Journal of Tourism Management Research
2023 Vol. 10, No. 2, pp. 200-212
ISSN(e): 2313-4178
ISSN(p): 2408-9117
DOI: 10.18488/31.v10i2.3579

Factors affecting destination innovation and competitiveness at destinations in the central highlands, Vietnam

Nguyen Thanh Long[1]
Pham Ngoc Kim Khanh[2+]
Nguyen Quoc Trung[3]
Nguyen My Linh[4]
Tong Thanh Phat[5]
Le Hong Nhung[6]
Phan Thi Ha Vy[7]
Tran Dang Khoa[8]

[1,2,3,4,5,6,7]*Faculty of Business Administration, Industrial University of Ho Chi Minh City, Ho Chi Minh City 70000, Vietnam.*
[1]*Email: nguyenthanhlong@iuh.edu.vn*
[2]*Email: phamngockimkhanh@iuh.edu.vn*
[3]*Email: quoctrungcnc@gmail.com*
[4]*Email: mylinh8205@gmail.com*
[5]*Email: tongphat24052001@gmail.com*
[6]*Email: lenhung.250700@gmail.com*
[7]*Email: phanhavy49@gmail.com*
[8]*Institute of Business Research, Univeristy of Economics Ho Chi Minh City, Ho Chi Minh City 70000, Vietnam.*
[8]*Email: khoatd@ueh.edu.vn*


(+ Corresponding author)

Article History
Received: 25 September 2023
Revised: 1 December 2023
Accepted: 13 December 2023
Published: 29 December 2023

Keywords
Central highlands
Competitiveness
Innovation
Tourism
Vietnam.

ABSTRACT

This study aims to determine the factors affecting both destination innovation and the competitiveness of the tourism destinations in the Central Highlands, Vietnam. This research used both qualitative and quantitative research methods. The qualitative research method was used through focus group interviews and one-on-one interviews in order to complete the research model and scales. In addition, SmartPLS software was used to analyse the reliability, convergent validity, and discriminant validity of the quantitative research method. The proposed hypotheses and research model were also examined via boostrapping with P-values ≤ 0.05. This study had a 210-expert survey of managers and experienced executives working in the tourism industry in the Central Highlands, Vietnam. The research findings showed four factors affecting competitiveness through innovation, which was a moderating factor among destinations in the Central Highlands of Vietnam, including Policies, Local specialties, Culture, and Natural environment. From these findings, some policy implications were proposed for destinations and tourism managers to develop and enhance destination innovation and competitiveness at destinations in the Central Highlands, Vietnam, through the improvement of Policies, Local specialties, Culture, and Natural environment. In addition, these implications also aim to realize sustainable tourism development for the region, which is one of the most potential tourism regions in Vietnam.

Contribution/Originality: This research aims to identify the factors affecting destination innovation and competitiveness, especially in the Central Highlands of Vietnam. This is the first study to look at factors influencing both destination innovation and competitiveness; other studies only looked at factors impacting one of the two.

1. INTRODUCTION

Currently, tourism is one of the fastest-growing industries. The tourism industry is an important industry for national economies because it provides opportunities for countries, especially developing countries, to create

productive and inclusive jobs, generate economic benefits, and grow firms innovatively. Therefore, in recent years, tourism has attracted a number of scholars to explore it in all aspects, especially innovation and competitiveness. According to Leung and Baloglu (2013), local communities and national economies would develop strongly through destination competitiveness. However, the 4.0 technology revolution has become a necessary tool in life, and the quality of life will increase day by day, especially in spiritual life. Organisations need to develop in parallel with technology and social changes if they are to not lose market share. Therefore, tourism enterprises or destinations need to innovate continuously. According to The World Tourism Organization (2023), destinations could be successful in innovation and create good competitiveness if they connected all stakeholders to collaboration opportunities and prioritised capacity building in tourism and technology. On the other hand, there are numerous studies relating to competitiveness that are based on model frameworks such as the Porter Diamond Model (Porter, 1990) and the integrated model (Dwyer & Kim, 2003). Currently, there is no research that has implemented a combined model to evaluate the factors affecting destination innovation and competitiveness, such as the studies of Vengesayi, Mavondo, and Reisinger (2013) and Zeleke and Biwota (2020). However, these studies were developed by modifying or adding variables to a complete scale. Hence, this showed that there were no significant differences between the studies relating to competitiveness.

The Vietnam National Administration of Tourism (2023) stated that tourism in Vietnam would become the most attractive destination in Southeast Asia to confirm its competitiveness. Vietnam welcomed more than 7.8, millions international and domestic tourists in the first eigth months of 2023 (Ministry of Culture, Sports, & Tourism Vietnam, 2023).

Vietnam has been focusing on the tourism industry and "breakthrough" tourism capabilities through its tourism development strategy in 2020, with a vision for 2030. This plan pointed out that the Central Highlands of Vietnam were one of seven key tourism regions (Vietnam.gov.vn, 2020). This region is one of the most fascinating areas in the country, with 5 provinces (Dak Lak, Dak Nong, Gia Lai, Kon Tum, and Lam Dong), and there are 47/53 ethnic groups of Vietnam living here. With its important strategic location, this region has favorable conditions to expand economic development exchanges, especially tourism development. Many major tourist routes have been formed, such as the "Central Heritage Road" or "Central Highlands Green Road," travel routes connecting Vietnam with Indochina countries. The region is blessed with many valuable resources to exploit for tourism development in landscapes or lakes along the region, such as the Dak Bla and Dong Nai rivers; Tuyen Lam; Dan Kia Suoi Vang (Lam Dong); or Bien Ho (Gia Lai). Hence, the Central Highlands of Vietnam should develop the tourism industry as a sustainable industry to increase economic performance and also improve the regional image. Destination competitiveness refers to the ability of a tourist destination to attract and retain visitors in comparison with other destinations. Gupta, Malhotra, Czinkota, and Foroudi (2016) stated that innovation capability was one of the enabling factors to achieve sustainable competitive advantage. However, there is no study or author that has mentioned this topic globally, especially in Vietnam in general and the Central Highlands of Vietnam.

Therefore, this study aims to explore and examine factors affecting destination innovation and destination competitiveness at destinations in this region. In addition, this study would propose some policy implications for government departments in the region that could improve competitiveness in the tourism industry. Moreover, this study is the first to explore factors affecting competitiveness with innovation as a moderating factor; no authors or previous studies conducted this context. This study is divided into 8 sections, including Section 1: Introduction; Section 2: Literature Review; Section 3: Hypotheses and Research Model; Section 4: Methodology; Section 5: Research Results; Section 6: Discussion and Policy Implications; Section 7: Conclusion; and Section 8: Limitations and Future Research Directions.

2. LITERATURE REVIEW

2.1. Destination Innovation

Innovation is an issue and a challenge that any business takes seriously. There were many definitions of destination innovation (Nguyen, 2010; Yangzhou & Ritchie, 1993), which meant that products and services would be innovated to become valuable and effective for the organization. The development cycle of innovation includes: (1) Discovery; (2) Visiting; (3) Development; (4) Consolidation; and (5) Stagnation. This study examines the innovation of destinations in the Central Highlands of Vietnam. The perceptions, attitudes, and beliefs of tourists determine how attractive a place is (Yangzhou & Ritchie, 1993). The value of attraction is the power to attract tourists (Nguyen, 2010). To achieve it, tourist destinations need to regularly innovate to create curiosity and attract tourists. In the tourism industry, destination innovation would improve its products and services to be an attractive destination to satisfy tourist needs, thereby enhancing its ability to compete with other destinations.

2.2. Destination Competitiveness

Competitiveness is one of the major topics of interest to scientific researchers and large and small businesses. However, the definition of competitiveness has not yet been unified in many aspects. For example, aspects of economics have different definitions (Porter & Ketels, 2003). Competitive capability levels are closely related to each other and are divided into 4 levels, such as (1) Country, (2) Industry, (3) Enterprise, and (4) Products and services. The previous studies illustrated the destination's competitiveness from many angles. According to Porter and Strategy (1980), labour productivity was considered the only measurement of competitiveness, which was the ability to create, maintain, and innovate new things that increase competitive advantage by creating productivity, being high quality, dominating the market, and developing sustainably. According to Dwyer and Kim (2003), competitiveness was an important factor for the success of enterprises and tourist destinations. They also stated that the destination's competitiveness was to provide better goods and services than other destinations based on the experiences of tourists. At the same point, Nguyen (2010) stated that tourist satisfaction and residents' sustainable prosperity were the competitiveness factors that could differentiate a destination from other foreign and domestic destinations. Providing real experiences for tourists contributed to creating a great destination image. Therefore, building up the destination image was a key role in creating a critical advantage in improving the destination brand to attract tourists and compete with others (Hương & Quân, 2018). Destination competitiveness is the competitiveness of the destination with other destinations based on tourist experiences and the maintenance and improvement of service or product quality at the destination.

3. HYPOTHESES AND RESEARCH MODEL

3.1. People

People collect knowledge, skills, and abilities, which have a key role in innovation and are an advantage for the innovation activities of tourism enterprises and hotels (Grissemann, Pikkemaat, & Weger, 2013). According to Nguyen, Nguyen, and Nguyen (2018), people were an important factor affecting the destination brand and competitiveness in Ben Tre. On the other hand, the people factor was a significant factor determining innovation in tourism (Divisekera & Nguyen, 2018). Local people's friendly attitude would help to improve tourist satisfaction during their vacation there and build up a great destination image (Maunier & Camelis, 2013). Based on the preceding studies, the research proposed the following hypothesis:

H_1: People have a positive impact on destination innovation in the Central Highlands, Vietnam.

H_2: People have a positive impact on destination competitiveness in the Central Highlands, Vietnam.

3.2. Culture

Culture and tourism had a close relationship, dialectical to each other, in the development process (The World Tourism Organization, 2023). Ritchie and Zins (1978) stated that cultural characteristics were a destination attraction. However, to improve attractiveness, we need long-term development and innovation. In addition, historical resources were also one of the factors affecting the decision to choose a destination. The historical sites and local culture could highlighted the differences in regional culture (Zeleke & Biwota, 2020). In addition, in fact, the development must always be accompanied by innovation to diversify products and services and "catch up" to development trends. Therefore, the hypotheses were proposed as follows:

H_3: Culture has a positive impact on destination innovation in the Central Highlands, Vietnam.

H_4: Culture has a positive impact on destination competitiveness in the Central Highlands, Vietnam.

3.3. Infrastructure

Tourism infrastructure seems to be the accommodation facilities serving tourists (Khadaroo & Seetanah, 2007). The better the tourism infrastructure, the greater the local ability to serve tourists. Therefore, this development could help increase the attraction performance of destinations. According to Watson and Kopachevsky (1994), the infrastructure supporting tourism services had become diverse. In addition, Murphy, Pritchard, and Smith (2000) stated that tourism infrastructure was the most important factor after the environmental factor in the tourist's experience. In addition, tourism infrastructure could be used to rate destination quality and vacation value. Therefore, the *H_5: Infrastructure has a positive impact on destination innovation in the Central Highlands, Vietnam.*

H_6: Infrastructure has a positive impact on destination competitiveness in the Central Highlands, Vietnam.

3.4. Natural Environment

Scenic spots, natural scenery, environment, atmosphere, and weather at the destination were stated as characteristics of the natural environment (Lin, Morais, Kerstetter, & Hou, 2007). On the other hand, Murphy et al. (2000) stated that destination environment played a key role in destination competitiveness, including climate, landscape, atmosphere, and frienliness. Huang and Chen (2009) defined innovation as the new way for enterprises to develop products, services, and their innovative environment. Dwyer and Kim (2003) and Ritchie and Crouch (2003) also suggested that innovation is embedded in destination management, marketing, product development, destination policy, plans, research, tourism infrastructure, architecture, and natural, cultural, and social factors. From those findings, hypotheses were proposed as follows:

H_7: Natural environment has a positive impact on destination innovation in the Central Highlands, Vietnam.

H_8: Natural environment has a positive impact on destination competitiveness in the Central Highlands, Vietnam.

3.5. Policies

Destination competitiveness is enhanced through policies and strategies in marketing, destination management, and sustainable development (Buhalis, 2000; Dwyer & Kim, 2003; Ritchie & Crouch, 2003). Howie (2003) stated that policy could present complex challenges and opportunities for management and strategic development. According to the Daklak Provincal People's Committee (2022), province tourism and region tourism should link with each other so that tourism can connect, complete strategies and policies, and attract investment for tourism development. In addition, the Ministry of Culture et al. (2023) stated that government departments should issue capital policies for the Tourism Development Support Funds to popularize, and support tourism destination development, which could help them complete step-by-step in development to become more creative, dynamic, and innovative. Hence, the study proposed hypotheses as follows:

H_9: Policies have a positive impact on destination innovation in the Central Highlands, Vietnam.

H_{10}: Policies have a positive impact on destination competitiveness in the Central Highlands, Vietnam.

3.6. Local Specialties

According to the Law on Tourism (2017), tourism products are a set of services that exploit and use the values of tourism resources to meet tourist needs. According to Vo and Ngo (2017), local specialties were unique tourism products that were differentiate from other products in order to attract, expand markets, and exploit good resources and potential for tourism development. The local specialty innovation and expansion aim to enhance the destination image and attract both domestic and foreign tourists. This study explores all aspects of local specialities, such as cuisine and local community activities, of which there are many ethics living in the Central Highlands, Vietnam. Hence, the hypotheses were proposed as follows:

H_{11}: Local specialties have a positive impact on destination innovation in the Central Highlands, Vietnam.

H_{12}: Local specialties have a positive impact on destination competitiveness in the Central Highlands, Vietnam.

3.7. Destination Innovation

Innovation is the realization of new ideas and new knowledge to creat new products, processes, and services to enhance competitive advantages and meet customer needs (Nyström, 1990). Hence, destination innovation is a key factor in the success of destinations competing with other destinations and dealing with economic and social changes (Hjalager, 2002). Innovation was related to competitiveness because innovation was necessary to maintain competitiveness in an industry and was a requirement to maintain or improve market position (Sánchez & López, 2015). Previous studies focused on exploring the innovative capabilities of tourism destinations without examining the impact of innovation as a competitive advantage (Kallmuenzer & Peters, 2018). Therefore, the study proposes the following hypotheses:

H_{13}: Destination innovation has a positive impact on destination competitiveness in the Central Highlands, Vietnam

From the above hypotheses, the authors decided to propose a research model, including 6 factors affecting innovation and competitiveness at destinations in the Central Highlands of Vietnam (Figure 1).

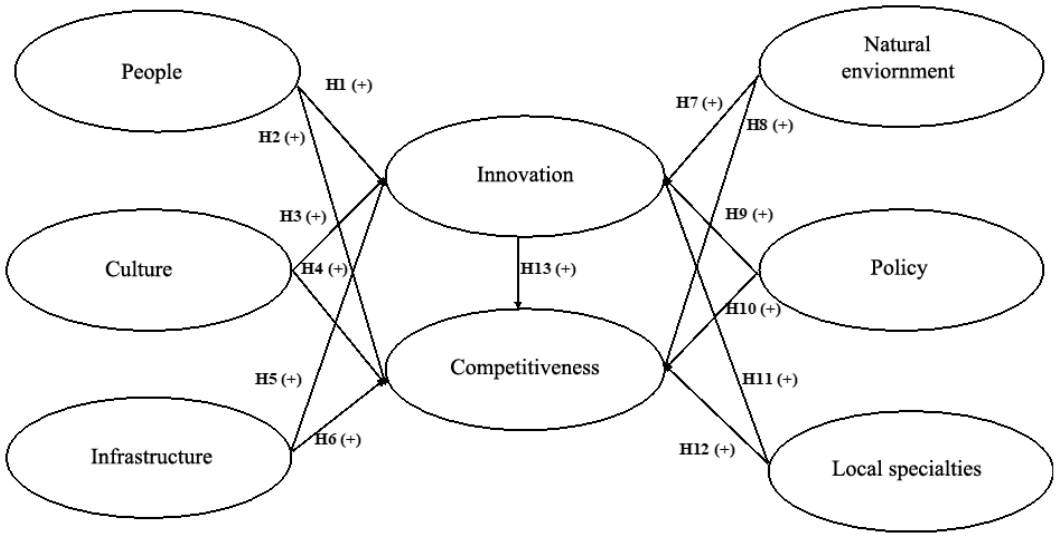

Figure 1. Research model.

4. METHODOLOGY

The study uses a combination of qualitative and quantitative methods:

Step 1: The study was approached using a qualitative method to complete a measurement and design questionnaire by expert interviews with managers and experienced executives working at destinations or tourism

enterprises. The research scale was adopted from the existing studies relating to this research. In addition, authors interviewed the experts to complete the scale and modified slightly the items of factors to be appropriate to the study context. People factor: 5 items were adopted from Akbulut and Ekin (2022); Khoa, Hùng, Thủy, and Tuấn (2017); Fallon and Kriwoken (2003); Gunya (2007); Nguyen (2017); and Nguyen et al. (2018). Culture: 4 items were adopted from Ritchie and Zins (1978); Haileslassie (2017); and Zeleke and Biwota (2020); Infrastructure: 5 items were adopted from Kuščer (2013), Tseng, Kuo, and Chou (2008), and Victorino, Verma, Plaschka, and Dev (2005). Natural environment: 3 items adopted from Akbulut and Ekin (2022) and Nguyen et al. (2018); Policies: 5 items adopted from Akbulut and Ekin (2022); Dwyer and Kim (2003); Kuščer (2013); and Ritchie and Crouch (2003). Local specialties: 5 items: Akbulut and Ekin (2022); Hương and Quân (2018); Kuščer (2013); Ngân and Hải (2022); and Phuong and Linh (2022); Innovation: 4 items adopted from Kuščer (2013), Tseng et al. (2008), and Victorino et al. (2005) and Competitiveness: 4 items adopted from Khoa et al. (2017) and Nguyen (2017). This tudy used Likert 5 from 1 – strongly disagree, 2 – disagree, 3 – average, 4 – agree, and 5 – strongly agree. The sample size must be greater or equal to 5 times the number of variables (Bentler & Chou, 1987). Therefore, this study needs at least 170 responses, but according to Raykov and Widaman (1995), the sample size must be greater than the original sample size of 50 to 100 responses in order to ensure the reliability of the study. Hence, the authors distributed a total of 235 online and offline questionnaires and collected all 235 responses. Among them, only 210 responses were valid because the remainder were many cells without an answer.

Step 2: The study used the quantitative method to analyse the data for reliability, convergent validity, and discriminant validity. Finally, to test hypotheses and examine model fit through the bootstrapping results with a P-value ≤ 0.05. This step was conducted via SmartPLS software.

5. RESEARCH RESULTS

5.1. Respondent Demographic Profile

This study distributed a total of 235 online and offline questionnaires to tourism managers, but the authors collected only 235 responses. Among them, only 210 responses were able to be used. Among 210 valid responses, the distribution of the years of experience was as follows: 1 year–3 years with 68 people (32.4%), over 3 years–5 years with 77 people (36.7%), over 5 years–10 years with 53 people (25.2%), and over 10 years with 12 people (5.7%). Regarding company size, there were 51 people working at 1–50 people (24.3%), 78 people working at over 50–100 people (37.1%), 53 people working at over 100–200 people (25.2%), and the remainder were over 200 people working at a company with over 200 people (13.3%). Only 53 respondents were working at Shareholding company (25.2%), 93 respondents were working at a limited liability company (44.3%), 51 respondents were working at a private company (24.3%), and the remainder of respondents were working at a local business (6.2%) Table 1.

Table 1. Sample demographic characteristics.

Details	Categories	Frequency	Percent (%)
Year of experience	1 year - 3 years	68	32.4
	over 3 years - 5 years	77	36.7
	over 5 years - 10 years	53	25.2
	over 10 years	12	5.7
	Total	*210*	100.0
Company size	1 - 50 people	51	24.3
	Over 50 - 100 people	78	37.1
	Over 100 - 200 people	53	25.2
	Over 200 people	28	13.3
	Total	*210*	100.0
Type of company	Shareholding company	53	25.2
	Limited liability company	93	44.3
	Private enterprise	51	24.3
	Local business	13	6.2
	Total	*210*	100.0

5.2. Scale Reliability Tests

This study used SmartPLS software to analyze the data. According to Hair Jr, Sarstedt, Hopkins, and Kuppelwieser (2014), the outer loading coefficient must be greater than 0,7, while the outer loading coefficient must be rejected if it is less than 0,4. The observed variables with outer loadings were all greater than 0.7 Table 2.

Table 2 also illustrates Cronbach's Alpha, composite reliability coefficient (CR), and average extracted variance (AVE), which are indicators to evaluate the reliability of research data. According to Chin (1998), CR must be greater than 0.6. The Cronbach's Alpha of all items is greater than 0,7, varying from 0,767 to 0,855. As for the total variance coefficient extracted, it will be a factor that ensures and strengthens the experimentality of the model from theory to reality, according to the authors (Fornell & Larcker, 1981). The AVE must be greater than 0.5, the results showed that all variables were greater than 0.5; varying from 0.589 to 0.694. At the same time, no AVE is less than 0.5.

Table 2. Reliability and the result of CFA.

Variables	Cronbach's alpha	OL	CR	AVE	Variables	Cronbach's alpha	OL	CR	AVE
PEO	0.767		0.851	0.589	NAEVI	0.768		0.864	0.680
PEO1		0.748			NAEVI1		0.808		
PEO2		0.770			NAEVI2		0.771		
PEO3		0.832			NAEVI3		0.891		
PEO4		0.716			POL	0.855		0.896	0.633
CUL	0.794		0.866	0.618	POL1		0.807		
CUL1		0.799			POL2		0.808		
CUL2		0.783			POL3		0.816		
CUL3		0.771			POL4		0.763		
CUL4		0.792			POL5		0.784		
INF	0.843		0.888	0.613	LOSP	0.840		0.886	0.609
INF1		0.712			LOSP1		0.767		
INF2		0.787			LOSP2		0.760		
INF3		0.811			LOSP3		0.814		
INF4		0.808			LOSP4		0.807		
INF5		0.793			LOSP5		0.752		
INNO	0.799		0.869	0.624	COMPE	0.853		0.901	0.694
INNO1		0.810			COMPE1		0.827		
INNO2		0.793			COMPE2		0.823		
INNO3		0.751			COMPE3		0.827		
INNO4		0.805			COMPE4		0.550		

Note: PEO: People; CUL: Culture; INF: Infrastructure; NAEVI: Natural environment; POL: Policies; LOSP: Local specialties; INNO: Inn ovation; COMPE: Competitiveness; Others are observations of each factor.

5.3. Partial Least Squares Structural Equation Modeling (PLS-SEM)

According to Fornell and Larcker (1981), to validate the discriminant between contructs, the discriminant validity must meet the square root of the variance between the construct and its AVE. It meant the main diagonal values were greater than the correlations between each construct and any other constructs, which were illustrated in Table 3.

Table 3. Discriminant validity – Fornell – Larcker (Fornell-Larcker criterion).

Variables	POL	PEO	INF	LOSP	NAEVI	COM	INNO	CUL
POL	0.796							
PEO	0.363	0.768						
INF	0.568	0.358	0.783					
LOSP	0.493	0.314	0.231	0.781				
NAEVI	0.309	0.404	0.212	0.348	0.825			
COM	0.585	0.410	0.369	0.638	0.382	0.833		
INNO	0.648	0.375	0.403	0.627	0.395	0.758	0.790	
CUL	0.487	0.532	0.316	0.510	0.341	0.485	0.595	0.786

Note: PEO: People; CUL: Culture; INF: Infrastructure; NAEVI: Natural environment; POL: Policies; LOSP: Local specialties; INNO: Innovation; COMPE: Competitiveness.

Table 4. Results of variance inflation factor test.

Variables	POL	PEO	INF	LOSP	NAEVI	CUL	INNO
COM	2.230	1.587	1.562	1.799	1.319	1.956	2.495
INNO	1.966	1.585	1.553	1.574	1.291	1.805	

Note: PEO: People; CUL: Culture; INF: Infrastructure; NAEVI: Natural environment; POL: Policies; LOSP: Local specialties; INNO: Innovation; COMPE: Competitiveness.

The PLS-SEM algorithm shows the structural model's estimate and validation in Figure 2. According to Hair Jr et al. (2014), to ensure no multicollinearity between variables in the model, we use the variance inflation factor (VIF), with VIF < 5. Table 4 illustrates that there is no multicollinearity between the variables in this study.

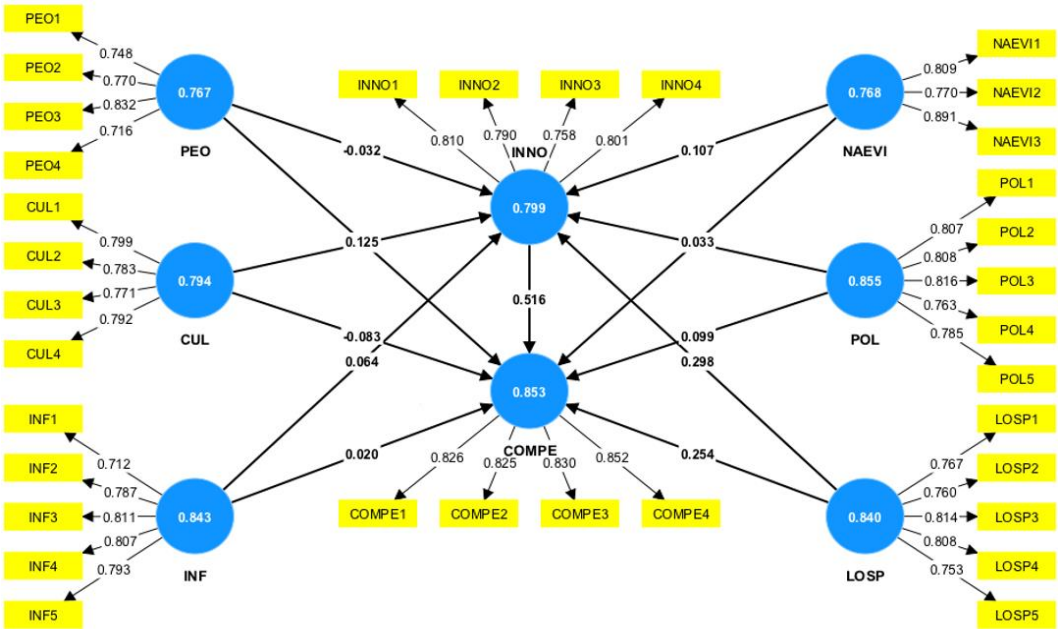

Figure 2. The PLS-SEM model.

Then, the parameters were calculated using a 5000-sample bootstrap procedure, which is a method for resampling with replacement where the original sample acts as a crowd. Estimated results using the Bootstrap method are averaged with bias still present, but in a very small amount. Therefore, the conclusions drawn from the estimates in the project's model can be reliable. However, the boostrap result indicated that the P-values of some paths were greater than 0.5, which was not accepted Table 5.

Table 5. Path coefficients.

Variables	Coefficients	SE	T-values	P values	Note
CUL -> COMPE	-0.083	0.072	1.142	0.253	Rejected H4
CUL -> INNO	0.245	0.075	3.263	0.001	Accepted H3
INF -> COMPE	0.020	0.075	0.267	0.789	Rejected H6
INF -> INNO	0.064	0.066	0.964	0.335	Rejected H5
INNO -> COMPE	0.516	0.087	5.914	0.000	Accepted H13
LOSP -> COMPE	0.254	0.081	3.138	0.002	Accepted H12
LOSP -> INNO	0.298	0.074	4.031	0.000	Accepted H11
NAEVI -> COMPE	0.033	0.051	0.652	0.514	Rejected H8
NAEVI -> INNO	0.107	0.054	1.990	0.047	Accepted H7
PEO -> COMPE	0.125	0.070	1.791	0.073	Rejected H2
PEO -> INNO	-0.032	0.062	0.517	0.605	Rejected H1
POL -> COMPE	0.099	0.076	1.312	0.190	Rejected H10
POL -> INNO	0.325	0.086	3.787	0.000	Accepted H9

The P-values of the path coefficients between Policies and Competitiveness, People and both Innovation and Competitiveness, Infrastructure and Competitiveness, Natural environment and Competitiveness, and Culture and Competitiveness were greater than 0.5; hence, those hypotheses were rejected. Therefore, Innovation was affected by Policies, Culture, Local specialties, and Natural environment by about 0,589 (R^2 = 58,9%). On the other hand, Competitiveness was affected by only Local specialties and Innovation (R^2 = 61.4%).

6. DISCUSSION AND POLICY IMPLICATIONS

6.1. Discussion

This study has contributed important meaning to the study of destination innovation and competitiveness. The study has pointed out four factors affecting destination innovation: (1) Culture; (2) Natural environment; (3) Policies; and (4) Local specialities. However, the hypotheses were rejected because they were misappropriate for the reality of Central Highlands tourism at the moment. The Central Highlands region of Vietnam is unique in terms of tourism, which it has made distinct from other domestic destinations because of the difference in natural environment with vegetation ecosystems and landscapes and the uniqueness of national culture as its strengths in developing destination image. The previous studies pointed out that policies, people, culture, and the natural environment were affected by destination competitiveness (Kuščer, 2013; Nguyen, 2017; Zeleke & Biwota, 2020). Therefore, the importance of the hypotheses was completely consistent with the research models of the topic. However, they were not appropriate to the reality of the research context; hence, those hypotheses were rejected.

In addition, this study has been the first to combine innovation and competitiveness in relation to tourism changes and sustainable development. Therefore, this study has contributed to the theoretical system on new aspects in tourism by completing scales through expert interviews, and there were some new observation variables suggesting exploring the reality context. Moreover, this study also contributed to the new potential correlation by bringing the research model closer to reality.

6.2. Policy Implications

6.2.1. Policies

The policy factor was to impact destination innovation. In the development orientation, to achieve the set goals, the Central Highlands region needs to have favorable policies to "break through" the tourism capabilities there in order to implement well the innovation of the area and also increase the region's competitiveness. Therefore, tourism managers should make strategies and plans. First, it is necessary to "speed up" tourism image of the region through organizing seminars, exhibitions, and festivals with the main title "Making tourism a key economic sector". To invest in digital marketing strategies, including the development of travel websites and applications, social media advertising campaigns, and search engine optimization (SEO) strategies to attract and introduce destinations to domestic and foreign tourists. Second, it is necessary to support the implementation of policies that promote a sustainable environment, such as to regenerating natural resources, encouraging the use of public transportation, and providing eco-friendly tourism products and services. Provinces and businesses should consider the feasibility of applying "Open the sky" policies and adding domestic airports to connect point-to-point between other provinces in Vietnam. Third, to develop policies to support small and medium enterprises in terms of finance, taxes, electricity prices, current import prices for tourist vehicles, and support for projected land rental prices. To promote tourism investment and attract international investment to expand and develop tourism. To establish tourism funds is to support tourism development.

6.2.2. Local Specialties

Local specialties were to impact both destination innovation and destination competitiveness in the Central Highlands, Vietnam. The Central Highlands of Vietnam is a region with unique landscapes or agricultural products.

One of them, coffee, has been planted in the Central Highlands of Vietnam, becoming a specialty of the region and Vietnam. In other words, it has been developing nationwide. However, each destination here has different local specialties to differentiate from each other and create a memorable impression for tourists. First, when building adventure tours, government departments of provinces and tourism companies need to carefully choose suitable routes and ensure safety for tourists when participating, which is the most important content. At the same time, to invest in and build the infrastructure quality and to build up a professional staff to handle emergency situations that occur. Second, to plan, organize and develop new tourism services such as eco-tourism, community tourism, or experiential tourism, and to cooperate with farmers to set up tours based on sightseeing, understanding, experience, and picking and bringing it home, like picking coffee or durian. Third, to organize professionally more activities relating to the traditional festivals of local communities is to attract tourists. Fourth, the Central Highlands of Vietnam has a unique advantage in coffee products; therefore, by combining tourism with coffee in many forms of experiential tourism such as harvesting, sightseeing, and experiencing, tourists will also hear about stories relating to coffee. Finally, provinces in the Central Highlands also need to be interested in activities to improve the environment and plant trees to turn eco-tourism into sustainable eco-tourism. Ecotourism destinations should improve quality and train professional staff in all stages of operations.

6.2.3. Culture

Culture had a direct impact on destination innovation at destinations in the Central Highlands, Vietnam. There are many ethnic groups living in the Central Highlands of Vietnam, among the 53 ethnic groups living along Vietnam with unique cultures and traditional activities. Therefore, provinces there should preserve and enhance cultural values, not only promoting national values but also promoting social and economic development and enhancing tourism capacity to improve resident lives. First, organising and developing specific traditional festivals will attract a large number of tourists and create many new experiences for visitors. Second, in parallel with that development, to preserve and enhance spiritual and cultural values, invest in and develop traditional craft villages. In addition, tourism experiences must be appropriated to local culture. When travelling to a destination, tourists always want to experience and explore the local culture and practices. Therefore, it is necessary to create tourism experiences that are consistent with local culture to attract tourists and help them better understand the unique culture there.

6.2.4. Natural Environment

The natural environment also had a direct impact on destination innovation. The Central Highlands region is known as a region with many wild and majestic landscapes, and this is considered an advantage in tourism development. Therefore, the Central Highlands provinces need to take advantage of the natural environment to develop and expand. Firstly, to make project plans, to develop all advantages, and to look for new tourism types that can be applied here. The build-up is based on consistency and synchronization with supporting factors and to evaluate the suitability and attractiveness of each tourism type for each terrain. Connecting tourist terrains together creates a "Tourism Road" of destinations. Moreover, when developing, managers and enterprises also need to pay attention to environmental protection while keeping the environment in the most stable state. Second, to depend on nature to develop natural activities such as adventure and survival sports tourism, community tourism, experiential tourism to explore the land and locality, or environmentally friendly tourism types such as green tourism, healing tourism, eco-tourism, and sightseeing tourism. At the same time, actively build a destination landscape by decorating with rows of trees, flowers, and natural materials to build an environmentally friendly destination image.

7. CONCLUSION

This study intends to explore factors affecting destination innovation and destination competitiveness at destinations in the Central Highlands, Vietnam. The results illustrated that Policies, Culture, and Natural environment affecting destination innovation directly, excluding Local specialties had an impact directly on both destination innovation and destination competitiveness. In addition, destination innovation was a moderating factor between the four factors mentioned above and destination competitiveness. This study suggests some policy implications for developing appropriate destination innovation and competitiveness so that tourism in the Central Highlands, Vietnam, could be improved and developed sustainably.

8. LIMITATIONS AND FUTURE RESEARCH DIRECTION

Although this study has findings and contributions, it has limitations. First, this study explored a quite new topic with a combination of innovation and competitiveness concepts; hence, approaches and explorations were limited. Second, this study was conducted only in the Central Highlands of Vietnam. Therefore, in future research, authors would continue exploring deeply this topic and expand the research areas in order to compare the innovation and competitiveness between each region in Vietnam.

Funding: This study received no specific financial support.
Institutional Review Board Statement: The Ethical Committee of the Industrial university of Ho Chi Minh city, Vietnam has granted approval for this study on 24 March 2022 (Ref. No. 19/HĐ-ĐHCN).
Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.
Competing Interests: The authors declare that they have no competing interests.
Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

REFERENCES

Akbulut, O., & Ekin, Y. (2022). Mountain destination innovativeness model (Mdim) for babadağ-Turkey. *Uludağ Üniversitesi Fen-Edebiyat Fakültesi Sosyal Bilimler Dergisi, 23*(42), 373–400. https://doi.org/10.21550/sosbilder.991873

Bentler, P. M., & Chou, C.-P. (1987). Practical issues in structural modeling. *Sociological Methods & Research, 16*(1), 78–117. https://doi.org/10.1177/0049124187016001004

Buhalis, D. (2000). Marketing the competitive destination of the future. *Tourism Management, 21*(1), 97–116. https://doi.org/10.1016/S0261-5177(99)00095-3

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern Methods for Business Research, 295*(2), 295-336.

Daklak Provincal People's Committee. (2022). *DakLak provincal people's committee.* Retrieved from https://daklak.gov.vn/web/english

Divisekera, S., & Nguyen, V. K. (2018). Determinants of innovation in tourism evidence from Australia. *Tourism Management, 67*, 157–167. https://doi.org/10.1016/j.tourman.2018.01.010

Dwyer, L., & Kim, C. (2003). Destination competitiveness: Determinants and indicators. *Current Issues in Tourism, 6*(5), 369–414. https://doi.org/10.1080/13683500308667962

Fallon, L. D., & Kriwoken, L. K. (2003). Community involvement in tourism infrastructure—the case of the Strahan Visitor Centre, Tasmania. *Tourism Management, 24*(3), 289–308. https://doi.org/10.1016/S0261-5177(02)00072-9

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research, 18*(3), 382–388. https://doi.org/10.1177/002224378101800313

Grissemann, U. S., Pikkemaat, B., & Weger, C. (2013). Antecedents of innovation activities in tourism: An empirical investigation of the Alpine hospitality industry. *Tourism: An International Interdisciplinary Journal, 61*(1), 7-27.

Gunya, A. (2007). *Cross-border cooperation at local level in the Alps, the Caucasus and the mountains of Central Asia*. Paper presented at the Ministerial Conference Environment for Europe.

Gupta, S., Malhotra, N. K., Czinkota, M., & Foroudi, P. (2016). Marketing innovation: A consequence of competitiveness. *Journal of Business Research*, *69*(12), 5671–5681. https://doi.org/10.1016/j.jbusres.2016.02.042

Haileslassie, B. G. (2017). *Status, challenges and prospects of tourism industry in Konso Woreda*. Southern Ethiopia: Segen Zone.

Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*, *26*(2), 106–121. https://doi.org/10.1108/EBR-10-2013-0128

Hjalager, A.-M. (2002). Repairing innovation defectiveness in tourism. *Tourism Management*, *23*(5), 465–474. https://doi.org/10.1016/S0261-5177(02)00013-4

Howie, F. (2003). Managing the tourist destination. In (pp. 210 - 230). London: Continuum.

Huang, Y.-K., & Chen, J.-S. (2009). Information synergy as the catalyst between information technology capability and innovativeness: Empirical evidence from the financial service sector. *Information Research*, *14*(1), 7.

Hương, N. T. L., & Quân, T. T. (2018). Identifying the Hue tourist destination image scale. *Hue University Journal of Science: Economics and Development*, *127*(5A), 87–104. https://doi.org/10.26459/hueuni-jed.v127i5A.4799

Kallmuenzer, A., & Peters, M. (2018). Innovativeness and control mechanisms in tourism and hospitality family firms: A comparative study. *International Journal of Hospitality Management*, *70*, 66–74. https://doi.org/10.1016/j.ijhm.2017.10.022

Khadaroo, A. J., & Seetanah, B. (2007). *Transport infrastructure and FDI: Lessons from Sub–Saharan African economies*. Paper presented at the African Economic Conference.

Khoa, D., Hùng, P. V., Thủy, L. X., & Tuấn, T. H. (2017). Factors affecting the competitiveness of tourism enterprises in Quang Ngai Province. *Hue University Journal of Science: Economics and Development*, *126*(5D), 125. https://doi.org/10.26459/hueuni-jed.v126i5D.4504

Kuščer, K. (2013). Determining factors of mountain destination innovativeness. *Journal of Vacation Marketing*, *19*(1), 41–54. https://doi.org/10.1177/1356766712461404

Law on Tourism. (2017). *Legal normative documents*. Retrieved from https://vbpl.vn/FileData/TW/Lists/vbpq/Attachments/129350/VanBanGoc_Luat.09.2017.QH14.pdf

Leung, X. Y., & Baloglu, S. (2013). Tourism competitiveness of Asia pacific destinations. *Tourism Analysis*, *18*(4), 371–384. https://doi.org/10.3727/108354213X13736372325876

Lin, C.-H., Morais, D. B., Kerstetter, D. L., & Hou, J.-S. (2007). Examining the role of cognitive and affective image in predicting choice across natural, developed, and theme-park destinations. *Journal of Travel Research*, *46*(2), 183–194. https://doi.org/10.1177/0047287507304049

Maunier, C., & Camelis, C. (2013). Toward an identification of elements contributing to satisfaction with the tourism experience. *Journal of Vacation Marketing*, *19*(1), 19–39. https://doi.org/10.1177/1356766712468733

Ministry of Culture, Sports, & Tourism Vietnam. (2023). *Ministry of culture, sports and tourism, Vietnam*. Retrieved from https://bvhttdl.gov.vn/luong-khach-quoc-te-den-viet-nam-trong-8-thang-gan-can-moc-chi-tieu-ca-nam-20230830164739 52.htm

Murphy, P., Pritchard, M. P., & Smith, B. (2000). The destination product and its impact on traveller perceptions. *Tourism Management*, *12*(1), 43–52. https://doi.org/10.1016/S0261-5177(99)00080-1

Ngân, N. T. K., & Hải, N. C. (2022). Factors affecting sustainable tourism development in an Giang Province, Vietnam. *TNU Journal of Science and Technology*, *227*(12), 142-150.

Nguyen, A. T. (2010). *Destination competitiveness of Vietnamese tourism*. Doctoral Thesis, University of Economics.

Nguyen, T. L. (2017). *Study on factors affecting the competitiveness of Ben Tre's tourism businesses. Ho Chi Minh City Open University Science Magazine - Economics and Business Administration*. Retrieved from https://journalofscience.ou.edu.vn/index.php/econ-vi/article/view/661/533

Nguyen, T. L., Nguyen, Q. T., & Nguyen, T. L. (2018). Factors affecting the brand and competitiveness of tourist destinations: Case study in Ben Tre province. *Economic Studies*.

Nyström, H. (1990). *Organizational innovation (M. A. West & J. L. Farr, Eds.)*. New York: John Wiley & Sons.

Phuong, V. T., & Linh, N. T. S. (2022). Evaluation of the image of the ba be lake tourist destination of domestic tourists. *TNU Journal of Science and Technology*, *227*(9), 415–423. https://doi.org/10.34238/tnu-jst.5912

Porter, M. E. (1990). *Competitive advantage of nations: Creating and sustaining superior performance*. New York: The Free Press.

Porter, M. E., & Ketels, C. H. (2003). *UK competitiveness: Moving to the next stage. Department of Trade and Industry*. Retrieved from https://www.hbs.edu/ris/Publication%20Files/file14771_83b42e5a-7e88-49be-9d33-2fc7585a87d9.pdf

Porter, M. E., & Strategy, C. (1980). *Competition strategy-techniques for analyzing industries and competitors*. New York: The Free Press.

Raykov, T., & Widaman, K. F. (1995). Issues in applied structural equation modeling research. *Structural Equation Modeling: A Multidisciplinary Journal*, *2*(4), 289–318. https://doi.org/10.1080/10705519509540017

Ritchie, J. B., & Crouch, G. I. (2003). The competitive destination, a sustainable perspective. *Cabi*, 145 - 151.

Ritchie, J. R. B., & Zins, M. (1978). Culture as determinant of the attractiveness of a tourism region. *Annals of Tourism Research*, *52*(2), 252–267. https://doi.org/10.1016/0160-7383(78)90223-2

Sánchez, A. G., & López, D. S. (2015). Tourism destination competitiveness: The spanish mediterranean case. *Tourism Economics*, *21*(6), 1235–1254. https://doi.org/10.5367/te.2014.0405

The World Tourism Organization. (2023). *The world tourism organization*. Retrieved from https://www.unwto.org/what-is-tourism-innovation

Tseng, C.-Y., Kuo, H.-Y., & Chou, S.-S. (2008). Configuration of innovation and performance in the service industry: Evidence from the Taiwanese hotel industry. *The Service Industries Journal*, *28*(7), 1015–1028. https://doi.org/10.1080/02642060701882080

Vengesayi, S., Mavondo, F., & Reisinger, Y. (2013). Tourism destination competitiveness: The impact of destination resources, support services and human factors. *Journal of Tourism*, *14*(1), 80-108.

Victorino, L., Verma, R., Plaschka, G., & Dev, C. (2005). Service innovation and customer choices in the hospitality industry. *Managing Service Quality: An International Journal*, *15*(6), 555–576. https://doi.org/10.1108/09604520510634023

Vietnam National Administration of Tourism. (2023). *Vietnam tourism marketing strategy to 2030 launched*. Retrieved from https://vietnamtourism.gov.vn/en/post/18385

Vietnam.gov.vn. (2020). *Strategy on Vietnam's tourism development until 2020, vision to 2030*. Retrieved from https://vietnam.gov.vn/2011-2010-69175/strategy-on-viet-nam-s-tourism-development-until-2020-vision-to-2030-1695138

Vo, S., & Ngo, L. (2017). Orienting the explotation of specific products for rural tourism development in an Giang province. *VNUHCM Journal of Social Sciences and Humanities*, *1*(X3), 34-41. https://doi.org/https://doi.org/10.32508/stdjssh.v1iX3.449

Watson, G. L., & Kopachevsky, J. P. (1994). Interpretations of tourism as commodity. *Annals of Tourism Research*, *21*(3), 643–660. https://doi.org/10.1016/0160-7383(94)90125-2

Yangzhou, H., & Ritchie, J. R. B. (1993). Measuring destination attractiveness: A contextual approach. *Journal of Travel Research*, *32*(2), 25–34. https://doi.org/10.1177/004728759303200204

Zeleke, A., & Biwota, S. (2020). Factors affecting tourism competitiveness of Ethiopia: International tourist destination choice perspective. *Journal Tourism Hospit*, *9*(446), 2167-0269.2120.