Journal of Infrastructure, Policy and Development 2024, 8(9), 8502.
https://doi.org/10.24294/jipd.v8i9.8502

Article

Research on the relationship among resource integration, shared value, and value creation in scenic areas

Zheng-yi Dong*, Jin-wen Tang

International College, Krirk University, Bangkok 10220, Thailand
*** Corresponding author:** Zheng-yi Dong, 1127586604@qq.com

CITATION

Dong Z, Tang J. (2024). Research on the relationship among resource integration, shared value, and value creation in scenic areas. Journal of Infrastructure, Policy and Development. 8(9): 8502. https://doi.org/10.24294/jipd.v8i9.8502

ARTICLE INFO

Received: 9 August 2024
Accepted: 27 August 2024
Available online: 10 September 2024

Abstract: This study investigates the potential predictors of resource creation behaviours in the Shanxi merchant courtyard scenic areas based on resource dependence theory. The research was conducted in China using questionnaire survey, and data analysis employed structural equation modelling, including mediation and moderation effects. The model was tested using a sample of 376 individual managers from scenic areas. The results show that external resource integration, internal resource integration, and shared value significantly affect resource creation in scenic areas. The findings indicate that shared value plays a significant mediating role in the relationship between resource integration and resource creation, while environmental dynamism significantly moderates this relationship. This study clearly demonstrates the relationship among resource integration, shared value, and value creation in scenic areas. This research contributes to the tourism management literature by identifying gaps and offering a comprehensive perspective to understand resource creation behaviours in the tourism industry.

Keywords: resource integration; shared value; value creation; environmental dynamism; Shanxi merchant courtyard

1. Introduction

Actor-to-actor (A2A) interactive resource integration is a primary mechanism for creating shared value, and resource integration is unique to each actor (Mele, 2009). Through resource matching, resource integration defines the role of each network member, achieves shared value, and maximises benefits (Gummesson and Mele, 2010). Symbiotic theory has gradually become an important research paradigm in the field of public tourism management, highlighting issues such as the insufficient integration of symbiotic concepts, weak relationships, fragile environments, and poor interface connectivity. Resources that form the basis for new products (often strategic) are combined with local resources to enhance their practical value by increasing diversity, attractiveness, and impact scope (Bański, 2022). Proper utilisation of local resources affects both the business of private actors and the development and growth of the local economy (Coccorese and Pellecchia, 2006).

This study aims to address this gap in the literature. It explores the impact of resource integration and shared value on resource creation in the Shanxi Merchant Courtyard scenic areas and addresses the following research questions: (a) Does resource integration have a significant impact on resource creation? (b) Does shared value have a significant impact on value creation? (c) Does shared value fully or partially mediate the relationship between resource integration and creative behaviours? More specifically, we focus on the moderating role of environmental dynamism in the relationship between resource integration and resource creation

within enterprises. From a competitive perspective, rapid environmental changes affect both the competitive dynamics within alliances and the effectiveness of alliance governance (Castaneda, 2020). Therefore, the final research question is as follows: (d) Does environmental dynamism fully or partially moderate the relationship between resource integration and creative behaviours?

The main contribution of this study lies in expanding the understanding of resource creation behaviours in the Shanxi Merchant Courtyard tourism industry, emphasising the role and importance of resource integration and linking the relationship between resource integration and creative behaviours. In this regard, this study responds to several recent calls in the literature to examine the impact of resource integration on creative behaviours in the tourism industry. Through the analysis of the current Shanxi Merchant Courtyard in China, the results of this study summarise and refine the concerns of each participant playing a role in the network, aiming to guide the planned resource integration behaviours of participants to achieve value propositions and provide guidance for tourism in Jinzhong City.

2. Literature review

2.1. Resource dependency theory

Recent research has highlighted the limitations of resource dependence theory: vague conceptual boundaries have resulted in a lack of precise identification of 'interdependence' between organisations. This has caused most studies to focus on one party's dependence on the other rather than mutual interdependence (Casciaro and Piskorski, 2005). Boards of directors seek the resources necessary for enterprise development by managing relationships with other organisations (Haunschild and Beekman, 1998).

Although resource dependence theory has a long history, its research outcomes are not abundant. After dividing resource dependence into mutual dependence and power imbalance, there have been no significant theoretical breakthroughs. This explains why there are few studies solely supported by resource dependence theory, with most analyses combining transaction cost theory, institutional theory, and other frameworks.

Current research proposes resource dependence theory to enhance (1) the Shanxi Merchant Courtyard scenic area organisations' dependence on the external environment, with the degree of dependence between organisations depending on the importance and scarcity of resources to the organisation; (2) the extent to which a specific group within or outside the Shanxi Merchant Courtyard scenic area obtains or handles resource use; And (3) the degree to which resources can be substituted. The Shanxi Merchant Courtyard scenic area organisations need to establish dependent relationships with the external environment. Resource dependence theory views organisations as a nexus of power and energy, rejecting the notion that they exist merely to achieve goals.

Therefore, this study uses shared value as an influencer (mediator) and environmental dynamism as a moderator in the relationship among external resource integration, internal resource integration, and resource creation in the Shanxi Merchant Courtyard scenic areas.

2.2. Definition of variables

External resource integration: According to Vargo and Lusch (2016), enterprise-oriented resource integration aims to develop and deliver novel value propositions. This paper adopts the definition by Vargo and Lusch (2016), describing outbound resource integration as the process by which tourism enterprises extend their available resources from within the organization to the external value network. The purpose is to develop and deliver innovative value propositions and facilitate a more extensive and rational allocation of resources.

Internal resource integration: Desa and Basu (2013) and Huang et al. (2022) define inbound resource integration as a goal-oriented process of acquiring resources to achieve specific objectives and needs. This paper adopts the definitions provided by Desa and Basu (2013) and Huang et al. (2022), characterizing inbound resource integration as the process by which tourism enterprises draw resources from the external value network into the organization. Through internal absorption and mastery, these resources are integrated into the enterprise's own resource base.

Shared value: Kim et al. (2013) and Wu and Cavusgil (2006) suggest that shared interests between channel partners represent the mutual benefits and value gained from the partnership, including competitive strengths. This thesis adopts the definitions of Kim et al. (2013) and Wu and Cavusgil (2006), defining shared value as the mutual benefits and competitive strength created by tourism enterprises and their stakeholders within the value network, based on a shared vision.

Resource creation: Chuang and Lin (2015) indicate that value can be measured by an increase in market share, rapid growth, and generation of additional profits. This paper adopts the definition by Chuang and Lin (2015), where value creation refers to the enterprise's own benefits and competitive advantages that arise from the spillover effects of relationships within the value network, beyond the shared value.

Environmental dynamism: Dess and Bearddw (1984) identifies the speed and unpredictability of environmental changes. This paper adopts Dess and Bearddw (1984) definition of environmental dynamism, which refers to its impact on the changes in outbound resource integration, inbound resource integration, and value creation.

2.3. Research on resource creation

Under the pressure of globalisation, companies face increasingly fierce competition in product markets and need to continue innovating to ensure their competitive advantage (Liao and Marsillac, 2015). Resource creation based on community sharing is embedded in the organisation's mission and DNA. Organisational operations co-create value in collaboration with network members (Kokko, 2018). The collaboration processes of social enterprises (SE) are deeply connected to the concept of social innovation (Ungvarsky, 2020).

The literature has explored resource creation in terms of co-creation among network members and corporate collaboration, but few have studied the quality of internal and external resource integration and resource creation under the framework of resource dependence theory. Matching resources to define the role of each network member is crucial for connecting their resources and maximising benefits

(Gummesson and Mele, 2010). Therefore, resource creation can be seen as resulting from resource integration.

2.4. Research on the relationship between resource integration in scenic areas and resource creation

Scholars assert that the sustainable development of tourism should involve the integration of all relevant tourism resources across different countries (Litavniece et al., 2023; YoshiAbe et al., 2024). Research explores how companies integrate their available or internal resources to develop unique capabilities (Sirmon et al., 2007). The effectiveness of enterprise integration depends on the degree of connection between the enterprise and external entities (Francesco and Ivan, 2010).

The literature has examined various aspects of coordination between enterprises and the state, public and private partnerships, and horizontal and vertical levels, but few tourism scholars have studied the relationship between external resource integration and resource creation in scenic areas. Villagers in Taoping Qiang Village have long participated in the integration of agriculture, culture, and tourism, benefiting from ticket dividends, rural tourism, and other aspects, with a high degree of involvement in the tourism industry's integration. Enterprises often face resource shortages and need to combine resources within social networks to address new challenges (Sirmon et al., 2007).

Hypothesis H1a: External resource integration has a positive moderating effect on resource creation.

The literature has examined various aspects of enterprises, technology, talent, and teams, but few scholars have studied the relationship between internal resource integration and the quality of resource creation within scenic areas. Enhancing cultural and tourism infrastructure and supporting services and promoting coordinated development mechanisms, including administrative promotion, market operation, and supervision feedback, are essential. Relevant departments should cultivate a pool of multidisciplinary talents in cultural tourism public services who understand the market and excel in management to promote the construction of cultural tourism (Poom et al., 2020).

Hypothesis H1b: Internal resource integration has a positive moderating effect on resource creation.

2.5. Research on the relationship between shared value and value creation

Partners establish relational norms, reach agreements, form mutual expectations, and enhance adaptability (Liu et al., 2009; Poppo and Zenger, 2002). They join networks due to their shared interest in developing a specific social mission and share their resources with the aim of creating social value (Kokko, 2018). The formation and maintenance of the community are ensured by the project ideas of network members (Agrawal et al., 2023).

The literature has examined how partners achieve shared value through the establishment of relational norms, commitment, and shared interests and values, but few scholars have studied the relationship between shared value and value creation.

Shared value forms a soft constraint on employees at the conceptual level, guiding departments and employees towards the strategic goals of the enterprise during business execution. The importance of value propositions lies in their explicit statement of the value that can be achieved through the co-creation of services and the implicit statement of the resources required from all participants (Zaional et al., 2019). The framework of value is separated from established power structures, mutual prosperity, and the systems for exchanging resources to create shared value, addressing local basic needs (Ákos, 2024).

Hypothesis H2: Shared value has a positive moderating effect on value creation.

2.6. Research on the relationship between resource integration, shared value, and value creation

The interconnection between airlines and hotel operations and the integration of travel agencies with transportation service providers both affect value creation in the tourism industry (Lafferty and Fossen, 2001; Long and Shi, 2016). Scholars argue that the competitiveness of the tourism industry can be enhanced by integrating tourism resources to increase the added value of tourism products (Valentinas and Asta, 2009). They also believe that the complexity of the tourism market necessitates the establishment of tourism cooperation and industry integration-related planning to promote network shared value (Carlisle et al., 2015). Enterprises absorb resources from value networks through an 'input' process from outside to inside, integrating acquired ideas, knowledge, technology, and other resources into the enterprise to overcome their resource limitations and create enterprise value (Cassiman and Valentini, 2016).

Hypothesis H3a: Shared value mediates the relationship between external resource integration and resource creation, thereby promoting new opportunities for resource creation in scenic areas.

Simultaneously, internal management systems should be strengthened to standardise internal control systems, improve operational efficiency, and enhance risk resistance (Faudziah et al., 2005). In the cultural and tourism industry, human resources are the core competitive element (Khanuw, 2012; Lytras and Pablos, 2008). Enterprises should make internal resources available to external stakeholders and collaborate with them in research and development to create network shared value (Cassiman and Valentini, 2016). Integrating tourism resources ensures that the design concepts and decorations of various regional tourism projects are innovative, better meeting their diverse needs (Lytras and Pablos, 2008).

Hypothesis H3b: Shared value mediates the relationship between internal resource integration and resource creation, thereby promoting new opportunities for resource creation in scenic areas.

2.7. Research on environmental dynamism, external resource integration, and resource creation

From a competitive perspective, rapid environmental changes affect both the competitive dynamics within alliances and the effectiveness of alliance governance (Castaneda, 2020). Environmental dynamism negatively moderates the relationship

between network relationship strength and breakthrough innovation, and it also has a moderating effect on the relationship between alliance knowledge acquisition and enterprise innovation performance. As environmental dynamism increases, the mediating role of partner knowledge sharing weakens (Pelin et al., 2021). The extreme capacity of a tourist scenic area, also known as maximum capacity or saturation capacity, is the limit of its tourism-carrying capacity (Sergio, 2020).

Hypothesis H4a: Environmental dynamism negatively moderates the relationship between external resource integration and resource creation.

In the cultural and tourism integration strategy, environmental dynamism has a significant impact on the implementation and effectiveness of internal resource integration (Isabelle, 2015). Environmental dynamism positively moderates the governance mechanisms of relationships. Platform-based leadership places greater emphasis on the accumulation and utilisation of resources as well as the integration of internal resources to compensate for the loss of utility caused by resource depletion, thereby accelerating resource bricolage (Pelin et al., 2021).

Hypothesis H4b: Environmental dynamism positively moderates the relationship between internal resource integration and resource creation.

Based on the inductive conclusion of the research hypothesis in this article, the hypothetical relationships between variables in the model are proposed, and the theoretical research model of this article **Figure 1** is constructed.

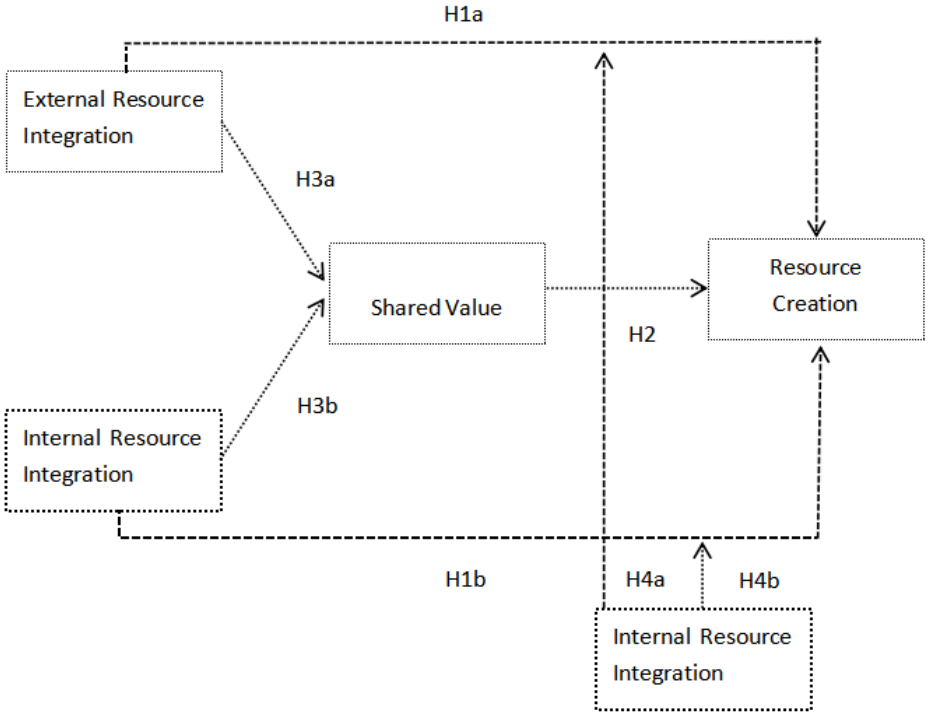

Figure 1. Research hypothesis diagram.

3. Methods

3.1. Data collection

To verify this hypothesis, we implemented a quantitative research design using a structured questionnaire and a non-probability convenience sample for an offline

survey. A total of 391 scenic area managers participated in the questionnaire. Data collection for this study took place from 8 October to 8 December 2023. Respondents who read the purpose and explanation of the survey and agreed to participate were able to join the survey. The author posed a preliminary question: 'Are you a manager of a Shanxi Merchant Courtyard scenic area? If "yes," please complete the rest of the questionnaire. If "no," you do not need to continue.' This study focuses on the managers of the Shanxi Merchant Courtyard scenic areas. Respondents were also required to provide demographic information related to their position, age, and other relevant details. The questionnaire also surveyed resource creation behaviours in the Shanxi Merchant Courtyard scenic areas, ending with research on the relationships among resource integration, shared value, resource creation, and environmental dynamism.

After collecting the data, we examined the results of the questions to determine whether individual participants completed the screening process when answering the questions. Therefore, participants who did not complete the questionnaire or did not correctly answer the attention check questions were excluded from the study. A total of 376 valid responses were collected.

3.2. All constructs

All constructs were measured using a five-point Likert scale (1 = completely disagree, 5 = completely agree). All items were derived from previous literature to ensure the content validity of the constructs. The study of external resource integration was based on the literature by Francesco and Ivan (2010). The measurement of internal resource integration was drawn from the literature by Poom et al. (2020). The measurement of shared value was sourced from the literature by Zaional et al. (2019). The measurement of resource creation was based on the literature by Liao and Marsillac (2015) and Valentinas and Asta (2009). The measurement of environmental dynamism was derived from the literature by Delio and Sergio (2020), Isabelle (2015), Pelin et al. (2021).

3.3. Data analysis

3.3.1. Reliability analysis

As shown in **Table 1**, the reliability tests of the research variables indicate that each variable has a Cronbach's alpha value greater than 0.7, suggesting that each variable exhibits good reliability. Therefore, it can be said that the measurement indicators of the research variables have high internal consistency, and the data collected are relatively reliable.

Table 1. Reliability analysis.

Item of analysis	Cronbach's alpha
Reliability of external resource integration	0.889
Reliability of internal resource integration	0.898
Reliability of shared value	0.867
Reliability of resource creation	0.897
Reliability of environmental dynamism	0.919

3.3.2. Confirmatory factor analysis

This study employed Amos 24.0 software to conduct a confirmatory factor analysis (CFA), using the maximum likelihood method to verify the structural validity of the model and scales. When evaluating model fit with CFA, it is necessary to consider multiple indices, including absolute fit, incremental fit, and parsimonious fit.

Based on the relationships among these indices, we constructed a CFA model using the survey data to perform the analysis and optimize and correct the error terms.

First, an analysis of the goodness-of-fit indices for the confirmatory factor analysis was conducted. Most of the indices show satisfactory fit, as illustrated in **Table 2**. The chi-square-to-degrees-of-freedom ratio is 2.054, which is less than the threshold of 3.000. The RMSEA value is 0.056, indicating a good model fit. The RMR value is 0.044, also reflecting a good fit. The GFI value is 0.911, demonstrating a good fit. The CFI and IFI values are both 0.956, indicating good model fit. The PNFI value is 0.796, suggesting a good fit in terms of parsimony. Overall, the indices perform well, and the model fit is acceptable, indicating a high degree of alignment between the theoretical model and the actual data, thereby enhancing the credibility of the model results.

Table 2. Confirmatory factor analysis model.

Fit indices	Ideal standard	General standard	Model results	Conclusion
CMIN/DF	1–3	The smaller, the better	2.054	Good
RMSEA	<0.08	<0.1	0.053	Good
RMR	<0.08	<0.1	0.044	Good
GFI	>0.90	>0.8	0.879	Average
CFI	>0.90	>0.8	0.943	Good
IFI	>0.90	>0.8	0.943	Good
PNFI	>0.50	-	0.805	Good

Based on the actual investigation data, the results are shown in the table above. The study indicates that the questionnaire model presented in **Table 3** includes five first-order factors: external resource integration, internal resource integration, shared value, resource creation, and environmental dynamism. The standardized factor loadings of all measurement items were greater than 0.5, and the critical ratio (CR) was greater than 1.96, showing significant differences at the 0.001 level. Additionally, the composite reliability of all factors was greater than 0.7, indicating good composite reliability of the model. The average variance extracted (AVE) values for each factor were all greater than 0.5, demonstrating good convergent validity of the model.

Table 3. Factor structural validity model.

Latent variable	Measurement item	Question item	Factor loading	C.R.	Composite reliability	AVE
External resource integration	Q7	The company collaborates with local high-quality specialty enterprises to achieve complementary advantages and boost the local tourism economy.	0.779			
	Q8	The company effectively promotes the deepening of cultural and tourism integration, with a high level of participation and benefit from the tourism industry integration entities.	0.765	15.466		
	Q9	The company enhances the comprehensive capability of tourist attractions by enriching the tourism resources and projects in the surrounding.	0.877	18.063	0.890	0.619
	Q10	The company cooperates with film production and cultural performance organizations to enhance overall corporate effectiveness.	0.738	14.822		
	Q11	The company organizes tourist attractions into strategic combinations, resulting in a win-win situation and increased tourism competitive	0.768	15.54		
Internal resource integration	Q12	Compared to other companies, the company creates unique brand series activities for tourist attractions through cultural performances and major events, aiming to increase the attractions' visibility.	0.803			
	Q13	The company nourishes tourism development with cultural resources, leveraging market-based and industrial operations to maximize its role and value.	0.816	17.638		
	Q14	Our company frequently supplements necessary new resources and internally develops and cultivates them to better achieve objectives.	0.74	15.538	0.901	0.646
	Q15	The company focuses on technological innovation, building a high-quality talent team, and improving market systems.	0.896	19.848		
	Q16	The company utilizes self-media marketing strategies to broaden brand promotion.	0.754	15.902		
Shared value	Q17	In terms of business execution, departments and employees align with the company's strategic goals.	0.779			
	Q18	Achieving strategic goals for the shared use of tourism resources, products, markets, information, sources, and benefits promotes high-quality enterprise development and creates new economic growth points in tourism.	0.646	12.392		
	Q19	Our enterprise and members of the value network jointly advance shared value.	0.775	15.168	0.868	0.570
	Q20	Both our enterprise and value network members share common profits.	0.814	15.985		
	Q21	Our shared value has gained significant strategic advantages.	0.751	14.659		

Table 3. (*Continued*).

Latent variable	Measurement item	Question item	Factor loading	C.R.	Composite reliability	AVE
Resource creation	Q22	Enhancing the added value of tourism products boosts the core competitiveness of scenic areas.	0.8		0.899	0.639
	Q23	New technologies, such as virtual reality and artificial intelligence, enhance tourists' immersive experiences at Jin merchants' courtyards.	0.808	17.051		
	Q24	By drawing resources from the value network and integrating acquired ideas, knowledge, and technologies into the enterprise, we address our resource limitations and create value for the enterprise.	0.796	16.723		
	Q25	Drive enterprise development and build the Jin merchants' courtyard brand.	0.797	16.74		
	Q26	Creates new opportunities and opens up new paradigms.	0.797	16.758		
Environmental dynamism	Q27	Rapid changes in the enterprise environment impact both alliance competition and the effectiveness of alliance governance.	0.779		0.920	0.590
	Q28	The maximum or saturation capacity of a scenic area represents the limit of its tourism load.	0.789	16.368		
	Q29	The market environment faced by scenic areas is continuously evolving.	0.753	15.467		
	Q30	The strength of network member relationships and breakthrough innovations influence resource integration in scenic areas.	0.809	16.866		
	Q31	Factors affecting enterprise environmental capacity include ecology, resources, weather, local customs and culture, local residents' attitudes, tourist quality, tourist psychology, time, spatial distribution, and reception capacity.	0.752	15.43		
	Q32	Scenic areas face new and evolving demands for products and services.	0.752	15.431		
	Q33	Effective relationship governance mechanisms have a positive moderating effect.	0.752	15.432		
	Q34	The implementation and outcomes of internal resource integration are critically important.	0.753	15.452		

As shown in **Table 4**, The discriminant validity test of latent variables shows that the square root of the minimum average variance extracted (AVE) is 0.755, which is higher than the maximum correlation coefficient of 0.433, indicating good discriminant validity between the latent variables.

Table 4. Discriminant validity test.

Square root of AVE	External resources	Internal resources	Shared value	Resource creation	Environmental dynamism
External Resources	0.787				
Internal Resources	0.433	0.804			
Shared Value	0.313	0.29	0.755		
Resource Creation	0.362	0.392	0.339	0.799	
Environmental Dynamism	0.371	0.32	0.114	0.225	0.768

3.3.3. Variable correlation analysis

Correlation analysis validates that, according to **Table 5**, value creation is significantly positively correlated with outward resource integration (correlation coefficient of 0.336). Value creation is also significantly positively correlated with inward resource integration (correlation coefficient of 0.353) and with shared value (correlation coefficient of 0.297).

Table 5. Variable correlation analysis.

Correlation						
		Resource creation	External resource integration	Internal resource integration	Shared value	Environmental dynamism
Resource creation	Pearson correlation	1	0.336**	0.353**	0.297**	0.204**
	Significance (two-tailed)		0.000	0.000	0.000	0.000
	N	376	376	376	376	376
External resource integration	Pearson correlation	0.336**	1	0.410**	0.283**	0.349**
	Significance (two-tailed)	0.000		0.000	0.000	0.000
	N	376	376	376	376	376
Internal resource integration	Pearson correlation	0.353**	0.410**	1	0.247**	0.302**
	Significance (two-tailed)	0.000	0.000		0.000	0.000
	N	376	376	376	376	376
Shared value	Pearson correlation	0.297**	0.283**	0.247**	1	0.098
	Significance (two-tailed)	0.000	0.000	0.000		0.058
	N	376	376	376	376	376
Environmental dynamism	Pearson correlation	0.204**	0.349**	0.302**	0.098	1
	Significance (two-tailed)	0.000	0.000	0.000	0.058	
	N	376	376	376	376	376

**. Correlation is significant at the 0.01 level (two-tailed).

Based on the research theories and hypotheses, a model of the influencing relationships between the variables was constructed. The path analysis of the structural equation for each variable is shown in **Figure 2**.

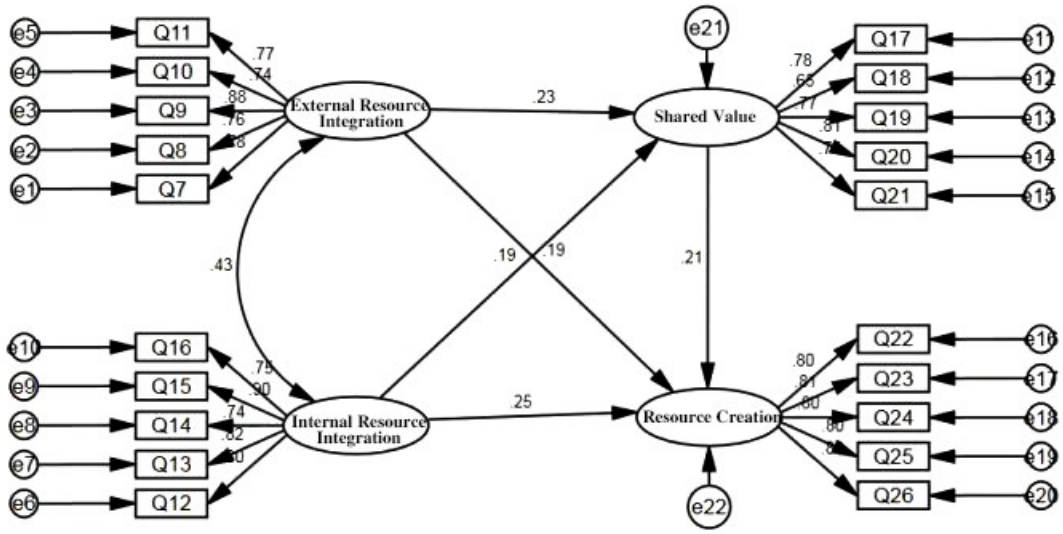

Figure 2. Path analysis diagram of the structural equation.

In this study, Amos 24.0 software was used to perform structural equation modelling on the collected data. The results were classified and analysed.

3.3.4. Mediating variable analysis

We used the bootstrap method to test the effect of the mediating variables. The sample size was 5000, with a 95% confidence interval.

The results of the mediating variable test are shown in **Table 6**. The mediating effect size for the path external resource integration—shared value—resource creation was 0.048, with a confidence interval of (0.013, 0.104), which does not include zero, indicating a significant mediating effect. Therefore, shared value plays a significant mediating role in the relationship between external resource integration and resource creation.

Table 6. Mediator variable analysis.

Indirect Path	Effect Type	Effect Size	SE	Bootstrap CI (95 percent)		*P*
				Lower Limit	Upper Limit	
External Resource Integration—Shared Value—Value Creation	Direct Effect	0.187	0.065	0.064	0.319	0.004
	Indirect Effect	0.048	0.022	0.013	0.104	0.005
	Total Effect	0.235	0.061	0.119	0.360	0.000
Internal Resource Integration—Shared Value—Value Creation	Direct Effect	0.251	0.065	0.120	0.380	0.000
	Indirect Effect	0.040	0.021	0.008	0.094	0.008
	Total Effect	0.291	0.064	0.160	0.412	0.000

The mediating effect size for the path internal resource integration—shared value—resource creation was 0.040, with a confidence interval of (0.008, 0.094), which does not include zero, indicating a significant mediating effect. Thus, shared value also plays a significant mediating role in the relationship between internal resource integration and value creation.

3.3.5. Moderating variable analysis

a) Analysis of environmental dynamism on the moderation between external

resource integration and value creation

This section examines environmental dynamism as the moderating variable, external resource integration as the independent variable, and resource creation as the dependent variable. Baron and Kenny (1986) and Hayes (2013) stepwise regression methods are employed to test the moderating effect of self-efficacy.

Table 7 shows that the results of the moderated regression analysis reveal an adjusted R-squared of 0.148, indicating that the combination of environmental dynamism as the moderating variable, outbound resource integration as the independent variable, and value creation as the dependent variable accounts for 14.8% of the variation in the dependent variable, demonstrating a good model fit.

Table 7. Model analysis.

Model Summary				
Model	***R***	***R* Square**	**Adjusted *R* Square**	**Standard Error of the Estimate**
1	0.410[a]	0.168	0.148	0.78939

Table 8 reveals an ANOVA *F*-value of 8.215, with a significance probability of 0.000 and a significance (sig) value of 0.000 < 0.05. This indicates that the linear relationship established between the independent variable "External Resource Integration" and the dependent variable "Resource Creation" is statistically significant at the 0.05 level, and the model fit is good with significant results.

Table 8. ANOVA[a] analysis.

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	***F***	**Sig.**
1	Regression	46.073	9	5.119	8.215	0.000[b]
	Residual	228.066	366	0.623		
	Total	274.139	375			

In the results presented in **Table 9**, the standard regression coefficient for the interaction term between environmental dynamism and External resource integration is −0.152, with a significance (sig) value of 0.006, which is less than 0.05. This indicates that the interaction term of environmental dynamism and External Resource Integration has a significant negative impact on the dependent variable, resource creation. The moderating effect of environmental dynamism is significant and operates as a negative moderator. This finding provides robust support for the research perspectives of Delio and Sergio (2020) and Pelin et al. (2021). Both studies argue from a competitive perspective that rapid environmental changes affect both alliance competition relationships and the effectiveness of alliance governance. They find that environmental dynamism has a significant moderating effect on firms, exhibiting a negative moderation effect. For instance, similar knowledge bases, technologies, market objectives, and interdependencies between alliances can also reduce a firm's adaptability.

Table 9. Coefficient[a] analysis.

Coefficient[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	***t***	**Sig.**
		B	**Standard Error**	**Beta**		
1	(Constant)	2.404	0.433		5.551	0.000
	External Resource Integration	0.256	0.057	0.242	4.476	0.000
	Environmental Dynamism	0.106	0.055	0.098	1.908	0.057
	Environmental Dynamism * External Resource Integration	−0.174	0.058	−0.152	−2.982	0.003

a. Dependent variable: Resource Creation.

b) Analysis of environmental dynamism moderating the relationship between internal resource integration and value creation

This section examines environmental dynamism as the moderating variable, internal resource integration as the independent variable, and resource creation as the dependent variable. Baron and Kenny (1986) and Hayes (2013) stepwise regression methods are employed to test the moderating effect of self-efficacy.

Table 10 shows that the results of the moderated regression analysis reveal an adjusted *R*-squared of 0.150, indicating that the combination of environmental dynamism as the moderating variable, internal resource integration as the independent variable, and resource creation as the dependent variable accounts for 15.0% of the variation in the dependent variable, demonstrating a good model fit.

Table 10. Model analysis.

Model Summary				
Model	***R***	***R* Square**	**Adjusted *R* Square**	**Standard Error of the Estimate**
1	0.413[a]	0.171	0.150	0.78817

Table 11 reveals an ANOVA *F*-value of 8.366, with a significance probability of 0.000 and a significance (sig) value of 0.000 < 0.05. This indicates that the linear relationship established between the independent variable "internal resource integration" and the dependent variable "resource creation" is statistically significant at the 0.05 level, and the model fit is good with significant results.

Table 11. ANOVA[a] analysis.

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	***F***	**Sig.**
1	Regression	46.775	9	5.197	8.366	0.000[b]
	Residual	227.364	366	0.621		
	Total	274.139	375			

In the results shown in **Table 12**, the standard regression coefficient for the interaction term between environmental dynamism and internal resource integration is 0.135, with a significance (sig) value of 0.006, which is less than 0.05. This indicates that the interaction term of environmental dynamism and internal resource integration

has a significant positive impact on the dependent variable, Resource Creation. The moderating effect of environmental dynamism is significant and operates as a positive moderator. This finding provides strong support for Li and Li (2021) research perspective, which posits that environmental dynamism has a significant positive effect on both incremental and breakthrough innovations within firms.

Table 12. Coefficient[a] analysis.

Coefficient[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	***t***	**Sig.**
		B	**Standard Error**	**Beta**		
1	(Constant)	2.247	0.415		5.408	0.000
	Internal Resource Integration	0.282	0.048	0.296	5.820	0.000
	Environmental Dynamism	0.141	0.056	0.130	2.536	0.012
	Environmental Dynamism * Internal Resource Integration	0.150	0.054	0.135	2.761	0.006

a. Dependent variable: Resource Creation.

4. Conclusion and implications

Many researchers have investigated the impact of resource integration on resource creation (Ostertag et al., 2021). Previous studies often neglected the explanation of the reasons and methods behind different forms of resource integration and their influence on creative behaviour. Through empirical research, this study explores and constructs a model of resource integration and resource creation centred on the Shanxi Merchant Courtyard scenic areas in China, involving multiple participants in a cyclical pattern. Therefore, this study attempts to expand the understanding of the impact of resource integration on resource creation in scenic areas. This conceptual framework is developed based on resource dependence theory.

This study contributes to the existing tourism literature in four ways. First, by testing the model, it describes the stages of external resource integration, internal resource integration, shared value, resource creation, and environmental dynamism within the Shanxi Merchant Courtyard. Second, the research highlights the important mediating role of shared value in both external and internal resource integration. Third, it demonstrates that environmental dynamism moderates the relationship between internal resource integration and resource creation. Finally, this study applies resource dependence theory to enhance the understanding of the development of the Shanxi Merchant Courtyard scenic areas.

Therefore, this study aims to explain the development of the Shanxi Merchant Courtyard tourism industry through the lens of resource dependence theory, enhancing the understanding of how shared value acts as a mediator and how environmental dynamism moderates the relationship between resource integration and resource creation. Although this study focuses on a sample of scenic area managers, it distils several resource integration models and elucidates key elements within these models. This can inspire scenic areas to tailor their actions according to their own resources, adapting to local conditions, capitalising on strengths, and mitigating weaknesses. In doing so, they can identify suitable action models, maximise resource integration, and

achieve optimal governance efficiency in resource creation within scenic areas.

5. Contributions

Based on resource dependence theory, this model investigates the external resource integration, internal resource integration, shared value, resource creation, and environmental dynamism of the Shanxi Merchant Courtyard scenic areas. Previous research has demonstrated the impact of resource integration on resource creation in scenic areas; however, there has been limited research on how these shared value factors translate into behavioural factors (Guo and Yi, 2024). We found that shared value plays a significant mediating role in the stages of external resource integration, internal resource integration, and resource creation in scenic areas. Additionally, we emphasise the crucial moderating role of environmental dynamism in the relationship between resource integration and creative behaviour.

The primary contribution of this study lies in its application of resource dependence theory, analysing the mediating role of shared value in external resource integration, internal resource integration, and resource creation in scenic areas as well as the moderating effect of environmental dynamism on the relationship between resource integration and creative behaviour. This study contributes to the literature by interpreting creative behaviour in the tourism industry as a response to resource dependence, elucidating the underlying mechanisms of resource creation behaviour. Furthermore, the model proposed in this study can be used to test the impact of resource integration on resource creation within scenic areas. Building on this, the consideration of shared value as a mediator in external resource integration, internal resource integration, and resource creation in scenic areas provides a reference for existing tourism literature. We found that resource integration significantly impacts resource creation in scenic areas in the tourism industry. This study extends the findings of Ostertag et al. (2021), identifying resource integration as the most effective method to enhance resource creation within scenic areas. Through the exchange and interaction of resources, each entity's resources become part of the shared resources of the value network members. Alliances should adhere to the principles of 'consultation, co-construction, and sharing' to promote regional tourism resource integration. In addition, it has a significant positive impact on the creation of dependent variables through internal resource integration, with its moderating effect being substantial.

The practical contributions of this study in resource integration include: innovative cooperation between external resources of tourist attractions and local high-quality specialty enterprises; internal resource integration within scenic areas should be tailored to local conditions, ensuring coordinated, distinctive activities to avoid homogenization of resources. For example, organizing the collection and organization of each attraction's cultural history and outstanding culture; arranging activities that enable deep interaction between tourists and culture based on the attractions' characteristics, such as gathering events or experiential tours; promoting architectural features of each site, such as the garden-style Jin merchant courtyards of Chang's family or the traditional charm of Cao's family courtyard; and promoting activities based on historical business operations, such as silk and ticketing in the Qing

Dynasty for Qiao's family, or salt and tea trade for Qu's family. Additionally, big data can be utilized for effective analysis and preventive measures in resource integration, activity planning, visitor preferences, and personnel distribution. In terms of creating value in scenic spots: First, in business execution, departments and employees of the enterprises in scenic areas can align their objectives with the strategic goals of the enterprise to achieve shared benefits from tourism resources, products, and markets, thus promoting development. Second, the resource creation should persist in promoting shared value and profits with value network members, securing a significant strategic advantage in industry competition. In terms of dynamic regulation of the environment: In the process of integrating external resources, it is crucial to strengthen trust and reciprocity mechanisms between enterprises, conduct advanced assessments of the environmental capacity of scenic areas, and leverage big data for comprehensive management. We need to strengthen our internal management system, internal leadership, and shared values among employees, a foundation is established for creating new features within scenic areas. The planned resource integration behaviours carried out by participants to achieve value propositions create new opportunities and open new horizons for the tourism industry of the Shanxi Merchant Courtyard.

6. Limitations and future research directions

Although this study contributes to the existing literature on sustainable tourism, it has limitations. First, the sample was collected in China, and tourism resources need to be integrated across different countries (Litavniece Lienite et al., 2023; YoshiAbe et al., 2024). Second, this study was conducted through offline surveys. Future research could include scholars and tourism promoters to identify factors that may influence resource integration and resource creation behaviour in scenic areas. Third, factors such as resource integration, shared value, and creative behaviour in scenic areas were measured through questionnaires. To determine the actual behaviour amid these landscapes, future researchers could use a combination of online studies and experimental research to investigate the real impact of resource integration.

Author contributions: Conceptualization, ZD and JT; methodology, ZD; software, ZD; validation, ZD and JT; formal analysis, ZD; investigation, ZD; resources, ZD; data curation, ZD; writing—original draft preparation, ZD; writing—review and editing, ZD; visualization, ZD; supervision, ZD; project administration, ZD; funding acquisition, JT. All authors have read and agreed to the published version of the manuscript.

Conflict of interest: The authors declare no conflict of interest.

References

Agrawal, A., Erbaugh, J., & Pradhan, N. (2023). The commons. Annual Review of Environment and Resources, 48(1), 531–558, http://doi.10.1146/annurev-environ-112320-113509

Ákos, N. (2024). Open value creation for the common good: a comprehensive exploration of social innovation in the context of social enterprises. Social Enterprise Journal, (3), 318–338.

Bański, J. (2022). The Integration of Local Resources in Search of a New Product—on the Example of the Lublin Region

(Poland). European Countryside, (4),753–769.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, (51),1173–1182.

Bi, H. (2020). A study on the relationship between corporate information technology, dynamic capabilities, and innovation performance [Master's thesis]. Hefei University of Technology.

Carlisle, S., Johansen, A., & Kunc, M. (2015). Strategic foresight for (coastal) urban tourism market complexity: The case of Bournemouth. Tourism Management.

Casciaro, T., & Piskorski, M. J. (2005). Power Imbalance, Mutual Dependence, and Constraint Absorption. A Closer Look at Resource Dependence Theory. Administrative Science Quarterly, (2), 167–199.

Cassiman, B., & Valentini, G. (2016). Open innovation: Are inbound and outbound knowledge flows really complementary? Strategic Management Journal, (6),1034–1046.

Castaneda, D. L. (2020). Knowledge sharing and innovation. A systematic review. Knowledge and Process Management, (3), 159–173. https://doi.org/10.1002/kpm.1637

Chuang, S., & Lin, H. (2015). Co-creating e-service innovations: Theory, practice, and impact on firm performance. International Journal of Information Management, (3).

Coccorese, P., & Pellecchia, A. (2006). Local Tourism Features in Italy. A Binomial Logit Analysis. Tourism Economics, (4), 565–583.

Desa, G., & Basu, S. (2013). Optimization or Bricolage? Overcoming Resource Constraints in Global Social Entrepreneurship. Strategic Entrepreneurship Journal, (1).

Dess, G. G., & Bearddw, D. W. (1984). Dimensions of organizational task environments. Administrative Science Quarterly, 29(1), 52–73.

Faudziah, H. F., Hasnah, H., & Muhamad, J. (2005). Internal auditing practices and internal control system. Managerial Auditing Journal, (8).

Francesco, C. A. P., & Ivan, S. (2010). Assembling resources when forming a new business. Journal of Business Research, (2), 220–229.

Guo, Y. F., & Yi, L. P. (2024). Research on the integration path of regional tourism resources based on the symbiosis theory. Market Weekly, (13), 58-61+133.

Gummesson, E., & Mele, C. (2010). Marketing as Value Co-creation Through Network Interaction and Resource Integration. Journal of Business Market Management, (4), 181–198.

Haunschild, P. R., & Beckman, C, M. (1998). When do interlocks matter? Alternate sources of information and interlock influence. Administrative Science Quarterly, 43(4).

Hayes, A. F. (2015). Hacking PROCESS for estimation and probing of linear moderation of quadratic effects and quadratic moderation of linear effects. Unpublished White Paper, (1), 1–44.

Huang, B., Song, J., Xie, Y., et al. (2022). The Effect of Big Data Analytics Capability on Competitive Performance: The Mediating Role of Resource Optimization and Resource Bricolage. Frontiers in psychology.

Isabelle, M. M. J., Reymen., Petra, A., et al. (2015). Understanding Dynamics of Strategic Decision Making in Venture Creation. A Process Study of Effectuation and Causation. Strategic Entrepreneurship Journal, (4).

Khanuw. (2012). Perceived Management Support and Training Effectiveness for Employees. LAP LAMBERT Academic.

Kim, S., Kim, N., Pae, J. H., et al. (2013). Cooperate and compete: Coopetition strategy in retailer-supplier relationships. The Journal of Business & Industrial Marketing, (4).

Kokko, S. (2018). Social entrepreneurship. creating social value when bridging holes. Social Enterprise Journal, 14(4), 410–428.

Lafferty, G., & Fossen, A. van. (2001). Integrating the tourism industry. problems and strategies. Tourism Management, (1), 11–19.

Li, D., & Li, X. (2021). Environmental dynamism, resource assembly, and innovation in small and medium-sized enterprises. Research on Financial, (04), 123–129.

Liao, Y., & Marsillac, E. (2015). External knowledge acquisition and innovation. the role of supply chain network-oriented flexibility and organisational awareness. International Journal of Production Research, 53(18), 5437–5455.

Litavniece, L., Lonska, J., Zvaigzne, A., et al. (2023). Smart tourism in the Baltic states. Current developments and trends. Worldwide Hospitality and Tourism Themes, (5), 486–496.

Liu, Y., Luo, Y., & Liu, T. (2009). Governing buyer-supplier relationships through transactional and relational mechanisms.

evidence from China. Journal of Operations Management, 27(4), 294–309.

Long, Y., & Shi, P. P. (2016). Pricing strategies of tour operator and online travel agency based on cooperation to achieve O2O model. Tourism Management.

Lytras, & Patricia, O. (2008). The role of a "make" or internal human resource management system in Spanish manufacturing companies. Empirical evidence. Human Factors and Ergonomics in Manufacturing & Service Industries, (4), 464–479.

Mele, C. (2009). Value logic in network. Sinergie, 16, 217–241.

Pelin, B., Shelby, D. H., & Sreedhar, M. (2021). Coopetitive innovation alliance performance. Alliance competence, alliance's market orientation, and relational governance. Journal of Business Research.

Poppo, L., & Zenger, T. (2002), Do formal contracts and relational governance function as substitutes or complements? Strategic Management Journal, 23, 707–725.

Toni, H., Tim, H., & David, C. (2012). Service co-creation and value realisation. Journal of Marketing Management, (13–14), 1504–1519.

Ungvarsky, J. (2020), Social innovation, Salem Press Encyclopedia, Research Starters. Available online: https://discovery.ebsco.com/c/n3fo33/viewer/html/s7u3w5p23v (accessed on 15 March 2023).

Valentinas, N., & Asta, M. (2009). The Possibilities for the Identification and Evaluation of Tourism Sector Competitiveness Factors. Inzinerine Ekonomika-Engineering Economics, (1), 37–44.

Vargo, S. L., & Lusch, R. F. (2016). Institutions and axioms: an extension and update of service-dominant logic. Journal of the Academy of Marketing Science, (1).

Wu, F., & Cavusgil, S. T. (2005). Organizational learning, commitment, and joint value creation in interfirm relationships. Journal of Business Research, (1).

YoshiAbe, Tod, J., Piotr, N., et al. (2024). Bricolage or breakthrough? Entrepreneurial responses to tourism development in a regional tourism destination. Singapore Journal of Tropical Geography, (2), 247–269.

Zaional, N. R., Zainol, F. A., Ibrahim, Y., et al. (2019). Scaling up social innovation for sustainability. the roles of social enterprise capabilities. Management Science Letters, 457–466.