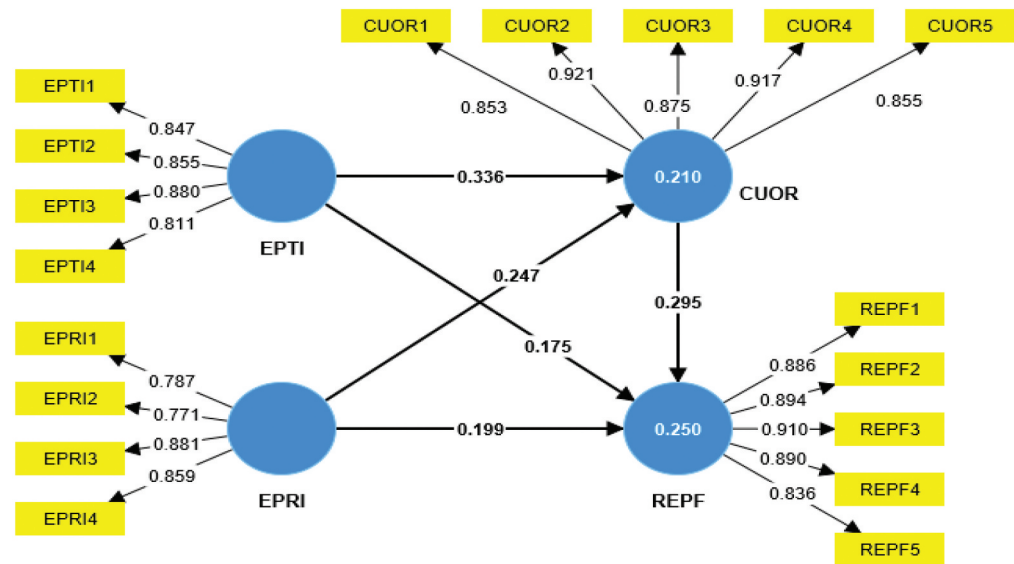
Variance Extracted (AVE) exceed 0.5 and outer loadings of above 0.708 (see Table 1). This advocates that the constructs are different and well-defined, and that the measurement model is effective in capturing the intended constructs. Discriminant validity has been successfully established using different techniques, as demonstrated by the results presented in both Tables 2 and Tables A1 (in Appendix 2). The Fornell-Larcker criterion was met as presented in Table 2. Also, the Heterotrait-Monotrait (HTMT) matrix in Table 2 produced supportive results, as all values were < the suggested threshold of 0.85 (Ab Hamid et al., 2017; Hair et al., 2019). The results in Table A1 in Appendix 2 demonstrates that each item performs best on its intended construct. Because all items have higher factor loadings on their intended construct than any other construct. These findings suggest that the constructs are distinct from one another and that the measurement model is effective in differentiating between them. Overall, these findings provide strong evidence that the model is a reliable and valid tool for measuring the intended constructs. By ensuring the reliability and validity, researchers can increase the quality of their research findings and draw valid conclusions based on the data they have collected.

4.3. Assessing structural model

After successfully establishing reliability and validity in the initial measurement model, a structural model was constructed and analyzed. The results of this analysis are presented in Figure 2 (PLS-SEM algorithm—path). The values of VIF for the main constructs as presented in section 4.1 are all less than 3 indicating that collinearity was not a concern in this study (Becker et al., 2015; Guenther et al., 2023). The relationship between EPTI and CUOR resulted in an f^2 value of 0.136, while the relationship between EPRI and CUOR resulted in an f^2 value of 0.073. The relationship between CUOR and REPF had an f^2 value of 0.091, and the relationships between EPTI and REPF and EPRI and REPF had f^2 values of 0.034 and 0.047, respectively. It is worth noting that according to (Cohen, 1988) an f^2 value of 0.02, 0.15, and 0.35 represents small, medium, and large effect sizes, respectively. Therefore, all the f^2 values in the relationships presented in this study are small.

In PLS-SEM, the values of R^2 are relevant as they are used to assess the predictive power of the model by indicating the amount of variance in the endogenous variable that can be explained by the included variables in the model (Hair et al., 2019). The values of R^2 as presented in Figure 2 are $R^2 = 0.210$ for CUOR and 0.250 for REPF. These results imply that innovation ambidexterity in terms of exploitative and exploratory innovation ambidexterity as exogenous variables in the model contribute to approximately 21% of the variance in the endogenous variable, CUOR, with an R^2

Figure 2. The structural model.



value of 0.210. Similarly, the R^2 value of 0.250 for REPF implies that approximately 25% of the variance in the endogenous variable (REPF) is explained by the included variables in the model. However, it is important to note that according to (Hair et al., 2019), R^2 values of 0.25 and below are considered low as they represent a low contribution to the model. The threshold for moderate and substantial contributions are 0.50 and 0.75, respectively. In addition, the Q^2 predict values are utilized to assess the explanatory and out-of-sample predictive power of the model (Hair et al., 2019, 2020). A Q^2 value greater than 0 suggests that the exogenous variable is relevant in predicting the endogenous variable in the structural model. In this study, the Q^2 values for CUOR and REPF are 0.175 and 0.149, respectively. These findings suggest that the data used in the study provides strong evidence supporting the predictive relevance of the endogenous variable (CUOR) in the model.

The p-values and path coefficients for assessing the hypothesized relationships are presented in Table 3. The results show that all hypotheses of the study were accepted as results support the hypothesized relationships. The findings suggest that innovation ambidexterity significantly and positively impacts customer orientation and economic performance in restaurant businesses. Specifically, the positive and significant relationship between EPTI and CUOR ($\beta = 0.335$, $p < 0.001$) and EPRI and CUOR ($\beta = 0.247$, $p = 0.001$) indicate the initial contribution of innovation ambidexterity to customer orientation. Similarly, the positive and significant relationships between EPTI and REPF ($\beta = 0.175$, $p = 0.044$) and EPRI and REPF ($\beta = 0.199$, $p = 0.018$) as presented in Table 3 demonstrate the influence of innovation ambidexterity on economic performance in surveyed restaurants. These results indicate that both exploitative and exploratory innovation ambidexterity have a positive and significant influence on both customer orientation and restaurant economic performance.

In addition, the study investigated the mediating role of customer orientation in the relationship between innovation ambidexterity and the economic performance of restaurants as part of addressing the second research question. The results in Table 3 indicate a significant indirect effect of innovation ambidexterity on restaurant economic performance as shown in the PLS path model. As presented in Table 3, the indirect effect of exploitative innovation on restaurant economic performance through customer orientation ($\beta = 0.099$, $p = 0.012$). These findings highlight the crucial role of customer orientation as a significant mediator in this relationship between exploitative innovation and restaurant economic performance ($p < 0.05$). Additionally, the

Table 3. Path coefficients for the structural model

Relationships	Path coefficients	Standard deviation	T statistics	p-values
EPTI -> CUOR	0.335	0.079	4.238	0.000
EPRI -> CUOR	0.247	0.077	3.222	0.001
EPTI -> REPF	0.175	0.087	2.013	0.044
EPRI -> REPF	0.199	0.084	2.369	0.018
CUOR -> REPF	0.294	0.090	3.258	0.001
Indirect effects				
EPTI -> CUOR -> REPF	0.099	0.039	2.525	0.012
EPRI -> CUOR -> REPF	0.073	0.032	2.253	0.024

Note(s): EPTI - Exploitative innovation, EPRI - Exploratory innovation, CUOR - Customer orientation, and REPF - Restaurant economic performance

relationship between exploratory innovation and restaurant economic performance was also found to be positive and significant, with a mediating effect of customer orientation ($\beta = 0.073$, $p = 0.024$). These findings suggest that customer orientation plays a significant and positive mediating role in the relationship between innovation ambidexterity, including both exploitative and exploratory innovation, and restaurant economic performance.

Thus, the second research question is answered, and it can be determined that customer orientation is an important mediator in the relationship between innovation ambidexterity (in terms of exploitative innovation and exploratory innovation) and restaurant economic performance. Nevertheless, in accordance with recommendations from the literature, both direct and indirect effects of exploitative and exploratory innovation on restaurant economic performance through customer orientation were found to be significant, indicating a partial mediation effect. This suggests that while some effects of innovation ambidexterity, both in terms of exploitative and exploratory innovation, are directly related to restaurant economic performance, some of the impact is indirect, passing through customer orientation as a mediator. In the absence of customer orientation as a mediating variable, innovation ambidexterity (exploitative innovation and exploratory innovation) can still have a positive impact on restaurant economic performance. This is the case as innovation ambidexterity allows restaurants to pursue both exploitative and exploratory innovation strategies at the same time, resulting in the creation of new products or services as well as enhancements to existing ones. These innovations have the potential to attract new customers, raise customer satisfaction, and improve overall performance. However, the presence of customer orientation as a mediating variable can explain the impact of innovation ambidexterity on restaurant economic performance indirectly. By concentrating on customer needs and preferences, restaurants can better target their innovation efforts and ensure that their products and services are well-received in the market.

5. Discussion

This study examines the role of innovation ambidexterity on restaurant economic performance and the mediating effect of customer orientation on the relationship between innovation ambidexterity and economic performance of restaurant businesses in the post-COVID-19 era. Generally, the study based on two important variables for improving restaurant economic performance which are innovation ambidexterity and customer orientation. The study established that innovation ambidexterity in terms of exploitative and exploratory innovation have positive and significant effects on customer orientation in restaurant businesses during the post-COVID-19 era as all p-

values as presented in Table 3 are statistically significant, supporting hypotheses H_{1a} and H_{1b} which are in consensus with prior studies (Widelska & Krot, 2021). The plausible explanation for the positive relationships is that innovation has become an important tool for businesses to provide customers with required new services and assist them in the dynamic business environment (Daradkeh et al., 2023; Ringo et al., 2022). Therefore, both exploitative and exploratory innovation are important determinants of customer orientation for restaurant businesses. On closer examination of items of innovation ambidexterity, EPTI3 with a loading of 0.880 and EPRI3 with a loading of 0.881 contributes much in explaining exploitative and exploratory innovation respectively on customer orientation.

These two items center on “*seeking to improve upon the efficiency of our menu items and services*” and “*being given information about new menu products from our suppliers*”. These items imply that restaurant businesses that focus on improving menu items and services, as well as those that receive advance notice of new menu products from suppliers, can improve customer orientation in their operations. This is due to the fact that customer orientation may focus on understanding customer needs (Ismail, 2023b), which is necessary for business growth, and by improving menu items, restaurant businesses are more likely to attract and meet the needs of customers. Customer orientation entails resource allocation (Racela & Thoumrungroje, 2020), for example, explorative innovation intends to discover new things and take risks, whereas exploitative innovation intends to overcome difficulties with those resources and procedures in order to provide good customer value (Enkel et al., 2017).

The study also discovered a positive and significant influence of innovation ambidexterity on restaurant economic performance, as both exploitative and exploratory innovation are positively and significantly related to restaurant economic performance, supporting the hypotheses H_{2a} and H_{2b} . Even though the positive results on the relationship between innovation ambidexterity and restaurant performance is not new (Cho et al., 2020), the role of both exploitative and exploratory innovation on enhancing economic performance of restaurant businesses in post-COVID-19 era for emerging economies like Tanzania remained unexplored. Therefore, unlike the study conducted by (Cho et al., 2020), our study establishes the empirical evidence of innovation ambidexterity on restaurant economic performance from Tanzanian context. Also, our study's findings are supported by those of (Najib et al., 2020), their results established that innovation is important determinant of performance for restaurants in Indonesia. Therefore, restaurant businesses can improve their economic performance through improvement of menu items and services that are offered to their customers. Increases in sales, market share, and profits may be directly related to innovation practices used by businesses to improve their overall performance (Rodhiah & Hidayah, 2022). Based on this, restaurants with ambidextrous innovation are more likely to improve their economic performance, particularly during the post-pandemic era when businesses resume normal business operations.

The study findings also indicate that customer orientation positively and significantly relates to economic performance of restaurant businesses, supporting the hypothesis H_3 . These findings imply that restaurants that focus on the needs of customers are more likely to improve their economic performance through improvement of their sales, profit margins, and market share and enhancing market opportunities. Our results are in support with other previous studies (Ismail, 2023b; Neneh, 2018). However, these studies were not conducted in the context of restaurant businesses which are unique in terms of offered services to the different nature of customers (Elias & Mwakujonga, 2019). Therefore, the study adds to the line of research on the role of customer orientation on performance in different context. Since, the current study provides an empirical evidence of customer orientation on economic performance of restaurant businesses in the context of emerging economy, Tanzania. Based on the closer examination of individual items of customer orientation, CUOR2 which centers on “*customer satisfaction is an important business objective*” is the main factor that contributes to the effect of customer orientation on improving restaurant business economic performance. As a result, businesses in the restaurant industry are

more likely to improve economic restaurant performance when they prioritize customer satisfaction as a key business objective. This is supported by studies conducted by (Amani, 2022; Ismail, 2023a), which emphasize the importance of improving customer satisfaction in order to improve business operations. This demonstrates the significance of customer orientation in restaurant strategies as a means of striving for excellence.

Finally, the study discovered that customer orientation has a mediating effect on the relationship between innovation ambidexterity and restaurant economic performance. Therefore, customer orientation serves as a mediator for the main relationship between the variables in the study, supporting H_{4a} and H_{4b} . Our findings indicate that some of the effects of innovation ambidexterity in terms of exploitative and exploratory innovation on restaurant economic performance are mediated by customer orientation. This implies that ambidexterity in innovation has an indirect effect on economic performance via customer orientation. The findings highlight the importance of customer orientation in shaping restaurant economic performance in the post-COVID-19 era. The findings that innovation ambidexterity directly influences customer orientation and customer orientation positively influences economic performance of a restaurant business support the theoretically hypothesized mediation effect. The implication is that for a restaurant to perform well, managers must invest in innovation ambidexterity (Cho et al., 2020), and customer orientation at the same time for improving performance. The findings of our study support present literature on the role of customer orientation as a mediator in a variety of contexts (Halvorsen et al., 2023; H. Kim & Qu, 2020; Zang et al., 2020). However, the current study provides uniquely empirical evidence from Tanzanian restaurant businesses that effective exploitative and exploratory innovation can be mediated by customer orientation, resulting in improved firm economic performance. Therefore, improving innovation ambidexterity and focusing on customer orientation are new ways for restaurants to meet customer demands in order to improve restaurant economic performance during post-COVID-19 era.

6. Conclusion, implications and limitations

After the COVID-19 pandemic, businesses, including restaurants, are attempting to recover by making operational improvements. Our research shows that two factors can have a significant impact on the economic performance of restaurants in the post-COVID-19 era: innovation ambidexterity, which includes both exploitative and exploratory innovations, and a strong customer orientation. The main findings suggest that innovation ambidexterity directly affects restaurant economic performance and also indirectly through its impact on customer orientation. In this regard, our results have significant inferences for restaurant managers in the restaurant industry. First, restaurant managers are advised to put in place innovative practices for changing and improving menu items and services for their businesses in order to ensure that customer needs and requirements are met, thus focusing on customer orientation. This can be accomplished by improving their organization's capabilities and operations in order to ensure that businesses revive in the post-pandemic era. The same can be achieved for improvement of economic performance as organizations with innovation ambidexterity are far much better in meeting customer needs and improving their performance. This is significant because the study established the positive influence of innovation ambidexterity on improving customer orientation and economic performance for restaurant businesses in terms of both exploitative and exploratory innovation.

Second, customer orientation, like in any other business that relies on meeting the needs of customers to survive (Ismail, 2023b), should be a key component of restaurant businesses. The focus of restaurant businesses should be on meeting the needs and requirements of customers through menu item modifications and ensuring customer satisfaction. Finally, the study's findings provide useful information on the importance of customer orientation in improving the relationship between innovation ambidexterity and restaurant economic performance. Restaurant managers, particularly in emerging economies such as Tanzania, have an important role to play in improving market position in this era, particularly after COVID 19. The ultimate goal of innovation ambidexterity is to improve a market position of the firm, which results in superior economic performance. Because innovation is action-oriented, it will be difficult for the restaurant to perform well without

considering customer orientation, as determined by the study. Therefore, restaurants must prioritize meeting their customers' needs while also investing in compliance with preventive measures to mitigate the pandemic's effects. These efforts may become necessary in support with other health precautionary measures put in place during the pandemic and investments in health-supportive equipment (Amani, 2023b; Coccia, 2023).

On the other hand, based on the ambidexterity theory, the study makes a theoretical contribution as it expands previous research on the role of innovation ambidexterity on restaurant performance (Cho et al., 2020), and the effect of customer orientation on explain performance in different contexts (Ismail, 2023b; B. Y. Kim, 2008; Pekovic & Rolland, 2016). The study was able to demonstrate the importance of customer orientation in the relationship between innovation ambidexterity and firm economic performance empirically. As a result, the study's findings suggest that customer orientation can be used as a mediator in the relationship between innovation and restaurant economic performance. Furthermore, the study was able to support the theory of innovation ambidexterity in explaining economic performance of restaurant businesses from the Tanzanian perspective. As a result, the proposed direct and indirect relationships between innovation ambidexterity and economic performance apply to emerging economies as well.

While our study extends the current body of literature, it is critical to recognize and address certain limitations that require attention. Our study's primary limitation is its cross-sectional design, which limits our ability to track changes in the variables of interest over time. Thus, our research concentrated on these variables at a specific point in time. Future studies may consider using longitudinal designs to explain trends observed in our study in order to build on our findings. Another noteworthy limitation is that our data were exclusively collected from restaurant managers, given their in-depth knowledge of the organizational affairs within their specific business settings. To broaden the scope of investigation, future research could include other employees, particularly frontline employees, to gather their perspectives and insights regarding the variables of interest. Furthermore, because the scope of the findings was limited to restaurant businesses in Dodoma, Tanzania, and the sample size was 169, future studies should consider a larger sample size. Furthermore, while the arguments in this paper were based on the innovation ambidexterity theory, there may be better explanations from other theories, particularly on the mediation effect of customer orientation on the influence of innovation ambidexterity and other non-economic performance indicators used by the current study to bring more new insights in emerging economies. Additionally, the study recommends that future research compare more than one country in emerging economies to examine the mediation effect of customer orientation or any other market orientations on the influence of innovation ambidexterity on economic performance or sustainability-related outcomes (Ismail et al., 2023), because different countries have different contexts in terms of culture, policies, people's behaviors, and the impact of the COVID-19 era.

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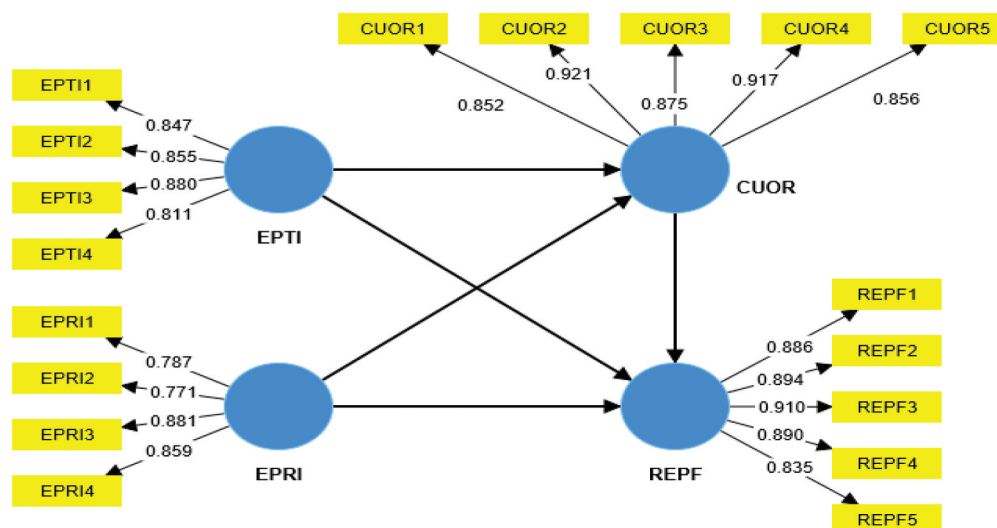
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Appendices

Appendix 1:

Figure A1. The Measurement Model.



Appendix 2:

Table A1. Cross loadings

Constructs/ indicators	CUOR	EPRI	EPTI	REPF
CUOR1	0.852	0.208	0.348	0.387
CUOR2	0.921	0.242	0.346	0.352
CUOR3	0.875	0.282	0.306	0.373
CUOR4	0.917	0.278	0.389	0.395
CUOR5	0.856	0.394	0.329	0.375
EPRI1	0.208	0.787	0.142	0.179
EPRI2	0.234	0.771	0.192	0.174
EPRI3	0.316	0.881	0.145	0.347
EPRI4	0.276	0.859	0.243	0.333
EPTI1	0.330	0.142	0.847	0.238
EPTI2	0.318	0.118	0.855	0.305
EPTI3	0.392	0.268	0.880	0.319
EPTI4	0.268	0.204	0.811	0.261
REPF1	0.446	0.331	0.326	0.886
REPF2	0.380	0.299	0.302	0.894
REPF3	0.354	0.274	0.306	0.910
REPF4	0.334	0.314	0.259	0.890
REPF5	0.354	0.238	0.272	0.835