

Increasing organizational agility and innovation performance of tour operators from the relational view perspective

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Abstract: Previous research based on the Relational View has four major issues. The first issue is the need to stabilise relational rent in the long-term collaboration which can be addressed through involving management commitment. The second issue is the absence of implementations of non-financial relational rent such as innovation performance. The third issue is a significant fact that the research has not been conducted in crisis situations, where companies face limited resources and require both agility and innovation for survival. The fourth issue pertains to the absence of implementations regarding non-financial relational rent, such as innovation performance. To bridge this gap, in consideration of existing literature, this research is required to formulate a theoretical model that involves supplier collaboration, operational agility, management commitment, innovation performance, and the calculation on the effect of the relationship. This research applies structural equation modelling as an analysis tool with the support of AMOS software. The participants are leaders of tour operator companies based in Central Java Province and the Special Region of Yogyakarta, both are the major tourism destinations in Indonesia. Analysing 198 observations, the results demonstrate a positive impact of supplier collaboration on both operational agility and innovation performance. Management commitment has been demonstrated to moderate the impact of collaboration on innovation performance. This research encourages leaders of tour operator companies to engage in collaborations with their suppliers to achieve operational agility and improve innovation performance, particularly in facing the conditions caused by the Covid-19 pandemic.

1 Introduction

The Covid-19 pandemic from 2019 to 2022 has significantly affected the economy and seriously contributed substantial changes in the business environment, even resulting in a crisis. This crisis is clearly reported in the contraction of Indonesia's economic growth in 2020 to -2.07% from the average of the previous five-year period at the 5% level. Tourism, contributing 4% to Indonesia's GDP, is experiencing the most significant impact. Tour operators encountered significant conditions, as during the pandemic they were going through challenging times in business and leading to serious financial conditions. The tourism sector met significant changes post-pandemic, such as a shifted towards domestic tourists and an increased reliance on online reservation service [1]. On the other hands, companies were also facing evolving consumer expectations, which 52% of tourists chose domestic tourist destinations, 66% chose natural tourist attractions as tourist destinations, 56% chose short

tourist trips with a maximum visit time of 4 days, and 72% chose safe tourist destinations, especially from Covid-19 transmission [2].

In order to align with evolving consumer expectations within limited resources, businesses must engage in collaborative efforts [3], so that tour operators can redesign tour packages and provide unique experiences. In addressing the challenges caused by the Covid-19 crisis, companies are required to enhance their capacity for both perceptive awareness and effective response. Perceptive awareness involves the company's consciousness of a crisis, while effective response denotes the company's proficiency in undertaking appropriate actions during and following a crisis. Throughout this period, the company acquired valuable insights, experienced transformative changes, and ultimately achieved substantive acceleration to effectively address the crisis. Following the uncertainty post-Covid-19, companies must consistently engage in the processes of sensing and responding, as well as applying adaptability for continuous adjustments. Companies with

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significant flexibility in changing product variety and volume proved to have the are said to have agility [4].

A theory that is relevant to explain the flow of information, knowledge, and resources in company collaboration is the Relational View (RV). RV explains that the resources a company requires to achieve a goal may be available outside the company, yet they can not be obtained in the secondary market. These resources are strategically located within a collaborative network, founded on the principle of resource compatibility among participating companies. This synergy leads to the generation of supernormal profits, commonly referred as relational rents [5]. Relational rents can manifest in both financial and non-financial forms. We address multiple research gaps within the scope of RV, creating the uniqueness of this research. First, the principal issue in RV research is considered caused by the absence of relational rents over the course of extended collaborations, due to opportunistic behaviours exhibited among participating companies [6]. We address this main issue by including management commitment, given its integral role as an integrator in aligning and harmonising organizational elements and upholding the enforcement of designated policies [7]. The purpose is to strengthen the influence of antecedents on relational rents. The integration of management commitment in the RV research has not been implemented in previous studies. Second, considering the post-COVID-19 pandemic scenario, we discovered that the application of collaborative resources forms operational agility [8] through knowledge acquisition, joint research and development. The integration of operational agility in RV research has not been carried out much in previous studies. Third, we recognize no significance in implementing non-financial relational rents [9] which in the context of this research refers to innovation performance. High innovation performance is required by companies experiencing environmental changes due to the Covid-19 pandemic and enabling them to maintain business sustainability. Fourth, majority of RV research has traditionally been conducted in the manufacturing industry. Hence, our study seeks to assist researchers in enhancing their comprehension of how a collaborative network can sustain relational rents in the service sector, namely hospitality industry. This research was conducted in the tourism sector of Central Java Province and the Special Region of Yogyakarta, which collectively accounts for 10% of tourism visits in Indonesia.

This research aims to address several research questions, those are: (1) To what extent can supplier collaboration improve operational agility and innovation performance? (2) To what extent do operational agility improve innovation performance? (3) To what degree does management commitment strengthen the impact of supplier collaboration on innovation performance? This research is structured into distinct sections. Initially, we conducted a comprehensive review on existing literature to determine the relationship between supplier collaboration,

operational agility, innovation performance, and management commitment within the relational view framework. Secondly, we developed and formulated hypotheses and empirically validated it applying structural equation modelling. Following this, we presented discussions and drew conclusions, which contained the theoretical and managerial implications of this research.

2 Literature review

2.1 Relational view

In order to attain competitive advantage, it is significant for a company to acquire resources that may be owned by external parties in its business environment. Based on this, in gaining success to acquire access to these resources, companies must engage in strategic collaborations, for example by applying partnerships with business entities, consumers, and academic institutions. The theory developed based on this assumption is the Relational View (RV) [4]. Companies engaged in collaboration acquire supernormal profits that are unattainable outside the collaborative network, or referred to as relational rent. Relational rent is generated by four key factors: significant investment in relationship-specific assets, substantial knowledge exchange, the sufficient combination of complementary, but scarce, resources or capabilities, and effective governance mechanisms [5]. Relationship-specific assets include visible or tangible assets (eg. collaboration locations, and production facilities) and intangible assets (eg. knowledge and work processes) forming certain capabilities due to reciprocal relationships between collaborating companies. Substantial knowledge exchange involves a routine and regular sharing of information that results in the developing of superior and specialised knowledge in collaborative networks. The combination of complementary, but scarce, resources or capabilities creates unique collaborative resources that are not available in the secondary market. The nature of this resource proves challenging to emulate, with no viable substitutes available. The governance structure demonstrates a high level of efficiency and adaptability in accordance with the company's requirements for collaboration. This process has shown the possibility in lowering monitoring costs while preventing opportunistic company's collaborative behaviour.

2.2 Supplier collaboration

Supplier collaboration involves the process of two or more independent companies collaboratively coordinating to control and optimise supply chains to meet shared objectives and mutual benefits [10]. Trust and sharing risks plays an important factor in supplier collaboration [11]. Supplier collaboration includes various aspects such as the management of interdependence of operations, products, processes, designs, marketing efforts, and purchasing planning or projections. This process also includes formulating strategic decision-making between supply

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chain members [12], and can result in integration of cooperation between participating companies to implement effective supply chain planning and operations. We concluded that supplier collaboration is a cooperation with suppliers across research, design, and production stages in order to effectively utilise shared resources and knowledge sustainably. This process also covers sharing risks, to achieve mutual benefits.

The dimensions of supplier collaboration have been established and mature and extensively applied in previous research, including the following : sharing knowledge, aligning goals, aligning decision-making, aligning incentives, sharing resources, implementing collaborative communication, and creating joint knowledge [13]. In this present study, the indicators applied to measure supplier collaboration are companies sharing information and knowledge with suppliers, aligning goals with suppliers, sharing resources with suppliers, and implementing collaborative communication.

2.3 Management commitment

Management commitment refers to the ability of company management to direct and organise all its employees to specified goals [14]. Additionally, management commitment is also characterised as the behaviour of company management, that includes involvement, influence, leadership, and support from senior management in a company's activities to achieve specific objectives [15]. Management commitment can also be defined as pressure from high-ranking executives on all company employees to develop the organization. This influence is accompanied by the involvement and support of high-position holders to attain a determined objective [16]. We concluded that Management commitment is the specific action of high-ranking officials of management in providing the resources and policies required to achieve specified objectives, as well as actively contributing as team players along side all members of the company.

Management commitment is assessed by various dimensions identified in previous literature. The first dimension includes several indicators, including : availability of sufficient budget and facilities (software and hardware), initiatives to motivate employees development, availability of required training, especially in the field of product development, and managing feedback from consumers. The second dimension includes various parameters, such as compensation adjustments for sales of new products and for employees who successfully acquire new customers. The third dimension relates to management as an integrator function, including the socialization of company strategies and targets, involvement of management in product development and marketing, as well as periodic joint evaluation of product performance [17].

2.4 Operational agility

Operational agility refers to part of organisational agility indicating the company's adaptability and acceleration in recalibrating business processes to dynamic environmental demands. Operational agility also reflects the ability of a company's business processes to swiftly, precisely, and efficiently exploit opportunities for innovation and enhancement of competitiveness. Operational agility allows companies to modify existing processes and establish a new one to exploit dynamic market environmental conditions effectively [18]. This involves a company's ability to effectively response to changes in competition, organise technical resources, as well as align managerial processes [19]. Operational agility allows companies to respond promptly and effectively towards uncertainty in consumer and market demand. Companies facilitate redesigning processes and quickly implementing improvised products and service parameters , as well as providing alternative products and services [20]. Operational agility also includes the ability to adjust product volume and variety [21], and ultimately contribute significant impact to organizational performance. The implementation of operational agility can be observed from the speed of finalizing decisions to modify products (eg. features and packaging), the flexibility to add product variations; and adjust product prices.

2.5 Innovation performance

Innovation performance indicates the creation of new products and services and the revenue generated from these processes [22]. Innovation performance can be derived in the proportion of revenue from the sales of new products, as well as products with enhanced features [23]. Innovation performance also involves the product innovation perspective and refers to the speed and timeliness needed in introducing innovative products to the market [24]. It is assessed by the quantity of new services in a specific period and shown by the ratio of new product sales value to accumulation of company revenue [25]. In conclusion, in this research, we define that innovation performance is a visible achievement from the implementation of fresh ideas implemented in the number of new products or product differentiation. It also refers to the introduction of newly developed products to the market, and the proportion of sales value of developed products compared to the total company's revenue.

2.6 Hypotheses development

Supplier collaboration benefits companies in increasing operational agility. First of all, intensive and effective exchange of communication in a collaboration accelerates the flow of information. This process enables companies and suppliers to share valuable knowledge [26] in order to appropriately and effectively provide the efficient amount and type of material, volume, and time of supply, according to new products or improvements criterias to recent products. Supply chain modification consists of preparing

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the materials required, new technologies, product components, and production processes [27]. Supplier collaboration results in the formation of supply flexibility [28]. Collaboration guarantees effective flow of information and knowledge to provide a responsive supply network. This process allows the company to perform responsive adjustment to coordinate the supply with the production requirement. When a company performs an adaptation process, the supply network is required to formulate adjustments including modifying the amount of capacity in response to surge in demand, or implementing process changes in response to disruption. Supplier collaboration not only enhances supply flexibility but also accelerates supply networks to apply new production methods, product development, new product diversification, and changes in the company's business processes. We have reached the conclusion that supplier collaboration positively impacts operational agility (**hypotheses 1**).

Suppliers play a significant part in providing resources required by companies to develop products according to market needs. Supplier collaboration significantly accelerates a company's innovation performance through access to essential materials, information about market and competitor strategies. Further optimization is established when the extensive network is formed to provide more expansive accessibility and opportunity to utilise such resources. Additionally, suppliers are able to contribute technology and financial resources to be synergistically utilised [29]. Knowledge transfer in supplier collaboration holds essential and potential contribution to enhance innovation performance [22]. Supplier collaboration positively impacts quality performances, product innovation, and flexibility in addressing the market needs. Furthermore, supplier collaboration provides a significant and positive impact on sustainable innovation performance [30]. Literature refers to the fact that the application of collaboration with suppliers provides companies knowledge and information to develop their products following evolving market expectations. This process not only accelerates the production of new items but also streamlines the decision-making process. In conclusion, supplier collaboration demonstrates a positive impact on innovation performance (**hypotheses 2**).

Operational agility refers to a company's proficiency in directing flexibility and speed of adaptation in business processes. Companies are able to modify current processes or formulate new processes and enhance innovation performance. The efficient and swift allocation of resources in context of specific requirements are the benefit for this process. The application of any modification in operational agility includes product variety and volume, that subsequently will affect the product features and price changes. Flexibility implemented in production processes and methods contribute significantly to improve

innovation performance [31]. This process provides a significant contribution for the creation of new products and services, by implementing creative and unique ideas [32]. Innovation performance requires accelerated action punctuality in the context of distributing innovative products to the market. This process is supported by operational agility in allowing the enhanced implementation of new processes. This process will be implemented quickly, precisely, and efficiently in a continuous method in the production structure and process. The modification accelerates its possibility to result in higher revenue from new products launched. Operational agility also accelerates the distribution of new products to the market and increases product variety. Innovation performance appears on the speed in distributing the new products to penetrate the market, the variety of new product in a certain period, and the profit level of new products. Subsequently, operational agility indicates a solid form of positive impact towards innovation performance (**hypotheses 3**).

Management commitment is an essential factor to increase innovation performance, particularly in establishing stronger impact of supplier collaboration on company's innovation performance. Management commitment enhances the collaborative synergy between the company's work processes, resource configuration, and provides the means to implement innovation and create new products. As a main and dominant part, company management determines various regulations and implements resource planning, as well as establishing cooperation to achieve specified targets [33]. Management commitment not only strengthens the learning process but also accelerates the implementation of new ideas [34]. In terms of highlighting the crucial need to increase the influence of supplier collaboration on innovation performance, management commitment focuses on emphasising the need to increase the company's flexibility to adapt to environmental changes. Several major points aligned by the company management, include modification of company strategy, the application of good governance, the speed of decision-making, the adjustment of business systems, control systems, incentives, human resource management, and product development [35]. Management commitment has consistently provided positive support to influence supplier collaboration on innovation performance. First, the company is able to provide adjustments between the process of creating new products and alignment with the availability of supplies from its suppliers. Second, both companies in collaboration establish faster methods to result in efficient decision-making in circumstances where sudden modification on product creation process or supply combination is required. Third, management actively encourages employees to acquire new methods in product innovations which are planned together with suppliers. In conclusion, management commitment significantly increases the

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influence of supplier collaboration on innovation performance (**hypotheses 4**).

3 Methodology

We use the quantitative inquiry to verify the developed hypotheses and address the research questions. The unit of analysis was an organisation, referring to tour operators in Central Java Province and the Special Region of Yogyakarta. The respondents for this research were directors or top leaders of tour operator companies. Heads of the branch or subsidiary are included to correspond for several branch-type companies. The research instrument applied was a survey questionnaire and distributed using google forms. Following the data collection, we conduct an analysis on structural equation modelling using AMOS for hypothesis testing and calculate the effect. We targeted 200 sets of responses to be able to implement AMOS [36].

3.1 Sample and data collection

According to data from the Indonesian Central Bureau of Statistics, there are 1,238 tour operators in Central Java Province and the Special Region of Yogyakarta, with 652 of them in Central Java Province and 587 units in the Special Region of Yogyakarta. This research sample focused on 284 units tour operators registered with Association of the Indonesian Tours and Travel Agencies/ASITA. The target number of responses was 200 sets and by estimating a response rate of 75%, the total number of questionnaires sent was 267 sets. The sampling technique applied for this research is proportionate stratified random sampling which includes grouping the population based on a criterion. The total number of questionnaires distributed can be seen in Table 1.

Table 1 Questionnaire distribution

Provinces	Areas	Number of members	Proportion (%)	Number of questionnaires
Central Java 132 units	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
Special Region of Yogyakarta 152 units	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

3.2 Analytical approach

The analysis used includes descriptive and inferential methods. Descriptive analysis exhibits the respondent's profile, which includes: the respondent's position, office location, head office or branch/subsidiary status, company age, and number of employees. Inferential analysis is implemented to examine the relationship between variables. We used structural equation modelling assisted by AMOS to be able to fully operate statistical data and test the research hypotheses.

The research instrument implemented needs to fulfil the requirement for validity and reliability. The validity criteria are shown by the loading factor value of the question item which is above 0.5, while Reliability is shown by the construct reliability (CR) value and average variance extracted (AVE) value. The question item is reliable if CR > 0.6 and AVE value > 0.4 [37]. To demonstrate the suitability of the research model with the theory applied, a goodness-of-fit test was performed, along with the key parameters of significance, including probability ≥ 0.05, and also GFI, CFI, and TLI each ≥ 0.90.

Subsequently, a hypothesis test using the p-value is executed and if the p-value < 0.05 then the hypothesis is accepted [36].

3.3 Measure

This research applied several series of instruments for measuring supplier collaboration, management commitment, operational agility, and innovation performance from previous research and adapted to the characteristics of tour operator businesses. The operational definitions of the research variables are described below (Table 2). Supplier collaboration is where companies agree to share important information and budget to achieve the predefined target or objective. Management commitment refers to providing sufficient provision of the resources needed and active contribution of company management to achieve company goals. Operational agility is the speed in modifying product variations and prices according to market expectation. Innovation performance refers to the benefits resulting from a new product, the number of product variations, and the speed at which they are

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penetrated to the market. The questionnaire was created in a Google form that attached with closed questions. Responses are formulated in the form of a Likert scale of 1

to 5, with an answer level of 1 indicating strongly disagree and 5 representing otherwise.

Table 2 Variables and indicators

Variables	Codes	Indicators
Supplier collaboration (KS)	KS1	Accuracy of information regarding product design.
	KS2	Agreement on goals with suppliers.
	KS3	Willingness to share budget with suppliers.
	KS4	Frequency of interaction with suppliers.
Operation agility (OA)	OA1	Speed of decision making.
	OA2	Ease of changing product variations.
	OA3	The speed of changing product prices.
Management commitment (KM)	KM1	Availability of budget for developing new tour packages.
	KM2	Periodic socialization of company strategies and targets to all parties within the company.
	KM3	Management involvement with the team that creates the tour package.
	KM4	Management involvement with the team to expand the market.
	KM5	Management role with all parties in the company to carry out periodic performance evaluations of new tour packages.
Innovation performance (KI)	KI1	The proportion of profits from new tour packages.
	KI2	A number of tour packages are offered.
	KI3	Speed in offering new tour packages to consumers.

4 Result and discussion

4.1 Descriptive analysis

A total of 201 (75.28%) questionnaires were responded and the majority were answered by directors (189 questionnaires) and only 12 questionnaires were answered by branch office heads. The largest number of respondents were in Sleman District (28.86%), followed by Yogyakarta City (21.39%), Semarang City (19.90%), and Surakarta City (8.46%). These areas are the main tourist destinations in Central Java Province and the Special Region of Yogyakarta. Responding companies are more than 15 years old (71.64%) and between 11 years and 15 years (17.41%), which shows that companies have been building relationships with their suppliers for a relatively long period. Several companies experienced the subprime mortgage crisis (2008) and the monetary crisis in Asia (1998) and managed to survive. Most of the companies are small and medium enterprises with 6 – 10 employees (44.28%) and 11-15 persons (26.87%).

4.2 Data normality

Based on the chi-square table, the Mahalanobis d-squared value > 34.81 are outliers that must be removed from operations. In this study, observations number 42, 24, and 56 had a Mahalanobis d-squared value > 34.81, therefore they were removed from data analysis. The multivariate value after subtracting these observations is 1.684, which shows that the data is normally distributed (between -2.85 and 2.85). In this way, the data can be forwarded for further analysis.

4.3 Validity and reliability of instrument

Based on the loading factor, valid question items were selected with a loading factor value of ≥ 0.5, and reliability was shown by CR value > 0.6 and AVE value > 0.4. Based on the loading factor, all questions had met the criteria, so 15 question items were used in the next analysis. Based on the CR and AVE calculation results, it was also found that all question items met the reliability requirements. The results can be seen in the table below (Table 3).

Table 3 Instrumet validity and reliability

Variables	Indicators	Loading Factor(λ)	Construct Reliability	Variance Extracted
Supplier Collaboration (KS)	KS1	0.655	0.746	0.469
	KS2	0.682		
	KS3	0.615		
	KS4	0.651		
Management Commitment (KM)	KM1	0.597	0.814	0.424
	KM2	0.631		

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Variables	Indicators	Loading Factor(λ)	Construct Reliability	Variance Extracted
	KM3	0.739		
	KM4	0.759		
	KM5	0.684		
Operational Agility (OA)	OA1	0.647	0.674	0.408
	OA2	0.662		
	OA3	0.607		
Innovation Performance (KI)	KI1	0.721	0.814	0.594
	KI2	0.776		
	KI3	0.813		

4.4 Goodness of fit

The first step is to modify the research model (Figure 1) by following the modification indices in AMOS. The modified model fits Goodness of Fit Criteria: probability

0.060 (> 0.05), RMSEA 0.037 (< 0.08), incremental fit that consists of GFI 0.941, TLI 0.971, CFI 0.977 are > 0.90 , and parsimony fit that consists of PGFI 0.636 and PNFI 0.705 are > 0.60 .

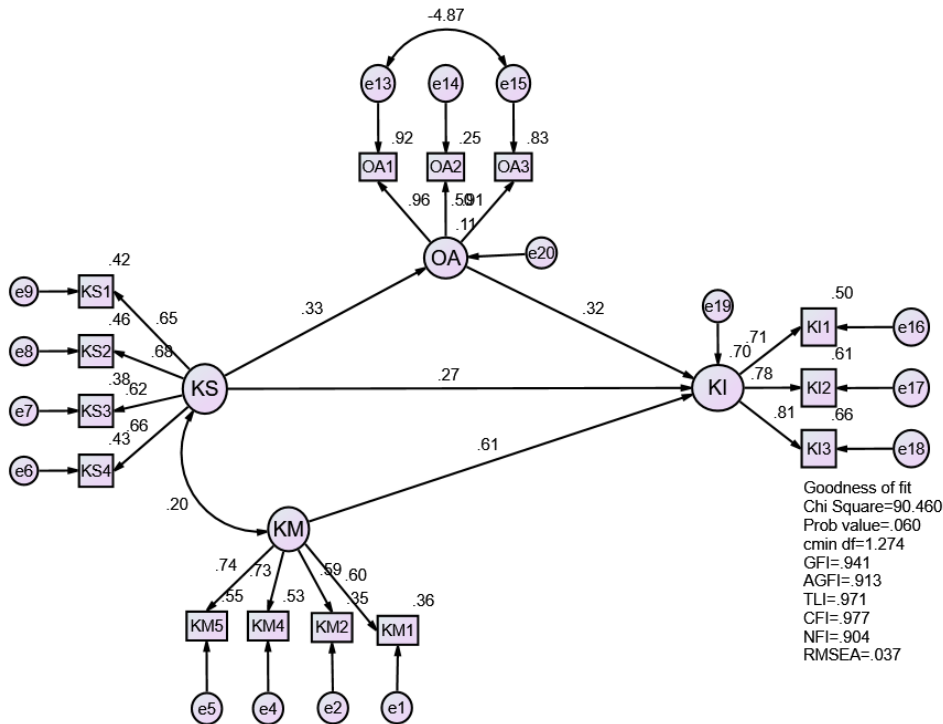


Figure 1 Modified research model

4.5 Hypotheses testing

Squared multiple correlation showed a figure of 0.701 for Innovation Performance, so it can be concluded that in this research the variation in innovation performance can be explained by 70.1% by the predictor variables. The results of the data analysis showed that supplier collaboration had an effect on operational agility with a p-value $*** < 0.05$, and the magnitude of the effect

was 0.332. Therefore, hypothesis 1 was accepted. Supplier collaboration also influenced innovation performance with a p-value of $0.001 < 0.05$, and the magnitude of the influence was 0.266. Therefore, hypothesis 2 was accepted. Operational agility influenced innovation performance with a p-value of $0.002 < 0.05$, and the magnitude of the influence was 0.324. Therefore, hypothesis 3 was accepted (Table 4, Table 5).

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Table 4 Hypotheses test

Variables	Estimate	S.E	CR	P	Label
K.S → OA	0.673	0.155	4.330	***	Significance
K.S → KI	0.292	0.092	3.178	0.001	Significance
OA → KI	0.176	0.057	3.097	0.002	Significance
KM → KI	0.796	0.129	6.159	***	Significance

Table 5 Standardized direct effects

	KS	KM	OA	KI
OA	0.332	0.000	0.000	0.000
KI	0.266	0.613	0.324	0.000

The moderation test is carried out by adding the interaction value between supplier collaboration and management commitment into the model and calculating the interaction loading factor and interaction error values

using the formula below. The calculation will use loading factors based on standardised regression weight (Table 6) and variances (Table 7).

Table 6 Standardized regression weights

	Estimate
KS → OA	0.332
KS → KI	0.266
OA → KI	0.324
KM → KI	0.613
KM → KM1	0.604
KM → KM2	0.595
KM → KM4	0.728
KM → KM5	0.742
KS → KS4	0.658
KS → KS3	0.618
KS → KS2	0.676
KS → KS1	0.650

Table 7 Variances

	Estimate	S.E	CR	P
KM	0.110	0.026	4.227	***
K.S	0.153	0.034	4.493	***
e20	0.562	0.162	3.462	***
e19	0.055	0.015	3.668	***
e1	0.191	0.022	8.569	***
e2	0.191	0.022	8.637	***
e4	0.149	0.021	7.222	***
e5	0.131	0.019	6.984	***
e6	0.200	0.027	7.527	***
e7	0.224	0.028	7.993	***
e8	0.177	0.024	7.287	***
e9	0.178	0.023	7.635	***

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We use the formula below to calculate the interaction loading factor ($\lambda_{interaction}$) and interaction error values (Θ_q).

$$\lambda_{interaction} = (\lambda X1 + \lambda X2 + \lambda X3) \times (\lambda Z1 + \lambda Z2 + \lambda Z3) \tag{1}$$

$$\Theta_q = \{(\lambda X1 + \lambda X2 + \lambda X3)^2 \times \text{Var}(X) \times (\Theta Z1 + \Theta Z2 + \Theta Z3)\} + \{(\lambda Z1 + \lambda Z2 + \lambda Z3)^2 \times \text{Var}(Z) \times (\Theta X1 + \Theta X2 + \Theta X3)\} + \{(\Theta X1 + \Theta X2 + \Theta X3) \times (\Theta Z1 + \Theta Z2 + \Theta Z3)\} \tag{2}$$

We found that $\lambda_{interaction}$ is 6.945 and Θ_q is 1.812. We use those result to find the moderating effect to the model that is shown in figure 3 and hypothesis testing in Table 8. By integrating interaction variables into the research model (Figure 2), the model meets the marginal fit requirements with probability 0.011 (< 0.05), meanwhile other criteria meet the standard (GFI 0.933,

AGFI 0.902, TLI 0.974, CFI 0.980, NFI 0.933 and RMSEA 0.045). The results of operational statistical data found that interaction influences innovation performance with p-value $*** < 0.05$, so it can be concluded that management commitment moderates the influence of supplier collaboration on innovation performance. Therefore, hypothesis 4 is accepted.

Table 8 Hypotheses testing

	Estimate	S.E	CR	P	Label
KS → OA	0.483	0.092	5.229	***	Significance
KS → KI	0.180	0.071	2.550	0.011	Significance
OA → KI	0.167	0.051	3.258	0.001	Significance
KM → KI	0.680	0.102	6.682	***	Significance
Interaction → KI	0.006	0.001	5.691	***	Significance

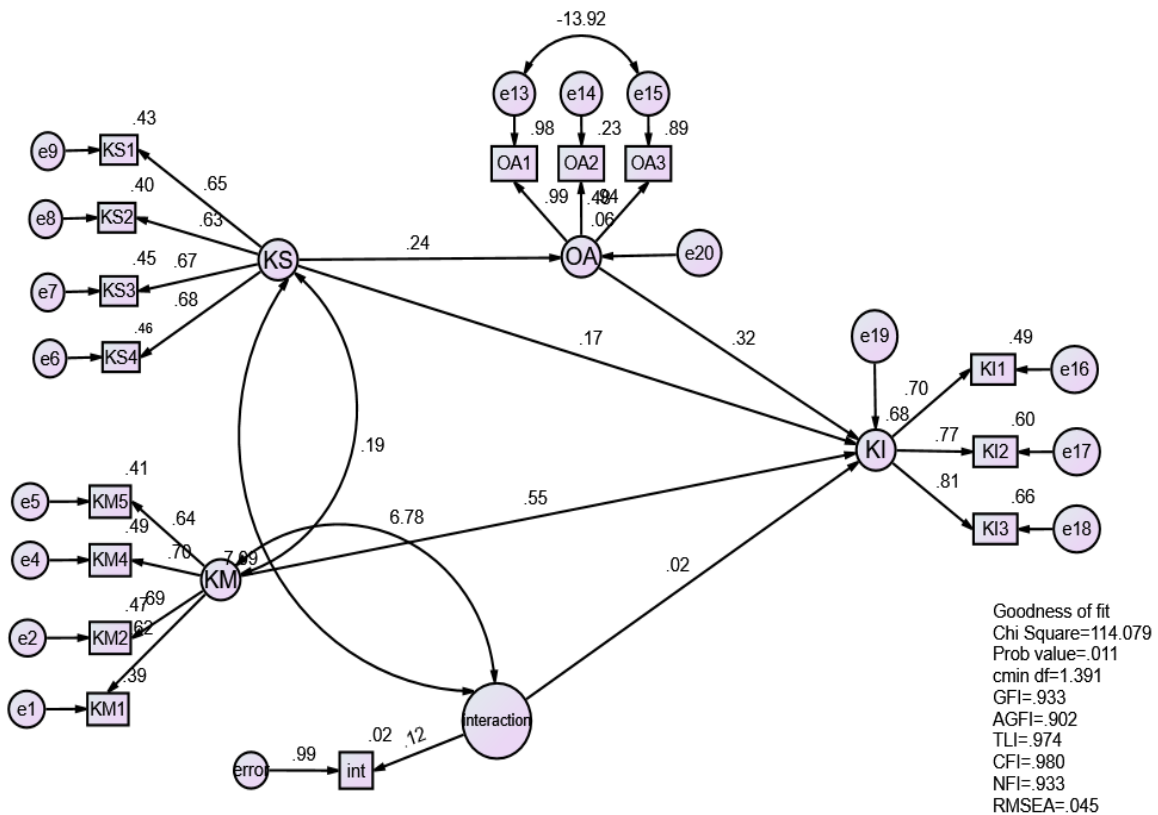


Figure 2 Research model with interaction

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5 Conclusions

The primary objective of this research is to enhance our comprehension towards Relational View (RV) through providing explanation how supplier collaboration, operational agility, and management commitment effectively improve innovation performance. This research demonstrates that supplier collaboration has a positive impact on operational agility by providing companies with access to flexibility in raw material supply and maintaining the availability of required materials. Furthermore, supplier collaboration plays a vital role in accelerating innovation performance by facilitating the flow of valuable information and knowledge regarding materials supplied. It also features the effectiveness of this information to be applied appropriately in innovating tourism products. Collaborative resources are easily accessed, selected and combined into products that are accepted by consumers and subsequently increase innovation performance. Operational agility provides a positive impact on innovation performance; it enables companies to modify not only the operation but also implementation of new methods. The ability to adjust company operations, including designing tour packages, arranging the type of transportation to be used, and adjusting base prices to meet tourists' purchasing ability will also enhance innovation performance. Management commitment demonstrates the ability to moderate the influence of supplier collaboration on innovation performance. Management commitment enlarges the influence of external resources on the ability to perform innovation, which then enhances innovation performance. This process is demonstrated in the context of the availability of required resources and the teamwork of employees and leaders.

From a theoretical standpoint, this research has expand the RV literature by considering supplier collaboration and management commitment, and also the formation of organizational agility and innovation performance. We have reached a notable fact that there has been an applications of moderating role of management commitment in RV research in tour operator companies. Moreover, it also offers significant ideas for tour operator leaders to perform collaborative action with their suppliers and also increase the management commitment to recover their business after the Covid-19 pandemic. It is crucial for companies to increase operational agility through applying supplier collaboration in order to create new tour packages and penetrate new market possibilities.

This research emphasises several limitations to consider for enhancement in future research. First, customer collaboration has not been significantly involved, despite its integral role in the service industry sector, where substantial customer participation characterises the development of the value co-creation concept [38]. Future research requires the involvement of customer collaboration to perform significant comprehension towards its role in increasing operational agility and innovation performance. It is also crucial for the

research model to be tested in other collaborative service industry, such as event organizers and construction services. This study currently applies only to tour operators in Central Java and the Special Region of Yogyakarta, both of which have been designated as main tourist destinations by the Indonesian government. Further research is to be implemented in various regions where economies are dominated by the tourism sector, to observe and study the generalisation of this research.

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