

Refining the relational view: How collaboration and organizational agility drive innovation performance

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Abstract

Purpose: This study proves the influence of supplier collaboration, management commitment, and organizational agility on innovation performance by using the Relational View as the main theory. The research model is applied to tour operators who are considered relevant because they have a collaborative business model.

Design/methodology/approach: Based on the main and supporting theories, the hypotheses are developed and then evaluated using Structural Equation Modeling assisted by AMOS software. Respondents were top leaders of tour operators in the Special Region of Yogyakarta and Central Java, one of the priority tourist destinations in Indonesia.

Findings: Supplier collaboration, management commitment, and organizational agility positively affect innovation performance. Organizational agility also plays a mediator role between supplier collaboration and innovation performance. However, contrary to the theories and literature that are already available, management commitment does not affect organizational agility.

Research limitations/implications: Facts on the ground show that tour operators in the Special Region of Yogyakarta and Central Java are small and medium-scale companies that are under pressure due to Covid-19, so they have to survive and rise slowly. They cannot add to the risk by becoming an agile organization. This condition has the potential to eliminate the influence of management commitment on organizational agility. This study also did not apply the model to large-scale tour operators in other provinces in Indonesia, so the findings were limited only to small and medium-scale tour operators.

Originality/value: Integrating the company's internal factors, which is the management commitment in the Relational View study, will solve the issue of declining cooperation benefits in a long term collaboration. Based on the existing literature, Relational View researchers have not yet used this variable because the focus was still on external factors of the company.

Keywords: Relational view, Organizational agility, Supplier collaboration, Management commitment, COVID-19 pandemic, Tourism, Tour operator

Jel Codes: O32, M21

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1. Introduction

The COVID-19 pandemic has had a long-term effect on tour operators' business performance, such as financial shortages, outdated tour packages, and employee layoffs. In the dynamic environment, the tourism businesses must enhance their adaptation and innovation capabilities (Meñaca-Guerrero, 2022), and shift their strategy, such as prioritizing the domestic market (Lapointe, 2020), to recover more quickly and face changes in tourist preferences (Wachyuni & Kusumaningrum, 2020). Tour operators' need for new products meets the lack of resources, making collaboration and resource reconfiguration inevitable. Cooperation with the stakeholders to create a new tourism product is essential for future development (Costa & Lima, 2018).

However, developing new tourism products often coincides with limited internal resources, making collaboration essential. Tour operators all over the world, including in Indonesia, function within a fragmented ecosystem where value creation depends on integrating assets owned by accommodation providers, transport companies, attractions, and tour guides. In this context, the Resource-Based View is less adequate because competitive advantage does not primarily stem from internally controlled resources. Instead, the Relational View (Dyer & Singh, 1998) offers a more appropriate framework, as it emphasizes relational rents generated through inter-firm collaboration, complementary resources, and network-based value creation. These conditions closely reflect the operational realities of tour operators.

Criticism of the Relational View (RV) arises because of the opportunistic behavior of each company and the imbalance of the scale of the company, so that one of the companies gets greater cooperation benefits and the cooperation becomes unsustainable (Lavie, 2006). Opportunistic behavior needs to be controlled with the commitment of the collaborating company. Power sharing is considered important in supporting alliance performance (Cowan et al., 2015). Recent research shows that these two issues are still being discussed. Opportunistic behavior has an impact on the decline of relational rents (Dyer et al., 2018), and investment inequality affects the unfair distribution of relational rents (Pemartín & Rodríguez-Escudero, 2017). It can be concluded that the commitment of the companies not to take excessive profits and balance resources is the key to the sustainability of relational rents.

In addition, research gap identification was also carried out so that this research will be aligned with the latest developments of RV. The first research gap is that most studies on RV focus on the context of supply chains (e.g., Bruning & Bendul, 2017; Canevari-Luzardo, 2019). Other topics, such as innovation and collaboration, remain underexplored (Dahlin, 2020; Gold et al., 2019). Second, RV has not been widely used in studies in the context of organizational agility, even though some research has shown that RV provides the ability for companies to be agile by improving strategic adjustment (Wahyono, 2018) as well as increasing supply chain flexibility and adjusting production capacity (Benzidia & Makaoui, 2020). Third, information about the role of management commitment as a factor that can maintain relational rents is limited (Chi et al., 2020; Salam, 2017). Management commitment enables the configuration of resources in collaboration (Chang, 2016) and the provision of resources (Ivandianto & Tarigan, 2020). Fourth, studies implementing non-financial collaborative benefits, such as innovation performance and organizational flexibility, are highly needed (Zhang & Cao, 2017). Innovation performance is important to ensure business continuity in the current dynamic business environment, especially in the uncertainty after the COVID-19 pandemic.

The main objective of this study is to answer RV's theoretical issue and research gaps by empirically analyzing the relationship between supplier collaboration, organizational agility, management commitment, and innovation performance influence. In addition, this research refines the RV by empirically testing whether relational

resources (supplier collaboration) and internal factors of a company (management commitment) translate into innovation outcomes through an internal dynamic capability (organizational agility). Previous studies have shown the importance of the relationship between these variables. First, we integrate management commitment in the model because this variable will reduce the opportunistic behavior of firms in collaboration and investment inequality. Management commitment is needed to improve innovation performance as management determines regulations, encourages innovation, and enhances the organization through various activities (Ivandianto & Tarigan, 2020). Second, business dynamics in tourism require the tour operator to adapt fast, therefore, we integrate organizational agility as the second variable. Organizational agility plays a significant role because it influences proactive business (Al-Omoush et al., 2020), company competitiveness (Mandal & Venkateshwar, 2017), and product performance (Zhou et al., 2018). Third, suppliers are external parties of tour operators who have complementary resources, and this research requires supplier collaboration as a variable following the RV as the main theory. Supplier collaboration gives access to technology, financial resources, and knowledge, which makes the company more innovative (Li, 2020; Um & Kim, 2019). Fourth, the tour operators must produce tour packages with new features to meet changes in tourists' preferences. Therefore, innovation performance is the appropriate consequence.

Based on the explanations above, the research questions are: (1) How does supplier collaboration influence organizational agility and innovation performance? (2) How does management commitment impact organizational agility and innovation performance? (3) How does organizational agility influence innovation performance? (4) Does organizational agility moderate the relationship between supplier collaboration and innovation performance?

This research is quantitative. In the next section, literature review and hypotheses development are carried out as temporary answers to research questions. After that, the methodology used and the results of the analysis of the collected data were explained. The interpretation of the results is carried out and ends with the withdrawal of research conclusions that show theoretical and practical contributions.

2. Literature Review and Hypotheses Development

2.1. Relational View

The Relational View (RV) was formulated with the main assumption that a company needs important external resources to increase competitiveness and has to collaborate with other companies since those resources are not available in the market. Four factors in the Relational View provide supernormal profits for companies in collaborative networks: investment in relation-specific assets, substantial knowledge exchange, the combination of complementary but scarce resources or capabilities, and effective governance mechanisms (Dyer & Singh, 1998). Supernormal profits are also called relational rents. The relational rents are not always in the form of financial profits but also innovation competitiveness and capabilities related to coordination, market sensing, and corporate learning (Zhang et al., 2017).

Relation-specific assets cover collaboration locations, tangible assets, and knowledge and capabilities due to reciprocal relationships between collaborative companies. Substantial knowledge exchange results in collaborative superior understanding. Routine and regular knowledge exchange can result in transferring, combining, and creating special knowledge. Combining complementary but scarce resources or capabilities can create rare and valuable collaborative resources that are difficult to imitate and replace perfectly. Companies in collaboration implement effective governance. Independent and effective governance implemented by companies in partnerships is more efficient and flexible because it reduces transaction costs and the risk of opportunistic behavior in collaboration.

2.2. Supplier Collaboration and Organizational Agility

Supplier collaboration is the collaboration between two or more independent companies to control and utilize operational supply chains to meet mutual goals and benefits (Chen et al., 2017), which is helpful for the company to increase response speed and performance for higher customer satisfaction (Ho et al., 2020). Supplier collaboration can be considered a mechanism for managing the interdependence of operations, products, processes, design, marketing efforts, purchasing planning or projections, and forming strategic decision-making

between supply chain members (Wu & Chiu, 2018). We underlined that a company collaborating with suppliers can utilize shared resources and knowledge, share risk in the research and design stages, and gain mutual benefits.

Organizational agility is a company's ability to sense and respond to its environment by changing the number and frequency of product or service variations (Singh et al., 2013). Organizational agility can be defined as an organization's ability to recognize unexpected changes in the company's environment and then respond to them quickly, precisely, and efficiently by utilizing and reconfiguring internal resources while obtaining a competitive advantage from this process (Žitkienė & Deksnys, 2018). Organizational agility covers flexibility and speed to respond to environmental change. Flexibility includes production volume, product model or configuration, organization, and HR. Speed refers to a company's ability to carry out work and operate relatively quickly. Speed covers the speed of releasing new products to the market, the speed and timeliness of product delivery, and the speed of company operations (Walter, 2020).

Complementary resources from the supplier are highly needed, and a collaboration promotes supply flexibility (Al-Omouh et al., 2020), maintains the availability of needed resources (Al-Omouh et al., 2020), and adjusts production capacity (Koç et al., 2022). Joint learning with suppliers facilitates alignment between consumer needs and the supply chain (Aslam et al., 2018). Suppliers can also prepare useful materials, new technology, product components, and processes to help companies innovate (Sutduean et al., 2019) and adjust production capacity, speed up the time to introduce new products to the market, as well as respond to changes in market demands, which ultimately increases the market agility (Benzidia & Makaoui, 2020). The close collaboration between the tour operators and suppliers can increase the ability to produce product variations and the speed of market penetration, which indicates an increase in organizational agility. Therefore, hypothesis 1 can be formulated as follows:

H1: Supplier collaboration positively affects organizational agility.

2.3. Management Commitment and Organizational Agility

Management commitment refers to behavior that shows attachment, involvement, mistakes, Influence, leadership, and support from senior management in a project or a company activity (Siagian & Tarigan, 2021). Management commitment can be in the form of pressure from high-level managers to develop organizational capabilities. Management commitment shows the efforts needed by a company to achieve the predetermined target (Suarez et al., 2016). Management commitment also shows a moral feeling or obligation to remain in the organization and achieve its goals (Ohana & Meyer, 2016). We conclude that management commitment is management's ability to organize, control company members, and provide the resources needed to achieve predetermined goals.

Company management acts as a driving force for change (Tarigan et al., 2020), supports implementing and adopting new ways of operating (Doan, 2020), and also increases the possibility of a reconfigurable manufacturing system (Dubey et al., 2014). Company leaders can align company goals, build trust, bridge differences, and interact deeply with their partners (Schoemaker et al., 2018). Agile companies can adapt to the environment, and this involves some factors such as corporate strategy, governance, and strategic decision-making processes, as well as business systems, including control systems, incentive systems, human resource management processes, and product development, to form a common perspective within the company (Zollo et al., 2016). Top management's commitment is important to implement a more flexible and faster system implementation through encouragement to internal parties, which is the key to achieving organizational agility. Therefore, hypothesis 2 can be stated as follows:

H2: Management commitment positively affects organizational agility.

2.4. Supplier Collaboration, Management Commitment, and Innovation Performance

In the service sector, innovation performance is the competitiveness that companies achieve based on service innovation. Innovation performance can be realized by combining and exchanging resources with consumers (Xie et al., 2021). Innovation performance is the visible successful implementation of creative ideas (Mennens et al., 2018). This performance can be defined from a product innovation perspective, which refers to the speed and timeliness of introducing innovative products to the market (Abdallah et al., 2019). In other words,

innovation performance is a visible achievement from implementing new ideas, as shown by the number of new products or product differentiation, the speed of introducing new products, and the proportion of sales value of developed products to the total sales.

The larger a business network, the more opportunities for the company to access resources and utilize them to create new products and improve innovation outcomes (Gu et al., 2016). It also provides technology and financial resources (Um & Kim, 2019). Supplier collaborations result in collaborative benefits indicated by increased quality, product innovation, and flexibility in meeting market needs (Pradabwong et al., 2017). Knowledge transfer occurs between suppliers and companies (Li, 2020), and it can improve the design and development of a product or service. Collaborative networks improve a company's innovation performance by providing access to several factors, such as complementary resources and assets, information about changes in market demands, and information about competitors' strategic directions. Therefore, supplier collaboration can improve innovation performance, and hypothesis 3 can be formulated as follows:

H3: Supplier collaboration positively affects innovation performance.

Company management determines regulations, encourages innovation, and continuously improves the organization through various activities (Ivandianto & Tarigan, 2020). Management commitment ensures the availability of resources required to enhance innovation performance, including resource planning and implementation (Lee et al., 2016). Management commitment enables the configuration of special resources owned by the company and the combination and transformation of resources that support innovation performance (Katsikeas et al., 2016). Management commitment also provides technical support for implementing new ideas (Farnese & Livi, 2016). Management commitment encourages learning within the company, which ultimately influences innovation performance (Dukeov et al., 2020). Management commitment is the predictor of innovation because it covers three factors that support innovation performance, those are providing resources, making policies, and motivating human resources. According to the argument, a hypothesis can be developed as follows:

H4: Management commitment positively affects innovation performance.

2.5. Organizational Agility, Innovation Performance, and the Mediating Effect

Organizational agility is a company's ability to sense and respond to its environment by changing the product diversity and production volume. Agile companies have five capabilities: sensing, searching, seizing, shifting, and shaping (Baškarada & Koronios, 2018), which can be seen from the number of product variations and speed of product introduction to the market (Singh et al., 2013). Organizational agility is shown by a company's ability to adapt quickly to changes in consumer needs (Zhou et al., 2018). Organizational agility positively affects service innovation because an agile company can find innovative business methods and anticipate environmental changes while finding new opportunities resulting from environmental dynamics (Nissen & Rennekampff, 2017). Therefore, it can promote the team's creativity to develop new products and realize new ideas through product innovation (Puriwat & Hoonsopon, 2022). Organizational agility increases the capacity of a company to determine the dynamic market demand, generate new product ideas, and change the design in a timely manner. The results are acceptable tour packages, higher profit, and faster delivery to the market. According to the argument, a hypothesis can be concluded as follows:

H5: Organizational agility positively affects innovation performance.

Organizational agility can be understood as a dynamic capability that enables firms to sense changes and reconfigure resources in turbulent environments. According to the Relational View (Dyer & Singh, 1998), competitive advantage arises from relational rents generated through inter-firm collaboration, complementary resources, knowledge-sharing routines, and effective governance. However, relational resources obtained through supplier collaboration do not automatically improve innovation performance. Firms require an internal mechanism to integrate and redeploy these relational assets. In this context, organizational agility acts as an intermediation capability that transforms collaborative resources into adaptive and innovative outcomes (Liu & Yang, 2019). Similarly, management commitment provides strategic direction and resource support, but its influence on innovation depends on the firm's agility in mobilizing and reconfiguring those resources. Therefore,

integrating the Relational View with dynamic capability theory positions organizational agility as a mediating variable linking supplier collaboration and management commitment to innovation performance.

Some studies revealed that as a mediating variable, organizational agility does not directly increase innovation performance, but it mediates the relationship between the knowledge application process and company performance (Cegarra-Navarro et al., 2016), consumer knowledge management and organizational effectiveness (Mehdibeigi et al., 2016), the knowledge creation process and organizational creativity (Chung et al., 2019), and also business intelligence and the speed of companies entering international markets (Cheng et al., 2020). Based on those thoughts, two hypotheses can be formulated as follows:

H6a: Organizational agility mediates the effect of supplier collaboration on innovation performance.

H6b: Organizational agility mediates the effect of management commitment on innovation performance.

3. Research Methodology

3.1. Quantitative Research

This research was conducted to answer research questions by testing research hypotheses. We used a hypothetico-deductive approach, where every phenomenon occurs due to a cause-and-effect relationship, so that truth is tested through the influence of one factor on other factors (Sekaran & Bougie, 2016, p. 23). Structural equation modeling was used to analyze the data, and AMOS was used for statistical analysis and hypothesis testing.

3.2. Data Collection and Analysis

The population in this study included tour operators in Central Java and the Special Region of Yogyakarta. The two provinces are known as the Borobudur Tourism Destination, one of the top tourism destinations in Indonesia. We used purposive sampling and targeted tour operators that were registered in the Association of Indonesian Tours and Travel Agencies (ASITA). Therefore, we can send a request to the top management of the companies to fill out the questionnaires. According to ASITA, there are 284 tour operators registered. The minimum number of samples for structural equation modeling is 5 times the number of questions (Memon et al., 2020), so that the minimum sample size for this study is 160. However, AMOS requires a minimum sample of 200 (Collier, 2020, p. 33). With an estimated response rate of 75%, we sent 267 sets of questionnaires to the respondents randomly. Our respondents were people in the highest management positions or directors.

Provinces	Areas	Number of members	Proportion (%)	Number of questionnaire
Central Java	Semarang area	60	21.13	56
	Kedu area	5	1.76	5
	Pati area	18	6.34	17
	Pekalongan area	7	2.46	7
	Banyumas area	18	6.34	17
	Solo Raya area	37	13.03	35
DI Yogyakarta	Sleman area	76	26.76	71
	Yogyakarta City area	46	16.20	43
	Bantul area	16	5.63	15
	Gunung Kidul area	1	0.35	1
Total		284		267

Table 1. Questionnaire Distribution

3.3. Measures

Instruments chosen to measure the research variables were modified from previous research to match the nature of the tourism operator business. Details of questions are listed in the appendix, while the number of items can be seen in Table 2.

Variable	Items	Code	References
Supplier collaboration	10	KS1-KS10	Jiménez-Jiménez et al., 2019; Zhang & Cao, 2017
Management commitment	11	KM1-KM11	Bhatia & Jakhar, 2021; Kitsis & Chen, 2021; Majid et al., 2019
Organizational agility	8	OA1-OA8	Felipe et al., 2017; Liu et al., 2018
Innovation performance	3	KI1 – KI3	Ferraris et al., 2020; Statsenko & Corral-de-Zubielqui, 2020; Dekoulou & Trivellas, 2017

Table 2. Description of Indicators

3.4. Analytical Approach

This study used inferential analysis, which was carried out to test the relationship between variables using structural equation modeling assisted by Analysis of Moment Structure (AMOS) software to analyze statistical data and test the hypotheses (Collier, 2020). Each item in the questionnaire was tested for validity and reliability. Validity was demonstrated by a loading factor value of higher than 0.5 (Sekaran & Bougie, 2016). Reliability was indicated by the construct reliability (CR) value of > 0.6 and the average variance extracted (AVE) value of > 0.4 (Fornell & Larcker, 1981). A goodness of fit test was needed to see whether the research model followed the theory and produced the expected objectives. The goodness of fit used the main parameter of significance probability value of ≥ 0.05 , and GFI, CFI, and TLI, each value of ≥ 0.90 (Collier, 2020). Hypothesis testing was based on the p-value. If the p-value is ≤ 0.05 , the hypothesis is supported, and if it is > 0.05 , the hypothesis is rejected (Sekaran & Bougie, 2016). To conclude the mediating effect, an argument from Baron and Kenny (1986) that explains full and partial mediation was used. Full mediation occurs if the direct influence between variables is not significant after the presence of a mediating variable, and partial mediation occurs if the direct influence is still significant after the presence of a mediating variable.

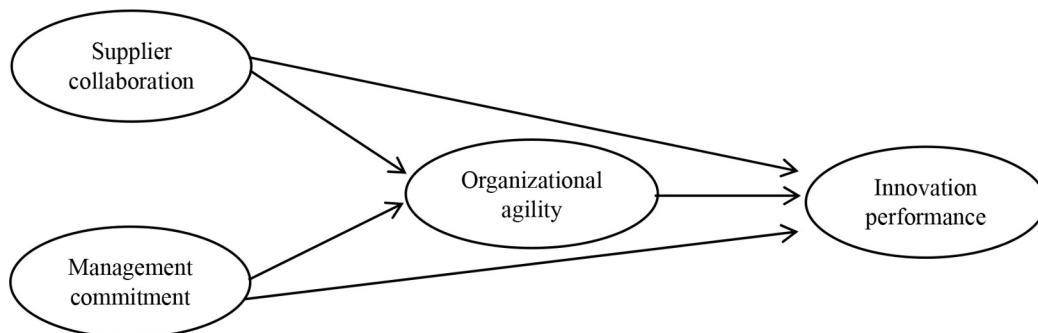


Figure 1. Conceptual Model

4. Results

4.1. Profile of Respondents

A total of 201 (75.28%) questionnaires were answered completely, consisting of 12 questionnaires answered by branch office heads and 189 questionnaires answered by head office directors. The largest number of respondents were located in Sleman District (28.86%), followed by Yogyakarta City (21.39%), Semarang City (19.90%), and Surakarta City (8.46%). These areas have major tourist attractions in their respective provinces. Most companies are over 15 years old (71.64%) and between 11 and 15 years (17.41%). They have been building relationships with their suppliers for quite a long time. Some have even experienced the impact of the subprime mortgage crisis (2008) and the Asian monetary crisis (1998). Most companies are small and medium enterprises with employees of around 6 – 10 people (44.28%) and 11-15 people (26.87%).

4.2. Measurement Model

Three criteria must be met before data analysis is carried out. First is the normality of the data shown by the multivariate value between -2.58 and 2.58, second is the reduction of outliers shown by the Mahalanobis value of > 53.49 (32 questions, $\alpha = 0.01$), and third is the common method bias due to a single data source used in this research.

Parameters	Full Data (201 observations)	Iteration 1 (199 observations)		Iteration 2 (198 observations)	
Multivariate	1.898	1.559		1.131	
Outliers (d-squared > 53,49)	2 observations		1 observation		None
	Observation	d-squared	Observation	d-squared	
	79	55.748	55	57.497	
	42	54.968			

Table 3. Elimination of Outliers and Data Normality

The answered questionnaires met the data normality criteria with a multivariate value of 1.898, but there are 3 observations that were indicated to be outliers and needed to be eliminated. The final multivariate score after elimination is 1.131. The total data processed for further analysis was 198 observations. The result of Harman's Single Factor Test shows a total variance of 18.50%, which is below 50%. There is no threat of common method bias.

The selection of valid question items was based on the loading factor value of ≥ 0.5 , construct reliability (CR) values of > 0.7 , and variance extracted (AVE) values of > 0.4 . The total number of questions that meet the validity and reliability requirements reached 25 items. The result is summarized in Table 4.

Variable	Indicator	Loading Factor (λ)	Construct Reliability	Variance Extracted
Supplier Collaboration (KS)	KS1	0.675	0.74	0.41
	KS2	0.692		
	KS6	0.619		
	KS7	0.577		
Management Commitment (KM)	KM1	0.655	0.85	0.41
	KM2	0.607		
	KM5	0.524		
	KM6	0.579		
	KM7	0.612		
	KM8	0.645		
	KM9	0.714		
	KM10	0.726		
Organizational Agility (OA)	KM11	0.652	0.78	0.42
	OA1	0.598		
	OA2	0.692		
	OA3	0.592		
	OA4	0.720		
Innovation Performance (KI)	OA7	0.629	0.82	0.61
	KI1	0.742		
	KI2	0.779		
	KI3	0.820		

Table 4. Instrument Reliability and Validity Test

Correlation test between antecedent variables shows that the coefficient is $0.20 < 0.85$, which means that there is no multicollinearity among variables in the research model, and the structural equation model can be applied.

4.3. Structural Model

Goodness of fit is an indicator used to assess how well the Structural Equation Modeling (SEM) model fits the data being analyzed. AMOS operation requires modifying the path diagram to ensure the goodness of fit of the model, and hypothesis testing can be carried out. The modification recommended the elimination of several

indicators. After a modification, the researcher obtained a path diagram that met the goodness of fit criteria with a probability value of 0.111 (> 0.05), GFI, CFI, and TLI values of each > 0.9 , which can be seen in Table 5. At the same time, the modified model is illustrated in Figure 2.

Fit Index	Goodness of Fit	Criteria	Cut-off Value	Result
Absolute fit	Probability	> 0.05	0.111	Fit
	RMSEA	≤ 0.08	0.030	Fit
	GFI	≥ 0.90	0.932	Fit
Increment Fit	TLI	≥ 0.90	0.979	Fit
	CFI	≥ 0.90	0.983	Fit
Parsimony Fit	PGFI	≥ 0.60	0.803	Fit
	PNFI	≥ 0.60	0.733	Fit

Table 5. Goodness of Fit Test

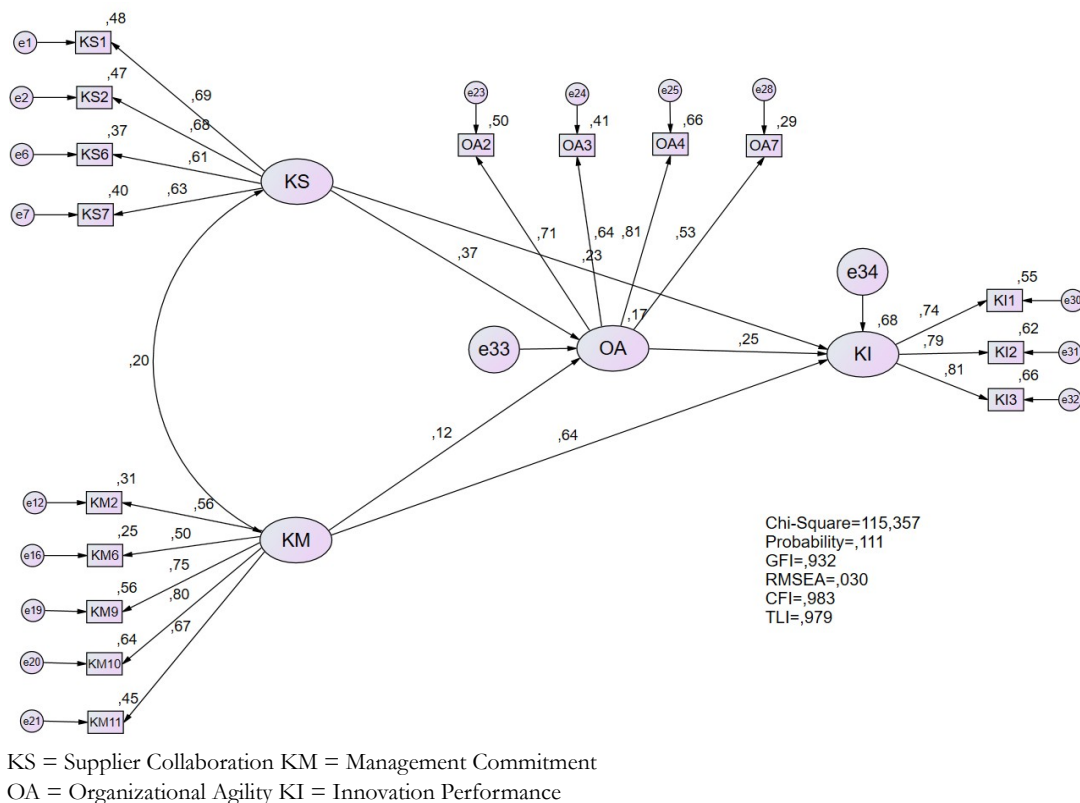


Figure 2. Modified Path Diagram

4.4. Hypothesis Testing

Data were analyzed and hypotheses were tested based on the modified path diagram. First, the squared multiple correlations obtained a value of 0.681 for innovation performance, meaning that the variation in innovation performance can be explained by 68.1% by the predictor variables. Then the statistical analysis was run for the five hypotheses to find the significance level and the amount of direct effect. The test showed that hypotheses 1, 3, 4, and 5 show $p\text{-value} < \alpha (0,05)$, which means these hypotheses were accepted. Meanwhile, the $p\text{-value}$ of hypothesis 2 was $> \alpha (0,05)$, and it was rejected. The mediating effect of organizational agility was evaluated using the $p\text{-value}$ and criteria from Baron and Kenny (1986). The mediating effect of organizational agility on the relationship between supplier collaboration and innovation performance was accepted, while the mediating effect of organizational agility on the relationship between management commitment and innovation

performance was rejected. Each hypothesis testing of the direct effect and the mediation effect can be seen in Tables 6 and 7.

	Relationship between variables			Estimate	S.E.	C.R.	P	Result	Standardized Direct Effect
H1	KS	→	OA	0.375	0.108	3.479	***	Accepted	0.367
H2	KM	→	OA	0.100	0.075	1.331	0.183	Not accepted	0.116
H3	KS	→	KI	0.275	0.095	2.895	0.004	Accepted	0.230
H4	KM	→	KI	0.644	0.086	7.499	***	Accepted	0.637
H5	OA	→	KI	0.289	0.095	3.051	0.002	Accepted	0.246

Sig = Significant ($\alpha = 0.05$)

Table 6. Hypotheses Testing

	Relationship between variables					Standardized Indirect Effect	P	Label	Result
H6a	KS	→	OA	→	KI	0,090	0.007	Sig.	Accepted
H6b	KM	→	OA	→	KI	0,029	0.153	Not Sig.	Not accepted

Table 7. Hypotheses Testing of the Mediation Effect of Organizational Agility

5. Discussion

This study extends our understanding of the effect of supplier collaboration, management commitment, and organizational agility on the innovation performance of tour operators in the Borobudur Tourism Destination in Indonesia. The findings reveal the importance of management commitment as an internal factor in the development of the Relational View. The result also shows that organizational agility is an important factor for tour operators in creating innovation performance after the COVID-19 pandemic.

The study confirms the positive effect of supplier collaboration on organizational agility. The tour operator business is an integrator of attractions, transportation, accommodations, tour guides, and restaurants, which most companies do not have, and creates a tour package as well as a price. When a tour operator can give clear information about their product development planning to their suppliers and involve them actively, it can achieve flexibility in supplies and ease of adjustment in tour packages, and finally achieve agility. Previous research shows that companies that can gain flexibility in the supply of materials needed to face environmental dynamics (Ramos et al., 2023; Shukor et al., 2020), maintain material availability in response to changes in demand (Al-Omouh et al., 2020; Benzidia & Makaoui, 2020), and changes in production capacity (Koç et al., 2022).

Moreover, the study also confirms the positive effect of supplier collaboration on innovation performance. Tour operators that involve their suppliers actively and agree to achieve the same objective will have a smooth two-way information flow (Tisnasasmita et al., 2024). The tour operators know the tourists' preferences and can share their newly developed tour packages with the suppliers. Suppliers can offer the best to complete the tour packages at a competitive price. This process will also save time, and the tour operators can increase their speed in delivering the new packages to the market and increase their innovation performance. Previous literature supports this argument; for example, supplier collaboration facilitates the flow of knowledge and information (Li, 2020; Gu et al., 2016) and enables companies to combine resources and produce positive innovation performance (Wang et al., 2018).

The management commitment positively affects innovation performance. Management of the tour operators (directors or branch managers) can provide a sufficient budget, empower staff to create and sell new products, and be involved in reconfiguring new travel packages. They can also motivate the marketing staff and provide the right tools for more aggressive and faster selling of new products. Therefore, the number of new products sold will increase and create better profit for the company; nevertheless, the innovation performance will also be elevated. From existing articles, we found that the Influence of management commitment on innovation performance aligns with some previous studies. Management commitment provides resources to support innovation performance (Huang et al., 2016; Lee et al., 2016; Wu, 2017) and encourages organizational learning (Dukeov et al., 2020; Farnese & Livi, 2016).

The statistical analysis also shows that there is a positive effect of organizational agility on innovation performance. An agile company collaborates flexibly with suppliers and consistently improves the production process. This effort will lead to faster decision-making and support the ease of changing product variations and prices. This ability will enhance the number of new tour packages offered to the market, and customers will receive them quickly. More varied products offered faster to the market will result in better profitability and generate innovation performance. Several previous studies concurred with this argument. The positive Influence of organizational agility on innovation performance is in line with previous studies, where organizational agility accelerates the company's adaptability and decision-making in the implementation of new methods (Mihardjo et al., 2020), as well as encourages the formation of new product designs (Cai et al., 2019).

On the contrary, management commitment does not affect organizational agility. This challenges assumptions in previous studies and shows that management commitment cannot always improve organizational agility. Based on the previous studies, management commitment ensures that companies collaborate to transform resources (Katsikeas et al., 2016) and accelerates the decision-making process (Mihardjo et al., 2020), enabling them to adapt quickly to changes in the business environment (Zhou et al., 2018). The rejection of hypothesis 2 means that this mechanism does not happen significantly. This condition may be due to the characteristics of small and micro companies with limited resource capacity and concentration of decision-making. The survey shows that most of the tour operators in Central Java and Yogyakarta are small companies with few employees. It is common for owners to concurrently manage in micro and small companies. If it is also linked to the age of the company, it seems that the two previous crises experienced by the owners and management, the Asian monetary crisis of 1998 and the subprime mortgage crisis of 2008, left a trauma, and they believed strongly in the strategy to save the company at that time, and did not want to explore other alternatives.

The implementation of RV in research must consider the size of the company. Previous studies explain the conditions of the micro and small companies, which can clarify the rejection of hypothesis 2. First, management has no experience managing agility within the company and doubts success in facing the pandemic (Helfat & Peteraf, 2015; Suddaby et al., 2020). Second, in facing the pandemic and post-pandemic, the management focuses more on financial performance without considering the importance of organizational agility (Bojesson & Fundin, 2021). Thus, agile companies will face higher risks, and the management may avoid additional risks due to the pandemic (Appelbaum et al., 2017). When the pandemic causes financial problems, they will tend to survive and avoid risk. In order to recover from the crisis, they tend to rely on existing tour packages that the tourists have accepted. That means avoiding market risk by creating new packages and relying on existing customers, and eventually, organizational agility will not be advanced.

Finally, the research shows that organizational agility mediates the effect of supplier collaboration on innovation performance. The mediation is partial because the direct influence of supplier collaboration on innovation performance is still significant even with the presence of organizational agility as a mediating variable. However, the mediation effect of organizational agility on the relationship between management commitment and innovation performance cannot be concluded because the effect of management commitment on organizational agility is not significant. There are several explanations that show reasons why the mediation was partial, not full. In the short term, companies will focus more on internal capabilities to recover, namely, aligning processes with market changes, product production capabilities, internal configurations, and financial performance in a crisis. Companies have not thought about increasing competitiveness because the impact is thought to arise in the long term (Chatzoudes et al., 2022). Most of the respondents are managing a small-scale tour operator company. In small companies, the business leaders tend to reduce the potential for short-term failure in the face of a crisis, especially in companies that are no longer young (Paeleman, 2024).

6. Conclusion and Implication

The study answers all the research questions and shows that supplier collaboration, management commitment, and organizational agility improve innovation performance. Adding management commitment to the model improves the innovation performance. Organizational agility also mediates the Influence of supplier collaboration on innovation performances. The main findings of this study show that although external factors are necessary to generate relational rents, internal factors such as commitment management are also important to

increase and maintain relational rents in the long term. This study contributes to the development of the Relational View by considering both external factors (supplier collaboration) and internal factors (management commitment) to produce sustainable relational rents (innovation performance), especially for subsequent studies. On the contrary, we found that management commitment does not affect organizational agility, which contradicts previous studies. We suspect that the scale of respondent companies makes management prefer not to take risks and sell existing packages to existing consumers. Theoretically, the implementation of the Relational View in small and micro enterprises must also examine the organizational capacity, such as financial capability, asset type, and top management experience. Those factors can explain the company's ability to take risks in implementing new methods and adapting to changes in the business environment.

This study also offers implementation solutions for tour operator leaders to respond to changes in the business environment. First, tour operators must enhance their collaboration with suppliers, which covers the whole process, from product planning, sales, and performance evaluation. A dashboard that can be accessed by a tour operator and its suppliers can act as an enabler of the flow of knowledge. Suppliers will become aware of a tour operator's plan to create a new product, and prepare the best solutions. For example, a transportation service can offer a rent price of a minibus, a hotel operator can give the most strategic hotel location, and a restaurant owner can offer the best culinary package. The tour operators may immediately access the offerings, create a competitive tour package, and send it to the market. A dashboard not only helps the flow of intangible knowledge but also increases the speed of creating a new tour package. Second, tour operators must retain some of the profit to withstand the risk of innovation and change. In the last 25 years, the world has always faced crises, and the tourism sector has been quite sensitive to them. Tour operators must build their financial resiliency to face the crises and create innovative products. Third, the decision-making process must be delegated from the top leaders to the managers or division heads, who better understand the changing market demands. Thus, tour package changes and resource reconfiguration can be faster, and organizational agility will increase.

We concluded some limitations of this study, which could be taken into consideration in future inquiries. First, this study reveals that management commitment does not affect organizational agility, but it has not been explored further. Future studies can explain factors related to financial performance, risk-averse behavior, or lack of experience that cause the top management to have a low confidence level in making the company agile. Second, based on data processed from press releases on the websites of the bureau of statistics of the two provinces, from 2022 to 2025, almost 90% of tourists are domestic, and international tourists' share is minimal. Future studies can expand to other regions that have international tourism destinations in Indonesia, such as Batam, Bali, and Labuan Bajo. The tour operators there might have different experiences in handling the effects of crises, and also face diverse tourists and suppliers' characteristics. Third, we encourage future research to be held on large-scale companies with stronger capital and resources, allowing higher probabilities to increase agility and absorb risks. Fourth, this study is limited to small and medium scale tour operators in Indonesia. The future study should improve the universality of the result by expanding the research area to ASEAN countries, which have similar characteristics to the tourism business.

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Authors' contributions

Bisma Jatmika Tisnasasmita and Muafi: They were responsible for conceptualizing the article and managing the revision based on the review results.

Dessy Isfianadewi: This author was responsible for processing the data and summing up the interpretations according to the research framework.

Wisnu Prajogo: The fourth author was responsible for ensuring research data was properly collected and met the specified criteria.

Data availability

Data available upon request

Use of Artificial Intelligence

The authors used the Mendeley Desktop to manage the references and declared no other AI was used to create the article.

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Appendix 1

Questionnaire Items

Supplier Collaboration	
KS1	My company shares accurate information about tour package design with our suppliers.
KS2	My company has agreements with suppliers to achieve mutual benefits.
KS3	My company involves suppliers in predicting tourist preferences.
KS4	My company and suppliers agree to share the risks in creating or developing tour packages.
KS5	My company involves suppliers in the tour package design team.
KS6	My company and suppliers share the costs in creating or developing tour packages (for example: survey costs or exhibition costs).
KS7	My company and suppliers carry out regular communication in designing tour packages.
KS8	My company and suppliers use various communication channels to discuss (for example: e-mail, WhatsApp, or video conference).
KS9	My company and suppliers work together to create unique tourism products based on their knowledge.
KS10	My company and suppliers share information about the competitive conditions of tour packages (e.g. price competition or tourist targets).
Management Commitment	
KM1	Management always provides a budget for the creation or development of tour packages.
KM2	Management provides hardware or software that supports the development of tour packages.
KM3	Management motivates employees to utilize technology applications in developing tour packages.
KM4	Management conducts training on the use of technology for the development of tour packages.
KM5	Management conducts training so that employees are able to dig up information from consumers.
KM6	Management provides more compensation for the sale of new tour packages.

KM7	Management provides more compensation for sales to consumers.
KM8	Management always periodically socializes the company's strategies and targets to all employees.
KM9	Management always evaluates the marketing results of tour packages.
KM10	Management is actively involved in the tour package design team.
KM11	Management is actively involved in the tour package marketing team.
Organizational Agility	
OA1	My company can make quick decisions to change tour packages according to tourists' demands.
OA2	My company can easily add variations to their tour packages.
OA3	My company can easily change tour package prices.
OA4	My company always makes improvements to the tour packages whenever necessary.
OA5	My company can take advantage of opportunities from changes in tourist demand.
OA6	My company has flexible cooperation with suppliers to create a variety of tour packages.
OA7	My company has flexible cooperation with suppliers to change the prices of tour packages.
OA8	My company can easily switch suppliers in the creation or development of tour packages.
Innovation Performance	
KI1	My company generates a greater proportion of its profits from new tour packages.
KI2	My company can produce a wider variety of tour packages.
KI3	My company can quickly offer new tour packages to tourists.

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