Employee ambidexterity: The influence of entrepreneurial orientation on increasing competitive advantage in the tourism industry

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Abstract

Purpose The aim of this study is to examine how ambidexterity capabilities (exploration and exploitation) and entrepreneurial orientation contribute to competitive advantage in East Java's tourism industry.

Methodology/approach: The research was conducted in East Java's tourism sector, involving a survey of 230 tourism managers selected through purposive sampling. The data was analyzed using path analysis with mediation tests and t-tests through SmartPLS to examine the relationships between the study variables.

Results/findings: This study found that Entrepreneurial Orientation (EO) enhances both exploratory and exploitative ambidexterity, which promotes innovation and efficiency. Although EO directly enhances competitive advantage, its impact varies across the dimensions of ambidexterity. Exploratory ambidexterity weakens the relationship between EO and competitive advantage, while exploitative ambidexterity strengthens it. This suggests that balancing innovation with execution is key to sustaining success in the market.

Conclusions: The research concludes that tourism organizations in East Java should focus on developing ambidexterity exploitation capabilities to maximize the benefits of their entrepreneurial orientation for achieving competitive advantage. The balanced management of external challenges proves more crucial than internal resource management in this context.

Limitations: A limitation of the study is its focus on East Java's tourism industry and its use of purposive sampling, which may affect the generalizability of findings to other regions or sectors.

Contribution: This study contributes to tourism management literature by empirically testing the ambidexterity-competitive advantage relationship in an underexplored context. The findings provide practical insights for tourism managers on strategically allocating resources between exploration and exploitation activities to enhance their competitive position.

Keywords: Competitive Advantage, Entrepreneurial Orientation, Individual Ambidexterity

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1. Introduction

The tourism sector in East Java has shown significant growth. Tourist destinations in East Java are popular among domestic tourists. As many as 200,550,000 domestic tourists visited East Java (Wang et al., 2022). Domestic tourist trips to Java Island accounted for 75.49% of the total domestic tourist trips in Indonesia. The main destination province in 2022 was East Java, with the highest number of trips in Indonesia, accounting for approximately 27.29% of the total domestic tourist trips. One of the

tourism industries in East Java that has quite high natural tourism potential is Lumajang Regency (Khattak, Wu, Ahmad, & Hattab, 2024). Currently, some of the tourism potentials owned by Lumajang Regency include Mount Semeru, Watu Gedek Beach, Tumpak Sewu Waterfall, Ranu Pane, various natural baths (Selokambang, Kalisemut, Penanggal, etc.), fruit gardens, and coffee plantations. The position of Lumajang Regency is also quite good, with the nickname of one thousand Ranu Regency (Asif, Yang, & Hashim, 2024).

Lumajang is one of the 10 largest regencies/cities in East Java that are most visited by domestic tourists and is one of the regencies that has quite large tourism potential. However, the popularity of Lumajang Regency's tourist attractions has only developed on a local scale, unlike the surrounding regencies in East Java. Based on the performance report of the Lumajang Regency Tourism Office in 2023, the number of tourist visits increased from 2021 to 2022 (Kebede, Terefe, & Ijigu, 2024). Tourism in Lumajang has the potential for improvement and development. The strategy of strengthening capacity and institutions in the community and strengthening cooperation networks and regional investment is important. This step is strategic in capturing opportunities and responding to the challenges of the dynamics of tourism development so that the performance of the regency's tourism can be increased. To identify the competitive advantages of the tourism industry in Lumajang Regency, it is necessary to identify the organizational ambidexterity and Entrepreneurial orientation that have been carried out by each tourism (Li, Khan, Chughtai, & Le, 2022).

Ambidexterity, the ability of a company to effectively align and manage existing business demands while adjusting to external changes, has garnered increased attention in recent years. Ambidextrous people are very good at taking advantage of current products to drive more radical innovation and at looking for fresh chances to drive incremental innovation (Li et al., 2022; Ouyang, Zhu, & Ma, 2022; Wulandari & Wardani, 2024). Businesses, particularly SMEs in the tourism industry, can demonstrate how they continuously use entrepreneurial values by adopting and successfully implementing new strategies in response to business challenges (Ribeiro et al., 2021). To achieve this, the tourism industry must optimize its improvisational capabilities by building networks. One of the keys to this ability is having a high Entrepreneurial orientation (Makona, Elias, Makuya, & Changalima, 2023). Entrepreneurial orientation is defined as the tendency of companies to be proactive, innovative, and willing to take risks.

While previous studies have extensively examined the role of entrepreneurial orientation (EO) and organizational ambidexterity in enhancing business competitiveness, most have focused on manufacturing or service industries, with limited attention to the tourism sector, particularly in emerging regions such as Lumajang Regency, Indonesia. Existing research (Li et al., 2022; Ouyang et al., 2022; Wulandari & Wardani, 2024). primarily explores ambidexterity in large corporations, neglecting small and medium-sized enterprises (SMEs) in tourism, which operate under unique constraints, such as seasonal demand and resource limitations. Additionally, prior studies often treat exploration (innovation-driven strategies) and exploitation (efficiency-driven strategies) as separate constructs, whereas this study integrates them within the context of tourism SMEs, offering a more holistic understanding of how these dimensions interact to shape competitive advantage.

The uniqueness of this study lies in its focus on Lumajang Regency, a region with high yet underdeveloped tourism potential, unlike more commercialized destinations such as Bali or Yogyakarta. Unlike previous studies that emphasize macroeconomic tourism policies (Ribeiro et al., 2021), this study adopts a micro-level perspective, analyzing how individual tourism businesses leverage EO and ambidexterity to enhance competitiveness. Furthermore, prior studies (Li et al., 2022). Highlights the importance of entrepreneurial behavior, this study extends the discussion by examining how improvisational capabilities and local networking mediate the relationship between EO, ambidexterity, and competitive advantage, a dimension rarely explored in earlier works.

Theoretically, this study enriches the Resource-Based View (RBV) and Dynamic Capabilities Theory by demonstrating how tourism SMEs in developing economies balance exploration and exploitation to sustain competitiveness. It also refines the concept of EO in tourism, showing that risk-

taking and proactiveness must be complemented by adaptive strategies tailored to local conditions. Practically, the findings provide actionable insights for Lumajang's tourism stakeholders, including policymakers and business owners. By identifying the key drivers of ambidexterity and EO, this study offers strategies for capacity building, institutional strengthening, and investment networking, which are critical factors in transforming Lumajang into a nationally recognized destination. Additionally, this study highlights the need for community-based tourism development, ensuring that local businesses can compete without losing their cultural authenticity. Thus, this study bridges a gap in the tourism and entrepreneurship literature and provides a framework for sustainable tourism growth in underdeveloped regions.

2. Literature review

2.1. Resource-Based View (RBV) Theory

The Resource-Based View (RBV) is a strategic management theory that posits that a firm's unique resources and capabilities are the primary drivers of competitive advantage and superior performance (Barney, 1991). According to RBV, not all resources contribute equally to competitiveness; only those that are valuable, rare, inimitable, and non-substitutable (VRIN) can sustain long-term success. In the tourism sector, these resources may include natural attractions, cultural heritage, skilled human capital, strong local networks, and innovative business models.

2.2. Employee ambidexterity

Across all industries, employee ambidexterity (EA) is increasingly acknowledged as a critical component of enhanced organizational and individual success. The ability to concurrently utilize and investigate organizational resources is referred to as organizational ambidexterity. Ambidexterity is a popular metric for assessing the impact of industrial strategy applications (Makona et al., 2023). Ambidexterity is the agility of an organization that works with exploration and exploitation learning, so that uncertainty is higher and the success rate is lower due to the many failure traps (Bhatia & Kumar, 2022). Ambidexterity simultaneously exploits existing capabilities and explores new opportunities (Iqbal et al., 2021). Ambidexterity is defined as the ability to simultaneously engage in exploration and exploitation activities (Sony, Antony, & Mc Dermott, 2023). Barkat, Waris, Ahmed, and Dad (2024) manifests itself in a firm's ability to strike a balance between opportunity-seeking (i.e., exploration) and profit-seeking (i.e., exploitation) activities (Ali & Johl, 2023).

Ambidexterity refers to a company's ability to excel in both stable environments, where efficiency and control are important, and dynamic environments, where flexibility, autonomy, and experimentation are necessary (Fadda, 2018). Exploitation focuses on optimizing existing resources by improving and reusing products and processes with existing resources. While exploration emphasizes organizations and their managers on radical innovation, which refers to freedom and radical thinking that opens up major changes for the organization (Peng, Liang, Fatima, Wang, & Rasheed, 2024), companies need to learn to be ambidextrous to survive, that is, to be able to leverage all of their 'present' potential and resources while simultaneously exploring and adapting to ever-changing 'future' conditions.

According to Zia, Burita, and Yang (2023), Entrepreneurial orientation is referred to as the spearhead (pioneer) to realize sustainable and highly competitive company economic growth. According to Al Koliby, Mehat, Al-Swidi, and Al-Hakimi (2024), Entrepreneurial orientation is seen as having the ability to improve a company's performance. According Ajmal, Sareet, and Islam (2025), as a dispositional phenomenon, entrepreneurial orientation is described as "a company-level disposition to engage in behavior [reflecting risk-taking, innovation, proactiveness, autonomy, and competitive aggressiveness] that leads to change in the organization or market". Hai, Latif, Bilal, and Ahmad (2020), on the other hand, define entrepreneurial orientation as behavior.

"A set of different but related behaviors that have the qualities of innovation, proactiveness, competitive aggressiveness, risk-taking, and autonomy" is the definition of entrepreneurial orientation, based on these two notions." In other words, entrepreneurial orientation can be understood as a framework of thinking and a tendency to be entrepreneurial, which is manifested in a series of performances in a profit

organization. Interrelated processes (namely innovation, risk-taking, and proactiveness) if the company wants to engage in successful Entrepreneurial (Nguyen, Hooi, & Avvari, 2023). Liu, Wang, and Chen (2019) explains that Entrepreneurial orientation is a company's approach to doing business that emphasizes processes, practices, and decision-making that lead to new inputs that have four aspects of Entrepreneurship namely innovation, proactive action, risk-taking, and autonomy.

Entrepreneurial orientation is a condition that tends to make individuals innovate, be proactive, and dare to take risks to start or manage a business (Michna & Kmieciak, 2020). Entrepreneurial orientation has three dimensions: innovation, proactiveness, and risk-taking. Innovation is the main foundation that influences the creation of a company's competitive advantage, which ultimately affects the improvement of the company's performance (Sharifirad, 2013). The second dimension is a proactive attitude, which is a characteristic that always looks forward and has future goals to seek opportunities in anticipating future demand (Jiang, Asante, Zhang, & Ampaw, 2023). The third dimension is risk-taking, which can be said to be the company's willingness to take chances and pursue opportunities, even when the outcome is uncertain. It involves making strategic decisions based on incomplete information and potential consequences (Mohiya & Sulphey, 2021).

2.2.1. Entrepreneurial Orientation and Employee Explorative Ambidexterity in Tourism

Employee explorative ambidexterity in tourism reflects workers' ability to balance innovation with operational stability, a capability that aligns with the RBV's emphasis on valuable, rare, and difficult-to-imitate resources (Barney, 1991). For instance, when frontline staff experiment with AI-powered concierge services or immersive cultural experiences (Luoh, Tsaur, & Tang, 2014), they create tacit knowledge that competitors cannot easily replicate (Kafeel, Khan, & Ahmed, 2024). This meets the RBV inimitability criterion, as such innovations often emerge from firm-specific learning processes.

Entrepreneurial orientation (EO) cultivates employee explorative behaviors in tourism businesses through three distinct pathways. First, organizational innovativeness encourages frontline staff to propose and test unconventional service enhancements (Nazir, Shafi, Asadullah, Qun, & Khadim, 2021). Luxury eco-resorts, such as Soneva, exemplify this by empowering employees to create unique sustainability-focused guest activities. Second, proactiveness enables tourism workers to anticipate market shifts, such as the growing demand for personalized cultural immersion experiences (Fu, Chen, Huang, Li, & Köseoglu, 2020). Third, measured risk-taking allows experimentation with new digital platforms and contactless service models that became crucial during the pandemic (Hadi & Sheikh, 2024).

The tourism context presents unique challenges to implementation. Seasonal demand fluctuations and the need for consistent service standards often discourage such exploration. Successful tourism firms address this through dedicated innovation time and cross-functional project teams that allow employees to explore without disrupting their daily operations (Kyei-Frimpong, Berko Obeng Damoah, & Osafroadu Amankwah, 2024).

H1: Entrepreneurial orientation positively influences employee explorative ambidexterity in tourism organizations.

2.2.2. Entrepreneurial Orientation and Employee Exploitative Ambidexterity in Tourism

Employee exploitative ambidexterity in tourism represents workers' capacity to optimize existing operations while maintaining service quality, a capability that embodies RBV's focus on valuable, rare, and organizationally embedded resources (Barney, 1991). When hotel staff refine check-in procedures or restaurant teams perfect table turnover (Zheng, Wang, Lin, & Liu, 2023), they develop firm-specific process knowledge that competitors cannot easily imitate (Wahab, Subramaniam, Ho, & Bali Mahomed, 2024), satisfying the RBV's "rareness" and "inimitability" criteria. Employee exploitative ambidexterity in tourism encompasses workers' ability to refine existing service processes, enhance operational efficiencies, and consistently deliver quality experiences (Wahab et al., 2024). This capability is particularly crucial in tourism, where minor service improvements can significantly impact guest satisfaction and repeat business (Zheng et al., 2023).

Tourism businesses with strong EO channel entrepreneurial energy into systematic improvements through frontline employee engagement (Neupane, Zielinski, & Milanes, 2025). Hotel chains, such as Marriott, implement structured employee suggestion systems that transform grassroots ideas into service enhancements. The customer-facing nature of the industry makes employee-driven exploitation especially impactful, as frontline workers can immediately apply incremental improvements to guest interactions (M. M. Khan et al., 2022).

H2: Entrepreneurial orientation positively influences employee exploitative ambidexterity in tourism organizations.

2.2.3. Entrepreneurial Orientation and Competitive Advantage in Tourism

In tourism enterprises, competitive advantage emerges from unique value creation that aligns with RBV's emphasis on resource heterogeneity (<u>Barney</u>, 1991). Entrepreneurial orientation drives this advantage through three mechanisms. First, innovativeness leads to distinctive experience design, as demonstrated by adventure tour operators creating increasingly immersive activities (<u>Tajeddini</u>, <u>Gamage</u>, <u>Tajdini</u>, <u>Hameed</u>, <u>& Tajeddini</u>, 2024). Second, proactiveness enables capitalizing on emerging trends such as wellness tourism before competitors (<u>Martínez-Falcó</u>, <u>Marco-Lajara</u>, <u>Zaragoza-Sáez</u>, <u>& Sánchez-García</u>, 2024). Third, risk-taking facilitates the early adoption of technologies such as AI-powered concierge services (<u>Khairy</u>, <u>Baquero</u>, <u>& Al-Romeedy</u>, 2023).

H3: Entrepreneurial orientation is positively related to competitive advantage in tourism organizations.

2.2.4. Employee Explorative Ambidexterity and Competitive Advantage in Tourism

Employee explorative ambidexterity drives competitive advantage by developing "experience-based" resources (<u>Barney</u>, 1991). When tour guides innovate storytelling techniques or hotels create unique amenities (<u>Tajeddini</u>, <u>Gamage</u>, <u>Tajdini</u>, <u>Qalati</u>, <u>& Siddiqui</u>, <u>2023</u>). Tour guides who experiment with storytelling techniques and hotel staff who develop unique room amenities create memorable differentiators. This exploratory capacity builds organizational resilience against market disruptions, as seen in how innovative tour operators pivoted to virtual experiences during travel restrictions (<u>Ferreras-Méndez</u>, Llopis, & Alegre, 2022).

H4: Employee explorative ambidexterity is positively related to competitive advantage in tourism organizations.

2.2.5. Employee Exploitative Ambidexterity and Competitive Advantage in Tourism

Employee exploitative ambidexterity enhances advantage through RBV's "efficiency-as-resource" perspective (Barney, 1991). Restaurant staff refining table turnover processes or front desk agents optimizing check-in procedures demonstrate how incremental improvements compound into significant advantages. This capability is particularly valuable in tourism's labor-intensive environment where small efficiency gains yield substantial cost savings (Bratianu, Mocanu, Stanescu, & Bejinaru, 2023). H5: Employee exploitative ambidexterity is positively related to competitive advantage in tourism organizations.

2.2.6. The Mediating Role of Employee Explorative Ambidexterity

In tourism businesses, employee explorative ambidexterity translates EO's innovative potential of EO into tangible market advantages through three key processes. First, it converts entrepreneurial vision into guest-facing innovations, as seen in how the Ritz-Carlton empowers employees to create personalized guest experiences. Second, it balances service standardization and creative personalization. Third, it adapts global brand standards to local cultural contexts, which is a critical capability for international hotel chains (Hanaysha & Al-Shaikh, 2024; Yadav, Vyas, Kanchan, Ghosal, & Yadav, 2024).

H6: Employee explorative ambidexterity mediates the relationship between entrepreneurial orientation and competitive advantage in tourism organizations.

2.2.7. The Mediating Role of Employee Exploitative Ambidexterity

Employee exploitative ambidexterity mediates EO's impact by institutionalizing continuous improvement in service delivery (Majali, Alkaraki, Asad, Aladwan, & Aledeinat, 2022). This is manifested through (1) systematic refinement of guest interaction protocols, (2) ongoing optimization

of back-of-house operations, and (3) consistent enhancement of service quality metrics. Cruise lines, such as Royal Caribbean, exemplify this through their employee-driven perfection of onboard service processes (Al-Hakimi & Borade, 2020).

H7: Employee exploitative ambidexterity mediates the relationship between entrepreneurial orientation and competitive advantage in tourism organizations.

3. Methodology

3.1. Research Design

This study used a quantitative descriptive method. Quantitative methods can be defined as a research approach based on the philosophy of positivism, which is used to study certain populations or samples (Aluonzi, Byamukama, Marus, & Charity, 2024). Data collection was conducted using research instruments, and the data analysis was quantitative or statistical in nature, aimed at describing and testing previously established hypotheses. Quantitative descriptive research allows researchers to identify patterns, relationships, and effects within variables, facilitating hypothesis testing using structured data collection and statistical analysis (Nelson, Junaidi, & Sentoso, 2025). Data collection was carried out using research instruments, and data analysis was quantitative/statistical, which aimed to test predetermined hypotheses.

3.2. Population, Samples and Sampling Techniques

Population refers to a group of individuals who share the same characteristics and traits (Maulana, Verawati, & Sisdianto, 2025). In this study, the population consisted of all tourist attractions in East Java. The sample was part of the research population. The sample in this study used purposive sampling technique, where members of the population do not get the same opportunity to be sampled (Cholili & Kancana, 2023). The sample criteria consisted of 230 respondents who were tourist attractions in East Java.

3.3. Data Collection Technique and Data Analysis Technique

The data collection process carried out by the researchers involved distributing questionnaires to tourist attractions in East Java the questionnaire was distributed via Google Forms. A questionnaire is a data collection technique that involves providing a set of written questions or statements to respondents. The data analysis method used in this study was multiple regression, which involved one dependent variable and three or more independent variables. This study employed PLS version 3.2. The hypotheses were tested using multiple regression analysis, which estimated the effects of several independent variables on the dependent variable.

4. Results and discussion

4.1. Research Results

Based on gender, table 1 shows that the demographic profile of respondents reveals a significant gender disparity, with males constituting the majority (74%) compared to females (26%). This suggests a maledominated leadership structure in the tourism industry in East Java. In terms of age distribution, the largest proportion of respondents (49%) fell within the 41–50 age group, followed by those aged 31–40 (22%), 21–30 (16%), and 51–60 (13%). This indicates that most tourism managers are middle-aged and likely possess substantial experience in the sector. The predominance of older respondents may influence decision-making styles, particularly balancing innovation with operational stability.

•		Unit	%
Gender	Male	171	74%
	Female	60	26%
Age	21 - 30	37	16%
-	31 - 40	51	22%
	41 - 50	113	49%
	51 - 60	30	13%

The loading factor parameters and convergent validity test results are displayed in table 2. All indicator loadings exceeded the threshold of 0.7, confirming strong convergent validity. For Entrepreneurial Orientation (EO), the highest loading was observed for "Having an Optimistic Attitude" (0.927), underscoring the importance of optimism in entrepreneurial behavior. In Explorative Ambidexterity, "Ability to use new technology" (0.837) loads more heavily than "Ability to think out of the box" (0.711), highlighting the role of technological adoption in exploration. For Exploitative Ambidexterity, "Commitment" (0.874) and "Ability to maintain product reliability" (0.805) are the strongest indicators, emphasizing consistency and efficiency. Competitive Advantage is best represented by "Speed in handling complaints" (0.946), suggesting that responsiveness is a critical competitive driver.

Tabel 2. Loading Factor

Variables	Indicators	Outer loadings	
	Ability to Innovate	0,768	
	Ability to be Adapt	0,886	
Entrepreneurial Orientation	Having an Optimistic Attitude	0,927	
	Ability to Take Risks	0,810	
	Willingness to Continue to Chang	0,871	
	Ability to think out of the box	0,711	
	Ability to use new technology	0,837	
Ambidexterity Exploration	Ability to create new products	0,729	
	Ability to meet customer needs	0,858	
	Ability to find new market segments	0,754	
	Have commitment	0,874	
	Ability to maintain product reliability	0,805	
Ambidexterity Exploitation	Ability to be efficient	0,720	
Amoldexienty Exploitation	Ability to analyze customer satisfaction	0,767	
	Ability to maintain the quality of	0,737	
	products offered		
	Ability to respond quickly	0,713	
Competitive Adventage	Speed in handling complaints	0,946	
Competitive Advantage	Competitor analysis ability	0,739	
	Willingness to satisfy tourists	0,921	

Source: Primary Data processed, 2024

The evaluation of convergent validity using the average variance extracted (AVE) is shown in table 3. The AVE values for all constructs surpassed the recommended threshold of 0.5, demonstrating robust discriminant validity. Specifically, **EO** (0.612), Explorative Ambidexterity (0.608), Exploitative Ambidexterity (0.730), and Competitive Advantage (0.699) each explained more than 50% of the variance in their respective indicators. This confirms that the constructs are distinct and well measured.

Table 3. AVE Data

Variable	Average Variance Extracted (AVE)
Entrepreneurial Orientation	0,612
Ambidexterity Exploration	0,608
Ambidexterity Exploitation	0,730
Competitive Advantage	0,699

Source: Primary Data processed, 2024

The findings of the Fornell-Larcker discriminant validity test are presented in table 4. The square roots of the AVE (diagonal values) exceed the inter-construct correlations (off-diagonal values), ensuring discriminant validity. For instance, the correlation between EO and Exploitative Ambidexterity (0.627) is lower than the square root of the AVE for EO (0.783). This confirms that each construct captures a unique phenomenon without overlapping with the others.

Table 4. Fornell-Larcker

	Z_2	Z_1	Y	X
Ambidexterity Exploitation (Z ₂)	0,783			_
Ambidexterity Exploration (Z_1)	0,445	0,780		
Competitive Advantage (Y)	0,549	0,448	0,854	
Entrepreneurial Orientation (X)	0,627	0,242	0,557	0,836

Source: Primary Data processed, 2024

The results of the composite reliability test are presented in table 5. Both Cronbach's Alpha and Composite Reliability values exceeded 0.7, indicating high internal consistency. For example, EO achieved a Cronbach's alpha of 0.907 and a Composite Reliability of 0.931, reflecting the scale's reliability. Similarly, Exploitative Ambidexterity (Alpha = 0.838, CR = 0.885) and Competitive Advantage (Alpha = 0.853, CR = 0.902) demonstrated strong consistency.

Table 5 Composite Reliability

Variable	Cronbach's Alpha	Composite Reliability
Entrepreneurial Orientation	0,907	0,931
Ambidexterity Exploration	0,849	0,887
Ambidexterity Exploitation	0,838	0,885
Competitive Advantage	0,853	0,902

Source: Primary Data processed, 2024

Table 6 shows that the model explains 30.1% of the variance in Exploitative Ambidexterity, 20.1% in Explorative Ambidexterity, and 47.1% in Competitive Advantage. This suggests that EO significantly influences competitive advantage, with exploitative ambidexterity playing a more substantial role than explorative ambidexterity.

Table 6 *R-Square*

	R-Square	R Square Adjusted
Ambidexterity Exploitation	0,301	0,298
Ambidexterity Exploration	0,201	0,197
Competitive Advantage	0,471	0,464

Source: Primary Data processed, 2024

Based on table 7, The SRMR (0.107) meets the acceptable threshold (<0.10), indicating a reasonable fit. However, the NFI (0.686) falls below the ideal benchmark of 0.9, suggesting room for model improvement, possibly by incorporating additional variables or refining measurement items.

Table 7. Estimated Model

Ketengan	Saturated model	Estimated model	
SRMR	0,107	0,118	
NFI	0,686	0,683	

Source: Primary Data processed, 2024

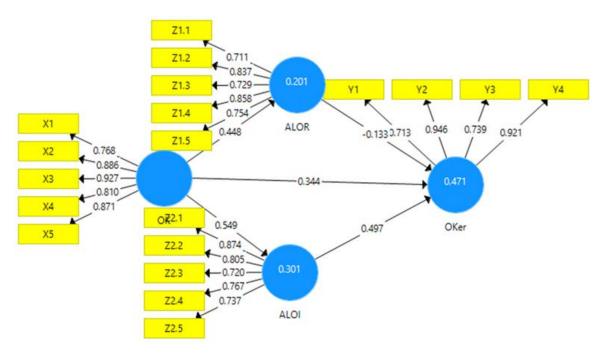


Figure 1. Output SmartPLS

The indicators used to generate a latent variable were evaluated for validity and reliability using this model. Table 11 shows that one of the seven hypotheses tested the influence of X on Y moderated by Z1 was rejected because its significance value was greater than 0.05. This suggests that the alternative hypothesis is rejected because Z1 does not mitigate the impact of X on Y. The other five hypotheses, however, are supported since they have significance values less than 0.05, indicating that X has a significant impact on Y, Z1 on X, Z2 on Y, and X on Y that is moderated by Z2.

Table 8. Results of Statistical t-Test

Variables	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/ STDEV)	P Value	Informat ion
Entrepreneurial Orientation → Ambidexterity Explorasi X → Z ₁	0,448	0,456	0,066	6,775	0,000	H1 is accepted
Entrepreneurial Orientation → Ambidexterity Exploitasi X → Z2	0,549	0,560	0,053	10,269	0,000	H2 is accepted
Entrepreneurial Orientation → Competitive Advantage X → Y	0,344	0,339	0,051	6,683	0,000	H3 is accepted
Ambidexterity Exploration → Competitive Advantage Z1 → Y	-0,133	-0,137	0,061	2,169	0,031	H4 is accepted

Ambidexterity Exploitation → Competitive Advantage	0,497	0,503	0,052	9,595	0,000	H5 is accepted
Z2 →Y						
Entrepreneurial Orientation → Ambidexterity Exploration → Competitive Advantage X → Z1 → Y	0,273	0,281	0,035	7,743	0,000	H6 is rejected.
Entrepreneurial Orientation \rightarrow Ambidexterity Exploitation \rightarrow Competitive Advantage $X \rightarrow Z_2 \rightarrow Y$	-0,059	-0,064	0,034	1,761	0,079	H7 is accepted

Source: Primary Data processed, 2024

4.2. Discussion

4.2.1. The Influence of Entrepreneurial Orientation on Ambidexterity Exploration in Tourism Management

The results of the statistical test show that entrepreneurial orientation has a significant effect on ambidexterity exploration, which means that H₁ is accepted. The ability of tourism Management Members to prioritize innovation affects their ability to develop tourism products that support the development of tourism in the place where they work. Innovation allows managers to create unique and attractive tourism experiences for tourists. This can include the use of new technology, creative product design, or the development of unprecedented, unique tour packages. This increases the attractiveness of destinations to tourists. Previous studies that support the findings of this research explaining the relationship between entrepreneurial orientation and ambidextrous exploration in various contexts, including the tourism industry, are by Fernandes, Ferreira, Veiga, Hu, and Hughes (2024), who stated that a high entrepreneurial orientation can increase the tendency of organizations to explore new opportunities, which is part of ambidextrous exploration. Ho, Soo, Tian, and Teo (2024), in their research, found that a strong Entrepreneurial orientation can increase the ability of organizations to simultaneously explore new opportunities and exploit existing resources.

Larsson, Elofsson, Sterner, and Åkerman (2019) found that entrepreneurial orientation positively contributes to ambidexterity exploration. Asad, Majali, Aledeinat, Abdelkarim Almajali, and Akhorshaideh (2023) showed that Entrepreneurial orientation can strengthen an organization's ability to manage ambidexterity, especially in the context of market and technological change. These studies consistently show that a strong entrepreneurial orientation can provide a good foundation for organizations to develop exploratory ambidexterity, which is essential for maintaining competitiveness and relevance in a changing market, such as the tourism industry.

4.2.2. The Influence of Entrepreneurial Orientation on Ambidexterity Exploration in Tourism Management

The results of the statistical tests show that entrepreneurial orientation has a significant effect on ambidexterity exploration, which means that H₂ is accepted. Entrepreneurial orientation encourages tourism Management Members to innovate by offering new products and services that can attract tourists. This includes developing unique tour packages, using technology to enhance the visitor experience, and creating promotional programs. Entrepreneurial orientation often encourages tourism Management Members to adopt a user-centric approach. The willingness of tourism Management

Members to continue to progress affects their ability to increase efficiency in tourism operations. Progressive Tourism Management Members tend to focus on improving service quality.

The willingness of Tourism Management Members to continue to progress not only brings direct benefits in terms of increasing operational efficiency but also supports the long-term growth and sustainability of the tourism industry as a whole. Research conducted by <u>Tajeddini et al.</u> (2023) reviewed management innovation and its important role in improving organizational ambidexterity. The factors that influence organizational ambidexterity and its impact on organizational performance (Khairy et al., 2023).

4.2.3. The Influence of Entrepreneurial Orientation on Competitive Advantage in Tourism Management

Based on the results of statistical tests, it appears that entrepreneurial orientation has a significant influence on competitive advantage, which means that tourism Management Members in Lumajang Regency, both those managed by the office and POKDARWIS, have very dynamic characteristics that affect their ability to provide a quick response when handling tourist complaints. The dynamic characteristics of tourism Management Members not only increase their ability to handle tourist complaints quickly but also allow them to maintain high service standards and increase overall tourist satisfaction.

When reviewed based on the characteristics of the respondents, the male gender is more dominant as a tourism manager in the Lumajang Regency. This also affects the statistical results, which show an influence between entrepreneurial orientation and competitive advantage. Male tourism management members have a more positive perception of prioritizing innovation, which influences decision-making in setting more competitive entrance ticket prices. In general, research shows that men tend to have a higher orientation towards ambition and risk-taking than women. This means that they are more likely to take the initiative in implementing innovation in the tourism business, including setting entrance ticket prices.

Tourism Management Members often tend to focus on competitive strategies to increase the competitiveness of their destinations. They can see innovation in pricing as a way to attract more tourists and beat competitors. The results of this study are also supported by several previous studies that revealed that entrepreneurial orientation affects competitive advantage. Martínez-Falcó et al. (2024) highlighted that entrepreneurial orientation in an organization affects its ability to create a competitive advantage. Tajeddini et al. (2024) study links Entrepreneurial orientation and organizational performance. They found that organizations with a high entrepreneurial orientation tend to have better performance and a greater competitive advantage. Focusing on innovation, adapting to market changes, and pursuing market opportunities can provide organizations with a competitive advantage.

Wahab et al. (2024) found that entrepreneurial orientation not only contributes to the creation of added value for the organization but also plays an important role in strengthening the organization's competitive position in a competitive market. Kyei-Frimpong et al. (2024) suggested that Entrepreneurial orientation, especially in terms of innovation and adaptation, is the key to achieving long-term competitive advantage. These studies provide evidence that entrepreneurial orientation is not only relevant for creating added value and organizational performance but also for achieving sustainable competitive advantage in dynamic and competitive markets.

4.2.4. The Influence of Ambidexterity Exploration on Competitive Advantage in Tourism Management

The results of the statistical test show that ambidexterity exploration significantly influences competitive advantage, which means that H₄ is accepted. Ambidextrous exploration refers to an organization's ability to simultaneously explore new opportunities and take advantage of existing advantages. Ambidextrous exploration has a direct impact on competitive advantage. Based on the results of the observations and interviews, it is known that there are several reasons why both variables

have a significant influence. One of them is the ability of Tourism Management Members to manage resources optimally.

The second reason is the existence of regulations and policies. The tourism industry is often highly dependent on government regulations and policies at the local and national levels. This can support an organization's ability to explore new opportunities independently because of government support. A deeper exploration of the results of the respondents' answers shows that the ability of tourism Management Members to update technology affects their ability to handle tourist complaints. Tourism Management Members may focus more on developing infrastructure or promoting tourism using new technology, accompanied by a tourist complaint-management system. Quick handling of tourist complaints is often more related to interpersonal skills, understanding local culture, and sensitivity to the needs and expectations of tourists. A balanced combination of sophisticated technology and good service management skills is more capable of meeting tourists' overall expectations and satisfaction.

Research that supports the finding that exploration ambidexterity influences competitive advantage investigates how organizational strategies to integrate exploration (innovation, new search) and exploitation (increasing the operational efficiency of what already exists) affect long-term performance. Hadi and Sheikh (2024) found that although ambidexterity can increase innovation (exploration), it does not result in direct performance improvement or competitive advantage. These studies suggest that while ambidexterity exploration is important for long-term innovation and organizational adaptation, it alone cannot guarantee a competitive advantage. Success in achieving a competitive advantage depends on how organizations manage and integrate ambidexterity into their overall strategy and operations.

4.2.5. The Influence of Ambidexterity Exploitation on Competitive Advantage in Tourism Management

The results of the statistical test show that exploration ambidexterity has a significant effect on competitive advantage. Therefore, H₅ is accepted. Ambidexterity exploitation allows the tourism industry to continuously improve service quality, reduce operational costs, and increase productivity. This can help tourism Management Members offer more competitive prices or better customer experiences, which are important factors in maintaining a competitive advantage. According to the results of respondents' answers to the two variables above, the commitment of tourism Management Members to improve the quality of tourist attractions affects determining more affordable entrance ticket prices compared to similar tourism competitors.

Improving the quality of tourist attractions can help build a better reputation for them in the eyes of visitors and the wider community. A good reputation can allow managers to attract more visitors, even by offering more affordable entrance ticket prices. Several previous studies that support the finding that ambidexterity exploitation has a significant effect on competitive advantage include research by Fu et al. (2020), which shows that ambidexterity, especially effective ambidexterity exploitation, has a positive effect on a company's competitive advantage. Kamboj et al. (2016) explored how ambidexterity (exploration and exploitation) contributes to innovative performance and competitive advantage in the manufacturing industry in India. Their findings suggest that strong exploitation ambidexterity helps firms adapt to market changes and achieve a competitive advantage in the long run.

According to Nazir et al. (2021), exploitative ambidexterity contributes significantly to achieving competitive advantage, especially in a dynamic market context. Kafeel et al. (2024) considered ambidexterity in the context of manufacturing companies in Indonesia, focusing on the relationship between ambidexterity and business performance. Their findings suggest that good exploitation ambidexterity can improve a firm's adaptability to environmental changes and, consequently, enhance its competitive advantage. These studies suggest that ambidexterity exploitation has a significant positive impact on a firm's competitive advantage in both international and domestic contexts, such as Indonesia.

4.2.6. Role of Ambidexterity Exploration in the Relationship between Entrepreneurial Orientation and Competitive Advantage in Tourism Management

The results of the statistical test indicate that entrepreneurial orientation has no influence on competitive advantage through ambidexterity exploration; therefore, H_6 is rejected. Ambidexterity exploration helps create differentiation from competitors, either through product innovation, tourism experience, or marketing strategy. However, ambidexterity exploration does not play a good role for tourism Management Members in Lumajang Regency. In the context of the relationship between Entrepreneurial orientation and competitive advantage in tourism management in Lumajang Regency, ambidexterity exploration does not appear to play a dominant role. Tourism Management Members may tend to focus more on maintaining existing operational efficiency than actively exploring new opportunities. Many tourism management members may focus on developing existing tourism infrastructure, improving marketing, and improving customer service rather than seeking new exploration opportunities that may require additional risk and investment. Furthermore, <u>Luoh et al.</u> (2014) show that excessive ambidexterity exploration (relative to exploitation) can interfere with the strategic adaptation needed to maintain a long-term competitive advantage.

According to (M. A. Khan, Ismail, Hussain, & Alghazali, 2020), the implementation of ambidexterity does not always result in competitive advantage due to the complex managerial challenges in achieving the right balance between the two activities. Ambidexterity Exploration does not play a strong role in the relationship between entrepreneurial orientation and competitive advantage in tourism management in Lumajang Regency. These factors indicate that efficient operational management and improvements in infrastructure and marketing may be more prominent in their efforts to achieve a competitive advantage. In short, it can be concluded that explorative ambidexterity cannot improve the relationship between entrepreneurial orientation and competitive advantage in tourism in Lumajang Regency.

4.2.7. The Role of Ambidexterity Exploitation in the Relationship between Entrepreneurial Orientation and Competitive Advantage in Tourism Management

The results of the statistical test of the influence of entrepreneurial orientation on competitive advantage through ambidextrous exploration were significant, meaning that H_7 was accepted. This can be interpreted as ambidexterity exploitation playing a good role in mediating the influence of entrepreneurial orientation on the competitive advantage of tourism Management Members in the Lumajang Regency. Ambidexterity exploration in the tourism industry refers to the ability to integrate and optimize the sustainable and responsible use of local natural and cultural resources while maintaining competitive and profitable tourism appeal.

By implementing the concept of ambidextrous exploration, the tourism industry can achieve a better balance between economic growth, environmental protection, and social welfare. This is not only beneficial for the environment and local communities but also strengthens the long-term tourism appeal of the destination. Based on this role, the entrepreneurial orientation of tourism Management Members can improve their ability to realize their competitive advantages. Entrepreneurial orientation in tourism often encourages the development of new products and services that meet changing market needs and desires (Mohiya & Sulphey, 2021). Ambidexterity exploration enables entrepreneurial orientation to create additional value in tourism, such as by developing partnerships with local communities or implementing sustainable management practices. Risk management is an important aspect of entrepreneurial orientation in the tourism industry (Jiang et al., 2023). Ambidexterity exploration enables holistic risk management, encompassing operational, financial, environmental, and social risks.

5. Conclusions

5.1. Conclusion

The primary findings of this investigation are presented. Theoretically, employee ambidexterity in the tourism sector can be explained by the theories of entrepreneurial orientation and competitive advantage exchange, according to this study. The practical significance of this study is that ambidexterity exploitation in tourism industry managers is more capable of bridging the increasing relationship between entrepreneurial orientation and competitive advantage. A tourism manager with creative ideas in tourism management can influence competitiveness in terms of the economic value of tourism

products by exploiting HR capabilities in controlling their resources compared to exploring other things outside the tourism industry, such as cooperation with the government or other stakeholders. Based on the results of this research, decision-makers can provide more in-depth treatment of the exploitation ambidexterity variable, meaning that by managing its resources effectively and efficiently, the tourism industry will achieve a more optimal competitive advantage. Further research can explore in more depth other factors that can optimize the competitive advantage of the tourism industry in Indonesia

5.2. Limitations

This study has several limitations that should be acknowledged. First, the research focused specifically on tourism managers in East Java, potentially limiting the generalizability of the findings to other Indonesian regions or different sectors of the tourism industry. Second, the cross-sectional design of the study restricts our ability to establish causal relationships or observe how these dynamics evolve over time. Third, reliance on self-reported data from managers may introduce response bias, as participants might provide socially desirable answers regarding their entrepreneurial orientation and ambidextrous capabilities. Fourth, this study primarily examined internal organizational factors (entrepreneurial orientation and ambidexterity) and did not consider external factors such as government policies, market competition, or global tourism trends. Finally, the study's quantitative approach may have overlooked nuanced contextual factors that could be captured through qualitative methods.

5.3. Suggestions

Building on the current findings, future studies should adopt a more comprehensive approach to deepen our understanding of ambidexterity in Indonesia's tourism sector. Researchers could benefit from expanding the geographical scope to include diverse tourism destinations across the archipelago, which would account for regional variations in tourism management practices and market conditions in Indonesia. A longitudinal research design would be particularly valuable for tracking how the relationship between entrepreneurial orientation, ambidexterity, and competitive advantage evolves over time, especially in response to industry disruption or policy changes. Incorporating mixed-methods approaches that combine quantitative surveys with in-depth interviews or case studies could yield richer insights into how tourism managers practically implement ambidexterity strategies in their daily operations. Future investigations should also consider examining critical external factors, such as government tourism policies, technological adoption, and global market trends, along with potential moderating variables, such as organizational culture or leadership styles, that might influence these dynamics. Comparative studies across different tourism sectors (e.g., hotels, travel agencies, and attractions) can reveal sector-specific patterns in ambidexterity implementation. Additionally, developing more nuanced measurement tools that capture the full spectrum of exploration and exploitation activities will enhance the precision of future research. These methodological improvements would collectively contribute to a more robust framework for understanding how Indonesian tourism enterprises can strategically balance innovation and efficiency to sustain their competitive advantage in an increasingly dynamic global tourism market.

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References

- Ajmal, M., Sareet, Z., & Islam, A. (2025). Unleashing Innovation Through Employee Voice Behavior in the Hotel Industry: The Impact of Ambidextrous Leadership on Innovative Work Behavior. *Journal of Hospitality and Tourism Insights*, 8(2), 448-471. doi: https://doi.org/10.1108/JHTI-08-2023-0564
- Al-Hakimi, M. A., & Borade, D. B. (2020). The Impact of Entrepreneurial Orientation on the Supply Chain Resilience. *Cogent Business & Management*, 7(1), 1-18. doi:https://doi.org/10.1080/23311975.2020.1847990
- Al Koliby, I. S., Mehat, N. A. B., Al-Swidi, A. K., & Al-Hakimi, M. A. (2024). Unveiling the Linkages between Entrepreneurial Culture, Innovation Capability, Digital Marketing Capability and

- Sustainable Competitive Performance of Manufacturing SMEs: Evidence from Emerging Countries. *The Bottom Line*, *37*(4), 473-500. doi: https://doi.org/10.1108/BL-08-2023-0241
- Ali, K., & Johl, S. K. (2023). Driving Forces for Industry 4.0 Readiness, Sustainable Manufacturing Practices and Circular Economy Capabilities: Does Firm Size Matter?. *Journal of Manufacturing Technology Management*, 34(5), 838-871. doi: https://doi.org/10.1108/JMTM-07-2022-0254
- Aluonzi, B., Byamukama, E., Marus, E., & Charity, T. (2024). Credit Risk Management: An Imperative for Profitability of Centenary Bank Kabale Branch. *International Journal of Financial, Accounting, and Management, 6*(1), 19-31. doi:https://doi.org/10.35912/ijfam.v6i1.1904
- Asad, M., Majali, T. e., Aledeinat, M., Abdelkarim Almajali, D., & Akhorshaideh, A. H. O. (2023). Green Entrepreneurial Orientation for Enhancing SMEs Financial and Environmental Performance: Synergetic Moderation of Green Technology Dynamism and Knowledge Transfer and Integration. *Cogent Business & Management, 10*(3), 1-20. doi:https://doi.org/10.1080/23311975.2023.2278842
- Asif, M., Yang, L., & Hashim, M. (2024). The Role of Digital Transformation, Corporate Culture, and Leadership in Enhancing Corporate Sustainable Performance in the Manufacturing Sector of China. *Sustainability*, 16(7), 2651. doi:https://doi.org/10.3390/su16072651
- Barkat, W., Waris, I., Ahmed, R., & Dad, M. (2024). Transformational Leadership and Frontline Managers Work Engagement, Innovative Work Behavior, Organizational Citizenship Behavior, and Employee Sustainability in the Hotel Industry in Pakistan. *Journal of Human Resources in Hospitality & Tourism*, 23(2), 315-336. doi:https://doi.org/10.1080/15332845.2024.2282217
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of management*, 17(1), 99-120. doi:https://doi.org/10.1177/014920639101700108
- Bhatia, M. S., & Kumar, S. (2022). Linking Stakeholder and Competitive Pressure to Industry 4.0 and Performance: Mediating Effect of Environmental Commitment and Green Process Innovation. *Business strategy and the Environment*, 31(5), 1905-1918. doi:https://doi.org/10.1002/bse.2989
- Bratianu, C., Mocanu, R., Stanescu, D. F., & Bejinaru, R. (2023). The Impact of Knowledge Hiding on Entrepreneurial Orientation: The Mediating Role of Factual Autonomy. *Sustainability*, 15(17), 1-21. doi:https://doi.org/10.3390/su151713057
- Cholili, A. Q. C. A., & Kancana, S. (2023). Analisis Persepsi Pelanggan terhadap Kualitas Jasa dengan Metode Importance Performance Analysis dan Potential Gain Customer Value. *Jurnal Studi Perhotelan dan Pariwisata*, 1(2), 99-110. doi:https://doi.org/10.35912/jspp.v1i2.2221
- Fadda, N. (2018). The Effects of Entrepreneurial Orientation Dimensions on Performance in the Tourism Sector. *New England Journal of Entrepreneurship*, 21(1), 22-44. doi:https://doi.org/10.1108/NEJE-03-2018-0004
- Fernandes, C. I., Ferreira, J. J., Veiga, P. M., Hu, Q., & Hughes, M. (2024). Dynamic Capabilities as a Moderator: Enhancing the International Performance of SMEs with International Entrepreneurial Orientation. *Review of Managerial Science*, 19(4), 1-22. doi:https://doi.org/10.1007/s11846-024-00784-8
- Ferreras-Méndez, J. L., Llopis, O., & Alegre, J. (2022). Speeding Up New Product Development Through Entrepreneurial Orientation in SMEs: The Moderating Role of Ambidexterity. *Industrial Marketing Management, 102*, 240-251. doi:https://doi.org/10.1016/j.indmarman.2022.01.015
- Fu, H., Chen, W., Huang, X., Li, M., & Köseoglu, M. A. (2020). Entrepreneurial Bricolage, Ambidexterity Structure, and New Venture Growth: Evidence from the Hospitality and Tourism Sector. *International journal of hospitality management*, 85. doi:https://doi.org/10.1016/j.ijhm.2019.102355
- Hadi, N. U., & Sheikh, S. A. (2024). Fostering Hotel Ambidexterity Through Knowledge-Sharing Culture and Knowledge-Sharing Behavior: A Study of the Hospitality Sector in Pakistan. Business Process Management Journal, 30(4), 1297-1313. doi: https://doi.org/10.1108/BPMJ-10-2023-0801
- Hai, M., Latif, S., Bilal, A. R., & Ahmad, B. (2020). Respect: Give it to Get it! Does Leadership Complimented with Respect Can Foster Creativity?. *International Journal of Emerging Markets*, 17(2), 621-644. doi:https://doi.org/10.1108/IJOEM-11-2019-0931

- Hanaysha, J. R., & Al-Shaikh, M. E. (2024). Impact of Entrepreneurial Orientation, Marketing Capability, and Market Orientation on Business Sustainability and Corporate Reputation. *Discover Sustainability*, 5(1), 1-15.
- Ho, M., Soo, C., Tian, A., & Teo, S. T. (2024). Influence of S trategic HRM and Entrepreneurial Orientation on Dynamic Capabilities and Innovation in Small-and Medium-Sized Enterprises. *International Small Business Journal*, 42(5), 611-640. doi:https://doi.org/10.1177/02662426231201761
- Iqbal, S., Moleiro Martins, J., Nuno Mata, M., Naz, S., Akhtar, S., & Abreu, A. (2021). Linking Entrepreneurial Orientation with Innovation Performance in SMEs; The Role of Organizational Commitment and Transformational Leadership Using Smart PLS-SEM. Sustainability, 13(8), 4361. doi:https://doi.org/10.3390/su13084361
- Jiang, Y., Asante, D., Zhang, J., & Ampaw, E. M. (2023). The Influence of Ambidextrous Leadership on the Employee Innovative Behavior: An Empirical Study Based on Chinese Manufacturing Enterprises. *Current Psychology*, 42(11), 9452-9465. doi: https://doi.org/10.1007/s12144-021-02233-1
- Kafeel, L., Khan, M. M., & Ahmed, S. S. (2024). Authentically Flown to Innovation: Authentically Triggered Innovative Work Behavior Through Flow at Work with Moderating Role of Creative Self-Efficacy. *International Journal of Innovation Science*, 16(3), 463-481. doi:https://doi.org/10.1108/IJIS-05-2022-0099
- Kebede, A. G., Terefe, S. D., & Ijigu, A. W. (2024). Ambidextrous Leadership and Academic Staff Innovative Behavior at Debre Berhan University, Ethiopia: the Mediating Role of Workplace Happiness. *Cogent Business & Management*, 11(1), 1-14. doi:https://doi.org/10.1080/23311975.2024.2307564
- Khairy, H. A., Baquero, A., & Al-Romeedy, B. S. (2023). The Effect of Transactional Leadership on Organizational Agility in Tourism and Hospitality Businesses: The Mediating Roles of Organizational Trust and Ambidexterity. *Sustainability*, 15(19), 1-21. doi:https://doi.org/10.3390/su151914337
- Khan, M. A., Ismail, F. B., Hussain, A., & Alghazali, B. (2020). The Interplay of Leadership Styles, Innovative Work Behavior, Organizational Culture, and Organizational Citizenship Behavior. *Sage Open, 10*(1). doi:https://doi.org/10.1177/2158244019898264
- Khan, M. M., Mubarik, M. S., Islam, T., Rehman, A., Ahmed, S. S., Khan, E., & Sohail, F. (2022). How Servant Leadership Triggers Innovative Work Behavior: Exploring the Sequential Mediating Role of Psychological Empowerment and Job Crafting. *European Journal of Innovation Management*, 25(4), 1037-1055. doi:https://doi.org/10.1108/EJIM-09-2020-0367
- Khattak, M. S., Wu, Q., Ahmad, M., & Hattab, I. (2024). The Role of Managerial Overconfidence in Digital Transformation and Sustainable Competitive Performance in Emerging SMEs: The Role Of Digital Culture. *Business Strategy & Development*, 7(3). doi:https://doi.org/10.1002/bsd2.403
- Kyei-Frimpong, M., Berko Obeng Damoah, O., & Osafroadu Amankwah, M. (2024). Modeling Innovative Work Behavior Through Leadership Behaviors in the Hospitality Industry; The Role of Work–Family Enrichment. *Journal of Hospitality and Tourism Insights*, 7(2), 1010-1030. doi:https://doi.org/10.1108/JHTI-11-2023-0815
- Larsson, J., Elofsson, A., Sterner, T., & Åkerman, J. (2019). International and National Climate Policies for Aviation: A Review. *Climate Policy*, 19(6), 787-799. doi:https://doi.org/10.1080/14693062.2018.1562871
- Li, M., Khan, H. S. u. d., Chughtai, M. S., & Le, T. T. (2022). Innovation Onset: A Moderated Mediation Model of High-Involvement Work Practices and Employees' Innovative Work Behavior. *Psychology Research and Behavior Management*, 15, 471-490. doi:https://doi.org/10.2147/prbm.s340326
- Liu, Y., Wang, W., & Chen, D. (2019). Linking Ambidextrous Organizational Culture to Innovative Behavior: A Moderated Mediation Model of Psychological Empowerment and Transformational Leadership. *Frontiers in Psychology, 10*, 1-12. doi:https://doi.org/10.3389/fpsyg.2019.02192

- Luoh, H.-F., Tsaur, S.-H., & Tang, Y.-Y. (2014). Empowering Employees: Job Standardization and Innovative Behavior. *International Journal of Contemporary Hospitality Management*, 26(7), 1100-1117. doi:https://doi.org/10.1108/IJCHM-03-2013-0153
- Majali, T. E., Alkaraki, M., Asad, M., Aladwan, N., & Aledeinat, M. (2022). Green Transformational Leadership, Green Entrepreneurial Orientation and Performance of SMEs: The Mediating Role of Green Product Innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(4), 1-14. doi:https://doi.org/10.3390/joitmc8040191
- Makona, A., Elias, R., Makuya, V., & Changalima, I. A. (2023). Does Innovation Ambidexterity Influence Restaurant Economic Performance in the Post-COVID-19 Era? The Mediating Effect of Customer Orientation. *Cogent Business & Management, 10*(2), 1-22. doi:https://doi.org/10.1080/23311975.2023.2242164
- Martínez-Falcó, J., Marco-Lajara, B., Zaragoza-Sáez, P., & Sánchez-García, E. (2024). The Effect of Organizational Ambidexterity on Sustainable Performance: A Structural Equation Analysis Applied to the Spanish Wine Industry. *Agribusiness*, 40(4), 773-803. doi:https://doi.org/10.1002/agr.21846
- Maulana, R., Verawati, H., & Sisdianto, E. (2025). Distribusi Upah Terhadap Produktivitas Kerja dan Kerja Sama dalam Ekonomi Islam. *Jurnal Akuntansi, Keuangan, dan Manajemen, 6*(3), 585-601. doi:https://doi.org/10.35912/jakman.v6i3.4034
- Michna, A., & Kmieciak, R. (2020). Open-Mindedness Culture, Knowledge-Sharing, Financial Performance, and Industry 4.0 in SMEs. *Sustainability*, 12(21), 1-17. doi:https://doi.org/10.3390/su12219041
- Mohiya, M., & Sulphey, M. (2021). Do Saudi Arabian Leaders Exhibit Ambidextrous Leadership: A Qualitative Examination. *Sage Open*, 11(4). doi:https://doi.org/10.1177/21582440211054496
- Nazir, S., Shafi, A., Asadullah, M. A., Qun, W., & Khadim, S. (2021). Linking Paternalistic Leadership to Follower's Innovative Work Behavior: The Influence of Leader–Member Exchange and Employee Voice. *European Journal of Innovation Management*, 24(4), 1354-1378. doi:https://doi.org/10.1108/EJIM-01-2020-0005
- Nelson, A., Junaidi, & Sentoso, A. (2025). The Impact of Green Human Resource Management to Environmental Performance. *Jurnal Akuntansi, Keuangan, dan Manajemen, 6*(3), 603-617. doi:https://doi.org/10.35912/jakman.v6i3.3898
- Neupane, B. P., Zielinski, S., & Milanes, C. B. (2025). Startup Success in Hospitality & Tourism SMEs in Emerging Economies: How Innovation and Growth Are Driven by Entrepreneurial Orientation, Networking Strategy, Leadership, and Flexibility. *Sustainability*, 17(8), 1-24. doi:https://doi.org/10.3390/su17083485
- Nguyen, N. T., Hooi, L. W., & Avvari, M. V. (2023). Leadership Styles and Organisational Innovation in Vietnam: Does Employee Creativity Matter?. *International Journal of Productivity and Performance Management*, 72(2), 331-360. doi:https://doi.org/10.1108/IJPPM-10-2020-0563
- Ouyang, C., Zhu, Y., & Ma, Z. (2022). Ambidextrous Leadership and Employee Voice Behavior: The Role of Work Motivation and Ambidextrous Culture. *Psychology Research and Behavior Management*, 15, 2899-2914. doi:https://doi.org/10.2147/prbm.s385033
- Peng, M. Y. P., Liang, Z., Fatima, I., Wang, Q., & Rasheed, M. I. (2024). The Nexus between Empowering Leadership, Job Engagement and Employee Creativity: Role of Creative Self-Efficacy in the Hospitality Industry. *Kybernetes*, 53(10), 3189-3210. doi:https://doi.org/10.1108/K-10-2022-1425
- Ribeiro, M. A., Adam, I., Kimbu, A. N., Afenyo-Agbe, E., Adeola, O., Figueroa-Domecq, C., & de Jong, A. (2021). Women Entrepreneurship Orientation, Networks and Firm Performance in the Tourism Industry in Resource-Scarce Contexts. *Tourism management*, 86, 1-15. doi:https://doi.org/10.1016/j.tourman.2021.104343
- Sharifirad, M. S. (2013). Transformational Leadership, Innovative Work Behavior, and Employee Well-Being. *Global Business Perspectives*, *1*(3), 198-225. doi:https://doi.org/10.1007/s40196-013-0019-2
- Sony, M., Antony, J., & Mc Dermott, O. (2023). How Do the Technological Capability and Strategic Flexibility of an Organization Impact its Successful Implementation of Industry 4.0? A Qualitative Viewpoint. *Benchmarking: An international journal, 30*(3), 924-949. doi:https://doi.org/10.1108/BIJ-09-2021-0541

- Tajeddini, K., Gamage, T. C., Tajdini, J., Hameed, W. U., & Tajeddini, O. (2024). Exploring the Effects of Service Innovation Ambidexterity on Service Design in the Tourism and Hospitality Industry. *International journal of hospitality management, 119*, 1-14. doi:https://doi.org/10.1016/j.ijhm.2024.103730
- Tajeddini, K., Gamage, T. C., Tajdini, J., Qalati, S. A., & Siddiqui, F. (2023). Achieving Sustained Competitive Advantage in Retail and Consumer Service Firms: The Role of Entrepreneurial Orientation and Entrepreneurial Bricolage. *Journal of Retailing and Consumer Services*, 75, 1-15. doi:https://doi.org/10.1016/j.jretconser.2023.103495
- Wahab, F. A., Subramaniam, A., Ho, J. A., & Bali Mahomed, A. S. (2024). Augmenting Effect of Inclusive and Ambidextrous Leadership on Public University Academic Staffs' Innovative Performance: The Mediating Role of Innovative Work Behavior. *Sage Open, 14*(1). doi:https://doi.org/10.1177/21582440241232761
- Wang, L., Sun, Y., Li, J., Xu, Y., Chen, M., Zhu, X., & Wang, D. (2022). Effects of Ambidextrous Leadership on Employees' Work Behavior: The Mediating Role of Psychological Empowerment. Frontiers in Psychology, 13, 1-15. doi:https://doi.org/10.3389/fpsyg.2022.862799
- Wulandari, F., & Wardani, M. K. (2024). Open Innovation in Village-Owned Enterprises: The Role of Entrepreneurial Orientation in Improving Financial and Social Performance. *Cogent Business & Management*, 11(1), 1-16. doi:https://doi.org/10.1080/23311975.2024.2350079
- Yadav, U. S., Vyas, S., Kanchan, Ghosal, I., & Yadav, A. K. (2024). Impact of Entrepreneurial Leadership, Social Media, Digital Technology, Entrepreneurial Orientation and Innovation on Business Performance in the Handicraft Sector: Talent Management as Mediating Construct. *Journal of Innovation and Entrepreneurship*, 13(1), 1-34. doi: https://doi.org/10.1186/s13731-024-00434-z
- Zheng, L. J., Wang, Y. A., Lin, H.-Y., & Liu, W. (2023). Understanding Circular Economy Adoption by SMEs: A Case Study on Organizational Legitimacy and Industry 4.0. *Industrial Management & Data Systems*, 123(4), 1157-1177. doi: https://doi.org/10.1108/IMDS-04-2022-0266
- Zia, N. U., Burita, L., & Yang, Y. (2023). Inter-Organizational Social Capital of Firms in Developing Economies and Industry 4.0 Readiness: The Role of Innovative Capability and Absorptive Capacity. *Review of Managerial Science*, 17(2), 661-682. doi: https://doi.org/10.1007/s11846-022-00539-3