Journal of Innovation in Business and Economics
Vol. 09 No. 02 December 2025 Page 175-190
P-ISSN: 2580-9431 E-ISSN: 2581-2025 http://ejournal.umm.ac.id/index.php/jibe

Received: 14-01-2025 | Received in revision: 10-04-2025 | Accepted: 10-04-2025 | Published: 14-07-2025

Fostering innovation in start-ups: The role of knowledge sharing and organizational creativity

Nony Kezia Marchyta[1], Eddy Madiono Sutanto[2], Robert Djohari[3]
School of Business and Management, Petra Christian University, Surabaya, Indonesia [1,2,3]

DOI: https://doi.org/10.22219/jibe.v8i02.39299

Abstract
The purpose was to determine the effect of knowledge-sharing on organizational innovation through organizational creativity as an intervening variable in start-up companies in Surabaya, Indonesia. The type of this data was quantitative. The sampling technique was purposive sampling, which comprised 64 start-up companies in Surabaya, Indonesia. The data were obtained through a questionnaire using a Likert scale. The data processing technique used is Partial Least Square (PLS). This study shows that knowledge-sharing affects organizational creativity and innovation at start-ups. Open communication and a culture of ongoing learning are essential to build trust and promote the free exchange of ideas. A supportive environment encourages organizational creativity, which drives the creation of novel goods and services. Continuous learning and strategically using technology are essential for innovation. Developing unique value products and rewarding creative ideas can enhance product and process innovation to achieve competitive advantage.

Keywords: Knowledge-sharing; organizational creativity; start-up companies

Introduction

In recent years, Indonesia's economic growth appears to have been driven by its vibrant startup culture and rapidly rising Internet economy (Statista Research Department, 2023). In 2022, Indonesia's startup ecosystem will be rated second in Southeast Asia (Statista Research Department, 2023). Indonesia has proven to be one of the region's start-up pioneers, ranking second only to Singapore in terms of unicorns (Statista Research Department, 2023). There are around 2.3 thousand start-up enterprises in Indonesia (Statista Research Department, 2023). Jakarta is ranked 32nd for its startup environment in 2022, with around 480 startup enterprises in the Indonesian city (Statista Research Department, 2023). Bandung, Surabaya, Medan, and Yogyakarta are other top startup cities in Indonesia (Statista Research Department, 2023).

In contrast to Jakarta, a start-up in Surabaya is more compelling and needs to be researched further. Additionally, prior research indicates a dearth of studies on Surabaya start-ups (Sitepu, 2017; Fatimah et al., 2022). Comprehensive frameworks that incorporate several aspects of innovation, like creativity and knowledge exchange, and are adapted to the start-up ecosystem in Surabaya are lacking. Without exploring particular industries like e-commerce and services sectors with a more significant potential for implementing innovation, most studies concentrate on digital start-ups.

The number of start-ups in Surabaya is still much smaller than in Jakarta, with only 98 start-ups

[1]E-mail: nonykezia@petra.ac.id

(Supriyatno, 2020). Surabaya is the second-largest city after Jakarta, located on Java Island, Indonesia. It has a high economic growth and development rate in many fields. It is a center of trade and services, shops, industry, education, and other activities.

Jakarta's start-up ecosystem is ranked first in Indonesia and 27th internationally in 2024, while Surabaya's is placed third in Indonesia and 624th globally (StartupBlink, 2024a; StartupBlink, 2024b). While the Jakarta government has numerous programs to help start-ups, like the "National Movement of 1000 Digital Start-ups" and "Start-up Studio Indonesia," the Surabaya government has a program named "Start Surabaya" that aims to support start-ups in Surabaya (Adieb, 2021; Wiraning, 2024). Although there are various businesses in both Jakarta and Surabaya, start-ups in Jakarta primarily engage in the fintech, e-commerce, and food technology sectors (StartupBlink, 2024a).

Surabaya had a population of 2.880 million people in 2021, with the demographic dominated by productive groups aged 25–39, comprising as much as 39.52 percent (Statista Research Department, 2023). This should encourage the potential development of start-ups in Surabaya, such as in Jakarta. The government of Surabaya is also beneficial for start-up actors to develop through business networking, mentoring, co-working space, ease of creating events and promotions, and facilitating the management of patents and human rights (Menuju era baru pertumbuhan start up di Surabaya, 2018, October 29). Various facilities provided by the Government of Surabaya will increase capacity building, ease of market access, and opportunities for creative industry players to collaborate with other start-ups.

The development of start-ups needs to be supported by creativity, an essential element in innovation (Sutanto, 2017). Organizations may diversify, adapt, and reinvent themselves through innovation (Chaubey et al., 2022). Organizational innovation refers to developing or implementing a new idea or behavior unique to the organization (Chaubey et al., 2022). Practical organizational innovation is critical in building and maintaining a competitive advantage in rapid economic and technological change (Sutanto, 2017). Despite ongoing scholarly efforts to understand both the innovation process and the conditions that foster invention, several areas of innovation remain relatively unexplored (Chaubey et al., 2022). According to Alves et al. (2018), there is a lack of thorough theories that incorporate the different facets of innovation, such as resource development, learning, leadership, and creativity.

According to Hughes et al. (2018), creativity is needed in the innovation process related to generating and implementing ideas. Hon & Lui (2016) added that companies need creativity in processes, procedures, and structures that can produce innovative products or services promptly and efficiently. Therefore, the creativity of individuals and groups is the starting point of innovation (Chaubey et al., 2022).

Sources of creativity and innovation in an organization or company can share knowledge among employees to ensure the transfer of thoughts, information, insights, and experiences (Ciulli & Kolk, 2019). Through communication channels between individuals, groups, and organizations, knowledge-sharing is a continuous process of applying organizational knowledge and experiences to business operations (Yeboah, 2023; Chua et al., 2023). However, knowledge-sharing does not only occur among employees. According to Yeboah (2023), knowledge-sharing in the organization will connect members of the organization with external sources of knowledge.

Cross-border network connections can foster innovation in firms through knowledge and learning sharing (Naqshbandi et al., 2024). The accumulation of knowledge would contribute to creativity and innovation and involve organizational culture and identity, policies, routines, systems, and other employees (Kremer et al., 2019). The ability to share knowledge has garnered much attention from the academic community and is essential for various organizational processes and performance outcomes (Ahmad & Karim, 2019; Deng & Lu, 2022). Even though research on information sharing has increased, much of it is dispersed over many different fields and directions (Yeboah, 2023). Zhao et al. (2020) focus on the connection between organizational innovation performance and information sharing, but it does not fully incorporate the relationship between creativity and knowledge-sharing.

The background of this research is the role of knowledge-sharing, organizational creativity, and organizational innovation in the development of start-ups in Indonesia, especially in Surabaya. The difference between this research and previous research is that it examines the effect of knowledge-sharing between employees (horizontal relations), leaders to employees, and employees to leaders (vertical relationships) through the perspective of company leaders. This research was conducted as a continuation of Wang & Noe's (2010) research. This research aims to improve start-up companies' quality and economic development, especially in Surabaya, Indonesia.

Literature Review

Organizational innovation is the implementation of ideas for new products or services, such as

restructuring, reducing costs, improving communication, new organization structures, and new programs (Martins & Terblanche, 2003). Factors that influence organizational innovation are the speed and the amount of innovation (Sarooghi et al., 2015). Innovation is not limited to goods and procedures; it involves marketing and organization (Naqbi et al., 2020). According to Battisti & Stoneman (2010), organizational innovation includes innovations involving new management practices, new organizations, new marketing concepts, and new corporate strategies.

Creativity is the foundation of all innovation (Sarooghi et al., 2015). Creativity and innovation are essential to achieving optimal organizational performance (Anderson et al., 2014). Innovation is putting these ideas into new goods and processes, whereas creativity is developing new and practical ideas (Sarooghi et al., 2015). Managers and leaders can better absorb and comprehend the dynamics of innovation and creativity because organizations need to manage their creative human resources, turn new products into value in international markets, and make these products profitable for the organization (Pinarbasi et al., 2024). They can also use the workforce and physical workspace to increase innovation in the organization, and strategies to increase creativity come with the need to develop and implement them (Pinarbasi et al., 2024).

Organizational creativity is forming deliberate and continuous changes consisting of creating and formulating problems, solving problems, and implementing solutions (Basadur, 1997). It also includes creating new products, services, ideas, procedures, or valuable and useful processes by individuals working together in complex social systems (Giustiniano et al., 2016). Organizational creativity drives change, enhances process effectiveness, and maintains competitiveness (Rumanti et al., 2023). Organizations must be creative to thrive in a changing world; otherwise, they may find adjusting to internal and external changes difficult (Rumanti et al., 2023). Organizational creativity should consider the environment, knowledge generation, and individual or group activities (Rumanti et al., 2023).

Effective use of internal and external knowledge resources propels organizational innovation (Wang et al., 2024). Organizations can enhance innovation outcomes and overall performance by providing venues for employees to access and exchange knowledge (Wang et al., 2024). According to the Resource-Based View (RBV), a company's distinct assets and competencies provide a competitive edge (Hendi et al., 2022). Information sharing is essential in this approach because it allows firms to take advantage of their internal knowledge assets, promoting innovation and improving general performance (Hendi et al., 2022). Businesses may better use their resources, adjust to shifting conditions, and maintain a competitive edge by efficiently exchanging knowledge (Gupta et al., 2018).

Azeem et al. (2021) define knowledge-sharing as exchanging information, facts, expertise, and experiences throughout the company that can avoid repeating mistakes in an organization. Knowledge-sharing has two dimensions: knowledge-donating and knowledge-collecting (Van Den Hooff & Ridder, 2004). Knowledge-donating involves communicating intellectual capital to others (Van Den Hooff & Ridder, 2004). Knowledge-collecting involves individuals consulting with others to obtain intellectual capital (Van Den Hooff & Ridder, 2004). According to the viewpoint of business executives, knowledge-sharing is explained in this study to complement Wang & Noe's (2010) research using a variety of relational linkages, including horizontal ties (between employees) and vertical ties (leaders to employees and employees to leaders).

Knowledge is shared at the individual and organizational levels to increase productivity and effectiveness (Chua et al., 2023). At the organizational level, it entails gathering, classifying, reusing, and sharing experience-based knowledge so that others in the company may access it (Chua et al., 2023). Knowledge-sharing is influenced by three factors: individual, organizational climate, and technology (Lin, 2007). Experience, beliefs, motivation, and values all impact an individual's readiness to share knowledge, while motivators such as perceived benefits encourage sharing (Lin, 2007). Knowledge sharing is also influenced by the organizational climate, which is influenced by elements like reward structures, the atmosphere of leadership, and support from upper management (Lin, 2007). Technology, especially information and communication technology (ICT) such as online databases, intranets, and virtual communities, also makes integrating, disseminating, and codifying organizational knowledge easier (Lin, 2007).

Figure 1 shows the models used in this research. Knowledge-sharing was the independent variable, organizational creativity was the intervening variable, and organizational innovation was the dependent variable**.**

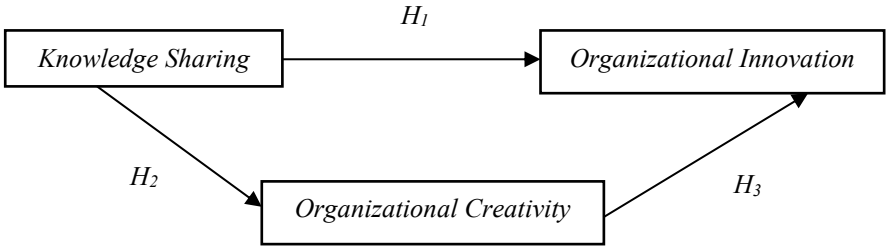

Figure 1. The conceptual framework for the research

Knowledge-sharing plays a vital role in innovation (Wen & Qiang, 2016; Cundawan et al., 2021). A knowledge donor shares their intellectual capital with others to receive voluntary feedback, while a knowledge collector actively seeks knowledge from colleagues (Wang et al., 2024). When employees actively collect and donate knowledge, it becomes a valuable resource for generating and implementing innovative ideas within the organization (Wang et al., 2024).

According to Abbas et al. (2019) and Brook & Pagnanelli (2014), innovations are related to information changes, and knowledge sharing positively influences organizational innovation because when employees share their experiences and knowledge, the company's innovation capabilities increase. Idrees et al. (2023) explained that companies that pursue product innovation must direct the implementation of knowledge-updating practices to facilitate knowledge sharing and creation.

H_1: Knowledge-sharing affects organizational innovation in start-up companies.

Kim & Park (2015), Hussain et al. (2017), Bodla et al. (2018), and Khan & Niazi (2023) found that knowledge-sharing positively affects organizational creativity by promoting value creation and developing an organic learning culture. People's knowledge base grows at work when they express their opinions (Khan & Niazi, 2023). The main conclusion is that employees should share their knowledge since it helps them develop ideas and learn from each other (Khan & Niazi, 2023). Workplace creativity results from these cooperative exchanges of ideas, information, experience, and thoughts (Wang et al., 2024; Giustiniano et al., 2016).

Knowledge-sharing at work is essential since it enables staff members to generate original concepts and imaginative results (Park & Joo, 2022). According to Bidault & Castello (2009), when individuals are involved in the knowledge-sharing process, they tend to have the same language and beliefs that can build mutual trust and are shown to have positively influenced creativity. Economic resources, organizational support, unconventional thinking, and knowledge-sharing among staff members are the main factors that foster creativity (Chen et al., 2021).

According to the social exchange theory, people weigh the costs and benefits of sharing knowledge before acting (Khan & Niazi, 2023). When transferring resources, including information, they seek to reduce expenses and increase advantages (Khan & Niazi, 2023). The expectation of reciprocity, or giving something with the hope of receiving something in return, is common among people when they exchange knowledge (Khan & Niazi, 2023). This conduct fosters the development of solid partnerships (Khan & Niazi, 2023).

H_2: Knowledge-sharing affects organizational creativity in start-up companies.

Sutanto (2017) and Chaubey et al. (2022) found that organizational creativity is a positive driving factor for organizational innovation. There is a substantial positive correlation between creativity and innovation, particularly at the individual level, where creativity fosters new endeavors (Sarooghi et al., 2015). A supportive creative environment and individual perspective-taking are two further elements that contribute to this interaction and improve the connection between personal creativity and organizational innovation (Litchfield et al., 2015). Creative workers can only come up with original and practical ideas (Chaubey et al., 2022). An individual's likelihood of being inventive increases with their capacity to produce fresh, original, and practical ideas, which supports organizational and collective creativity (Chaubey et al., 2022). Organizational elements like resources and atmosphere also influence how creativity and innovation (Rumanti et al., 2023).

According to the ambidexterity perspective, turning innovative ideas into reality requires juggling competing demands on people, groups, and organizations (Sarooghi et al., 2015). Ambidexterity requires

managing this tension between idea generation (exploration) and concept execution (exploitation) (Sarooghi et al., 2015). Achieving ambidexterity requires managing and minimizing the conflicts that emerge between idea development, which is an experimental activity, and concept execution, which is an exploitative activity (Sarooghi et al., 2015).

H_3: Organizational creativity affects organizational innovation in start-up companies.

Research Method

Study Design and Measurement Scales

This study used quantitative research. It collected data using a questionnaire. The questionnaire consists of two parts: the first part is related to the data of each start-up, which are the study's respondents, and it consists of the start-up's age, field, number of employees, and location.

The second part of the research questionnaire includes statements related to variables that will be measured, namely, knowledge-sharing (KS), organizational creativity (OC), and organizational innovation (OI). This study used a Likert scale of 1 to 5, with five being strongly disagreeing, disagreeing, neutral, agreeing, and strongly agreeing. Two criteria are considered when choosing indicators: they must be indicative and not causally related to the latent variables created (Ferdinand, 2014). Table 1 shows the indicators used in this research.

Table 1. Measurement scales used in the empirical study

Former Research	Indicators and Measurement Scales
Van Den Hooff & Ridder (2004)	Dimension: Knowledge-Donating and Knowledge-Collecting
Knowledge-Sharing	Sharing something new from leaders to employees.
	Sharing something new from employees to leaders.
	Sharing something new from employees to other employees.
	Sharing information from leaders to employees.
	Sharing information from employees to leaders.
	Sharing information from employees to other employees.
	Sharing new skills from leaders to employees.
	Sharing new skills from employees to leaders.
	Sharing new skills from employees to other employees.
	Leaders share their skills when employees ask questions.
	Employees share their skills when leaders ask questions.
	Employees share their skills when other employees ask questions.
Sutanto (2017)	Utilization of new ideas.
Organizational Creativity	Implementation of new behavior.
	Creation of new products.
	Utilization of new technology.
	Creating new ideas.
Liao et al. (2007)	Product innovation.
Organizational Innovation	Process innovation.

Data Collection and Profile of Respondents

The start-up criteria studied are start-ups that have been established for a maximum of five years, have at least two employees, and are engaged in e-commerce and services. These criteria are intended to examine the innovation capabilities of start-ups in the early phase. In the early phase, start-ups often experience various challenges, especially related to resources, so this study wants to examine the effect of knowledge-sharing on implementing innovative solutions through the support of organizational creativity.

The e-commerce and services sectors were chosen because they have a higher potential for innovation implementation.

The technique used is purposive sampling. The sample includes 64 start-up company leaders who fit the research criteria in Surabaya. Purposive sampling was chosen so that the researcher could select participants based on the research objectives and have the appropriate knowledge, experience, and characteristics. Purposive sampling increases internal validity by ensuring that the research objectives choose participants. Reliability is achieved by attempting to carry out sampling procedures consistently according to sample criteria. Table 2 shows the profile of respondents in this research.

Table 2. Profile of respondents

Characteristics of the respondents	Categories	Percentages
Start-up age	< 1 year	59.4
	1–5 year(s)	40.6
Start-up field	E-commerce	40.6
	Service	59.4
Number of employees	2 persons	64.0
	3–5 persons	31.3
	>5 persons	4.70
Start-up location	North Surabaya	4.70
	South Surabaya	29.7
	Centre Surabaya	4.70
	East Surabaya	26.5
	West Surabaya	34.4

The business age of start-ups who were respondents in this study is at most < 1 year old, as many as 38 respondents, while start-ups aged 1–5 years, as many as 26 respondents. The low number of start-up companies aged 1–5 can be caused by the failure of start-up companies to find and understand the market and identify customers. Most start-up company respondents in this study were engaged in the service field, with as many as 38 respondents, while in e-commerce, as many as 26. Start-up companies involved in e-commerce have an online store platform that uses a pre-order system on social media, for example, food sales, souvenirs, and fashion, while start-up companies engaged in the service sector include travel businesses, photography services, and videography.

Start-up companies consisting of two employees totaling 41 respondents, start-up companies with 3–5 employees as many as 20 respondents, and there are only three start-up companies with more than five employees. The majority of respondents in this study are start-up companies with two employees; this can be due to the need for work or employee output to achieve the company's target, which is low, and for the cost-efficiency effort.

The location with the most start-up companies surveyed was West Surabaya, with 22 respondents; the least was North Surabaya and Central Surabaya, with the same number of three start-ups. Most start-up companies are located in West Surabaya because West Surabaya is a rapidly growing area characterized by a growing number of housing, schools, hospitals, shopping centers, offices, entertainment centers, and other commercial centers that lead to the concept of a one-stop living city.

Data Analysis Method

The data analysis in this study used the Partial Least Square (PLS) using the SmartPLS program. Partial Least Square is a statistical technique used in the Structural Equation Model (SEM) to complete multiple regressions by comparing dependent and independent variables. PLS has the advantage of being able to handle complicated data structures with a large number of predictor variables and fewer observations (Cramer, 1993). Compared to other approaches, PLS frequently offers higher prediction accuracy, particularly when handling multicollinearity (Cramer, 1993). However, it also has the drawback of being prone to overfitting, mainly when the number of predictor variables is relatively high compared to the number of observations (Cramer, 1993). Like other multivariate techniques, PLS assumes that variables have linear correlations, which is not necessarily true (Cramer, 1993).

By evaluating composite reliability, Cronbach's alpha, convergent validity, and discriminant validity, the outer model test is used to assess the reliability of the data collected (Jogiyanto & Abdillah, 2019). When the intended latent variable's cross-loading value is higher than other variables, or when each construct's AVE (Average Variance Extracted) root is compared to the correlation between constructs,

discriminant validity is demonstrated (Jogiyanto & Abdillah, 2019). The AVE value is greater than 0.50, while the factor loading value on convergent validity is greater than 0.70 (Jogiyanto & Abdillah, 2019). Composite reliability and Cronbach's alpha are rated as weak if they are less than 0.60, acceptable if they are 0.70, and good if they are 0.80 (Jogiyanto & Abdillah, 2019). By examining the path coefficient, predictive relevance, and coefficient of determination (R-square), the inner model test is used to forecast the causal relationship between latent variables (Jogiyanto & Abdillah, 2019).

Results and Discussion

The mean value was calculated using the value range formula with class intervals, and the class is divided into three categories (bad, moderate, and good). Table 3 shows the categories of knowledge-sharing, organizational creativity, and organizational innovation based on class interval.

Table 3. Category of variables based on class interval

Variable	Value Range	Interpretation
Knowledge-Sharing	1.00–2.30	Bad
	2.31–3.61	Moderate
	3.62–5.00	Good
Organizational Creativity	1.00–2.30	Bad
	2.31–3.61	Moderate
	3.62–5.00	Good
Organizational Innovation	1.00–2.30	Bad
	2.30–3.61	Moderate
	3.62–5.00	Good

Table 4 shows descriptive statistical results. The average result of respondents' answers to the knowledge-donating dimension is 4.19, and the knowledge-collecting dimension is 4.20. The average result of respondents' answers to knowledge-sharing is 4.19. These results mean that the average respondent feels that knowledge-donating and knowledge-collecting (vertical and horizontal relationship) in start-up businesses are good and essential for the organization. Data distribution is reflected by the average standard deviation knowledge-donating dimension, which is 0.82, the knowledge-collecting dimension, which is 0.83, and the knowledge sharing is 0.617.

The average response to the organizational creativity variable was 4.35. These results mean that the average respondent feels organizational creativity in start-up companies is good. The average respondent considers the company to have actively generated and implemented new ideas with the latest technology. The data distribution is reflected in the average standard deviation of organizational creativity, which is 0.73.

The average result of the respondents' answers to the organizational innovation variable was 4.18. These results mean that the average respondent feels organizational innovation in the start-up business is good. The average respondent considers product and process innovation to have been carried out by the organization. The process innovation indicator obtained a value of 4.29, more significant than the product innovation indicator of 4.12. Data distribution is reflected in the average standard deviation of organizational innovation, which is 0.8.

A validity test evaluates the measurement scale's performance. Measurements are taken on the same object every time. The reliability test establishes the value of the results' consistency and stability. A valid indication at a 5% significance level is indicated by outer loading > 0.5 and a t-statistic > 1.96, the general rule for convergent validity. Every indication is valid for every variable in this investigation, as evidenced by outer loading larger than 0.5 and t-statistics greater than 1.96.

Since there should not be a strong correlation between several concept gauges, a discriminant validity test is employed to examine the correlation between them. Cross-loading measurement with its construct and comparing the average variance extracted (AVE) root of each construct with the correlation between constructs and other model constructs form the basis of the discriminant validity test. According to the discriminant validity rule of thumb, the loading factor indicator's value is the highest compared to other variables. The construct has a good discriminant validity value if the variable's AVE value exceeds

0.5. The loading factor value of each indicator, which is the variable's most significant value compared to other variables, shows that each indicator has excellent discriminant validity. Every variable in this study has an AVE value greater than 0.5, and when compared to the correlation between variables with other factors in the model, the AVE root value of each variable is relatively high. These findings suggest that all of the variables in this study have good discriminant validity. AVE value, Cronbach's Alpha, and composite reliability values are displayed in Table 5.

Table 4. Descriptive statistic result

Indicator	Item	Mean	Standard Deviation
Variable: Knowledge-Sharing			
Dimension: Knowledge-Donating			
When I learn something new, I tell employees about it.	KS_1	4.33	0.798
When the employees learn something new, they tell me about it.	KS_2	4.25	0.713
When my employees learn something new, they tell other employees about it.	KS_3	4.14	0.814
When I have new information, I share the same information I have with employees.	KS_4	4.27	0.802
When employees have new information, they share it with me.	KS_5	4.30	0.749
When my company's employees have new information, they share it with others.	KS_6	4.19	0.774
When I have new skills, I share them with employees at the company.	KS_7	4.09	0.811
When an employee has new skills, they tell me about their skills.	KS_8	4.19	0.906
When employees have new skills, they share their skills with other employees in the company.	KS_9	3.95	1.015
Dimension: Knowledge-Collecting			
When requested, I share my skills with employees in the company.	KS_{10}	4.25	0.735
When requested, an employee at my company told me about their skills.	K_{11}	4.23	0.850
When other employees request, employees at my company share their skills.	KS_{12}	4.14	0.889
Variable: Organizational Creativity			
Utilization of new ideas.	OC_1	4.58	0.61
Implementation of new behavior.	OC_2	4.38	0.70
Creation of new products.	OC_3	4.37	0.72
Utilization of new technology.	OC_4	4.17	0.83
Creating new ideas.	OC_5	4.29	0.77
Variable: Organizational Innovation			
Product innovation.	OI_1	4.12	0.83
Process innovation.	OI_2	4.29	0.77

Table 5. Validity and Reliability

Variable	Average Variance Extracted	Cronbach's Alpha	Composite Reliability
Knowledge-Sharing	0.565	0.930	0.940
Organizational Creativity	0.679	0.882	0.913
Organizational Innovation	0.859	0.837	0.924

Cronbach's Alpha and the composite reliability value can be used for a reliability test. Cronbach's Alpha, also known as the composite reliability value, is more significant than 0.7, while 0.6 is still considered to have qualified reliability testing. The research variable is dependable since each variable has a composite reliability value higher than 0.7 and a Cronbach's Alpha value larger than 0.6. Figure 2 displays the outcome of the PLS route model.

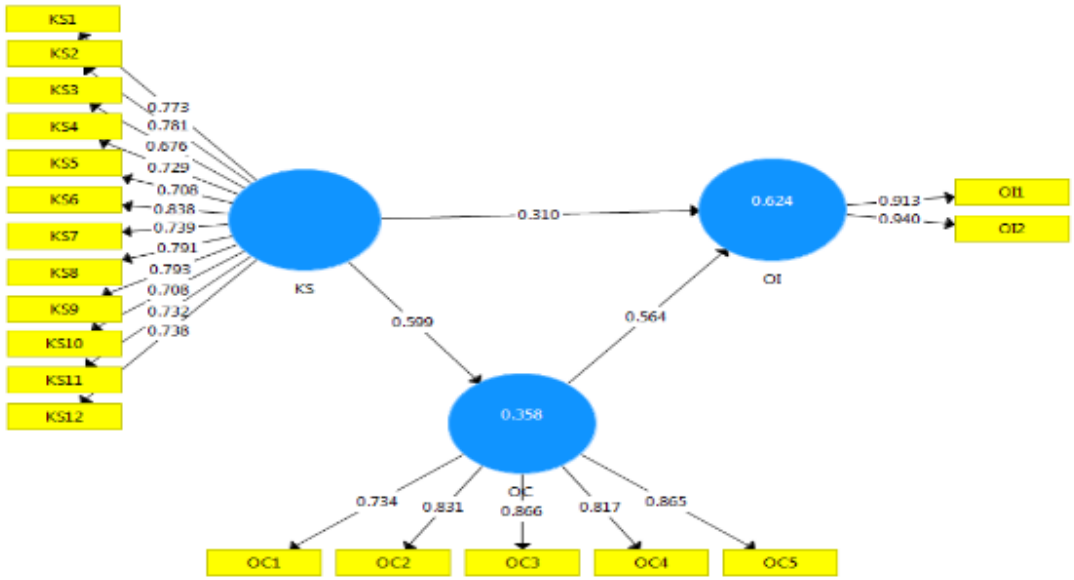

Figure 2. PLS path model

The value of R^2 shows the magnitude of the influence of the dependent variable, which the independent variable can explain. The variables' R^2 value is displayed in Table 6. Q^2 predictive relevance is used to measure the constructed model by measuring how well the model and its parameter estimation generate the observed value. The Q^2 value is more than zero, indicating that the model has predictive relevance. The value of $Q^2 = 1 - ((1 - 0.358) \times (1 - 0.624)) = 0.7586$. The value of Q^2 in this study is 0.7586, which shows that the structural model of this study has a good predictive relevance of 75.86%. In comparison, the remaining 24.14% is explained by other variables outside the research model.

Table 6. R^2 Value

Variable	R-square (R^2)
Organizational Creativity	0.358
Organizational Innovation	0.624

If mediating variables are not considered, the value of Q^2 knowledge-sharing on organizational innovation equals the R^2 value for the organizational innovation variable, which is only 62.4%. However, after including the mediating variables, the value of Q^2 in this study is 75.86%. This shows that in the presence of mediation variables, the structural model of this study has better predictive relevance with a reduced error rate.

Hypothesis testing is done by comparing t-statistic and t-table, with the t-statistic value of 1.96 or higher indicating a significant correlation on 0.05 significance level. Based on Table 7, the testing of the first hypothesis shows a significant result, which suggests that knowledge-sharing has a significant positive impact on organizational innovation, which can be seen from the t-statistic 3.047 > 1.96 and the value of the path coefficient of 0.310. Testing of the second hypothesis shows a significant result, indicating knowledge-sharing has a significant positive impact on organizational creativity; this can be seen from the value of t-statistic 7.696 > 1.96 and the value of path coefficient of 0.599. Testing of the third hypothesis shows a significant result, indicating organizational creativity has a significant positive impact on organizational innovation; this can be seen from the value of t-statistic 5.372 > 1.96 and the value of path coefficient of 0.564.

Table 7. Path coefficient and t-values

Variable	Path Coefficient	Standard Deviation	t-statistic
KS → OI	0.310**	0.102	3.047
KS → OC	0.599**	0.078	7.696
OC → OI	0.564**	0.105	5.372

Notes: **p < 0.05

Based on Table 8, knowledge-sharing has significant direct and indirect influences on organizational innovation; in other words, there is a partial mediation effect. The direct impact of knowledge-sharing on organizational innovation is 0.310. The indirect effect of knowledge-sharing on organizational innovation through creativity is 0.338. Increasing knowledge-sharing will increase organizational creativity, and increasing organizational creativity will improve organizational innovation. The direct impact of knowledge-sharing on organizational innovation is smaller than the indirect effect of knowledge-sharing on organizational innovation, meaning that organizational creativity is a good mediator. The existence of mediating variables implies that the influence of knowledge-sharing on organizational innovation is not only its direct effect of 0.310 but is increased to 0.648.

Table 8. Specific effects among variables

Variable	Path Coefficient	Standard Deviation	t-statistic
KS → OC → OI	0.338	0.060	5.649
KS → OI	0.648	0.079	8.161
KS → OC	0.599	0.078	7.696
OC → OI	0.564	0.105	5.372

Knowledge-sharing (vertical and horizontal relationship) has a positive influence on organizational innovation (Wen & Qiang, 2016; Abbas et al., 2019; Cundawan et al., 2021). These results illustrate that knowledge-sharing by start-up companies, both knowledge-donating and knowledge-collecting, can improve organizational innovation. They also align with the Resource-Based View (RBV) theory.

By giving workers a place to access and share knowledge, organizations can improve innovation outcomes and overall performance (Wang et al., 2024). Employee knowledge and experience sharing will boost the business's capacity for innovation and become the company's unique assets for achieving a competitive edge (Abbas et al., 2019; Hendi et al., 2022). By effectively sharing knowledge, businesses can better use their resources and adapt to changing circumstances (Gupta et al., 2018). Leaders and employees of start-up companies should not be quickly satisfied with their knowledge or skills because the environment's development, especially technology, is getting faster, demanding leaders and employees to continue to learn and find the latest information and skills.

Knowledge sharing among staff members builds trust and encourages corporate innovation. Because of this trust, creative ideas can be shared without worrying about adverse reactions. Start-up businesses, particularly those in Surabaya, should consider sharing expertise. Organizations must enhance their human resources management to balance employees' needs and the organization's capabilities and demands and foster positive collaboration among employees. This will increase the amount of knowledge that people can provide.

Start-up companies often experience significant failures in the early days of their establishment; knowledge-sharing can minimize those failures and avoid repeating mistakes in the organization (Azeem et al., 2021). Knowledge-sharing can prevent owners from being ignorant of new things, information, or skills. It helps start-up companies innovate through process innovations in production and operational effectiveness and product innovation in the form of product and service innovations (Idrees et al., 2023). This research also responds to a previous study conducted by Wang & Noe (2010), which suggested researching knowledge-sharing with others related to the relationship between employees (horizontal) and leaders to employees and employees to leaders (vertical) in the organization.

Knowledge-sharing has a positive influence on organizational creativity (Kim & Park, 2015; Hussain et al., 2017; Nugroho, 2023). These collaborative exchanges of ideas, knowledge, experience, and thoughts lead to creativity in the workplace (Giustiniano et al., 2016). According to Chen et al. (2021), the primary drivers of creativity are financial resources, organizational support, creative problem-solving, and

knowledge exchange among employees.

Participants in the knowledge-sharing process typically have similar language and attitudes, which can foster mutual trust and have been demonstrated to have a good impact on creativity (Bidault & Castello, 2009). These results align with the social exchange theory (Khan & Niazi, 2023). Team members in an organization develop closer bonds and greater trust when they regularly exchange expertise (Khan & Niazi, 2023). This trust fosters a creative environment, increasing people's willingness to share novel ideas without worrying about backlash (Khan & Niazi, 2023). Finally, knowledge-sharing carried out by start-up companies, both knowledge-donating and knowledge-collecting dimensions, can create and utilize new ideas to improve organizational creativity by promoting value creation and developing an organic learning culture (Ciulli & Kolk, 2019; Khan & Niazi, 2023).

Organizational creativity has a positive influence on organizational innovation (Sutanto, 2017; Hughes et al., 2018; Chaubey et al., 2022). Individual perspective-taking and a supportive team environment strengthen the connection between organizational innovation and personal creativity (Litchfield et al., 2015). Innovative and valuable ideas can be produced by creative people, which fosters group creativity (Chaubey et al., 2022). However, it needs to be supported by organizational elements such as atmosphere and resources (Rumanti et al., 2023). These results illustrate that organizational creativity carried out by start-up companies can increase organizational innovation both from product innovation and process innovation.

Start-ups have different stages of development: discovery, validation, efficiency, measurement, forwarding, and conservation (Salamzadeh & Kesim, 2017). In every stage of development, organizational creativity in the form of creative ideas, new ideas, and the utilization of new ideas are required to increase the organizational innovation of start-up companies. These creative ideas in the change process can improve organizational innovation, from problem-making and formulation to problem-solving and implementing solutions. These creative ideas will be product innovation and process innovation in start-up companies. The importance of organizational innovation in start-up companies can be a tool to face intense business competition by conducting product and process innovation.

The ambidexterity perspective explains organizational creativity's relationship with organizational innovation, which includes exploration and exploitation (Sarooghi et al., 2015). Exploration involves searching for new knowledge and ideas and taking risks, which is closely linked to creativity. Exploitation focuses on refining existing knowledge, improving efficiency, and implementing well-known processes where innovation happens. A successful organization needs to balance exploration and exploitation by encouraging a blend of creative thinking and practical implementation where innovative solutions can thrive. This balance helps organizations to maintain continuous innovation without sacrificing productivity, adapt to changes, and stay competitive.

In practice, start-ups should promote inquiry and knowledge sharing through workshops, group projects, or focus groups. Employee knowledge-sharing promotes organizational innovation and trust, allowing creative ideas to be shared without worrying about negative consequences. Start-ups, particularly those in Surabaya, should share their knowledge and enhance human resource management to balance the firm's expectations and its employees. Staying current with the newest technological advancements and engaging in ongoing learning is imperative to improve production and operational performance and prevent recurring errors. Also, start-ups must create distinctive value goods, stay abreast of technology developments, and recognize and reward staff members for their innovative ideas. Individual perspective-taking and a positive team atmosphere foster organizational creativity, which produces insightful concepts that propel innovation. Innovations are created by considering existing resources, increasing productivity, and boosting start-up efficacy.

Conclusions, suggestions and limitations

Based on the research analysis and discussion results, there is a positive effect between knowledge-sharing on organizational innovation, knowledge-sharing on organizational creativity, and organizational creativity on organizational innovation. Start-up companies need to consider knowledge-sharing (vertical and horizontal relationship) that can minimize the potential of failure and always be creative and innovative in creating new products or services to have a competitive advantage. Knowledge-sharing is vital in start-up companies because it can help them exchange new information, knowledge, and skills. Knowledge-sharing, organizational creativity, and organizational innovation in start-up companies through technology

development can be tools for facing intense business competition, which aligns with the Resource-Based View (RBV) theory.

Employees sharing knowledge creates an environment of trust, fostering organizational creativity. This trust encourages the exchange of innovative ideas without fear of backlash. Start-up companies, especially in Surabaya, need to consider the dimension of knowledge-donating. Organizations need to improve their human resources management to realize the balance between the needs of employees and the demands and capabilities of the organization and to have good cooperation between employees and other employees so that knowledge-donating increases.

Furthermore, a culture of continuous learning and staying updated with the latest information and skills is essential for avoiding repeated mistakes and fostering innovation in production and operational effectiveness. Start-up companies also need to pay attention to utilizing new technologies, keep up with the development of technology, and be able to use it so that the utilization of latest technology increases. This can be done by studying the creation of websites or using Facebook ad services; technology certainly needs to adjust to the needs of start-up companies. Start-up companies also must focus on developing unique value products that have an advantage over competitors. They should continuously improve organizational innovation so that they can create new products and services (product innovation) and improve their production and operational effectivity (process innovation) to compete with other companies, for example, by giving rewards to employees who provide creative ideas so that they can be encouraged and brainstorming. Organizational creativity, supported by individual perspective-taking and a supportive team environment, leads to the generation of valuable ideas that drive organizational innovation. Balancing exploration and exploitation, as explained by the ambidexterity perspective, is crucial for maintaining a continuous flow of innovation while efficiently implementing new ideas.

Based on the existing data, the respondents are overrepresented by start-ups whose business fields are engaged in e-commerce and service in Surabaya, Indonesia. This study found that other variables influence 24.14% of organizational innovation variables. Therefore, for future research, consider examining independent variables outside this research, such as learning orientation, personal leadership, internal management, and other variables that influence organizational innovation in start-up companies.

Competing Interests

The author(s) declare that there are no competing interests relevant to the content of this article.

References

Abbas, J., Hussain, I., Hussain, S., Akram, S., Shaheen, I., & Niu, B. (2019). The impact of knowledge sharing and innovation on sustainable performance in Islamic banks: A mediation analysis through a SEM approach. *Sustainability (Switzerland)*, *11*(15), 1–25. https://doi.org/10.3390/su11154049

Adieb, M. (2021). *Ini Dia 5 Contoh Startup Surabaya yang Berkembang Pesat*. Glints. https://glints.com/id/lowongan/startup-surabaya/

Ahmad, F., & Karim, M. (2019). Impacts of knowledge sharing: a review and directions for future research. *Journal of Workplace Learning*, *31*(3), 207–230. https://doi.org/10.1108/JWL-07-2018-0096

Alves, M. F. R., Galina, S. V. R., & Dobelin, S. (2018). Literature on organizational innovation: past and future. *Innovation and Management Review*, *15*(1), 2–19. https://doi.org/10.1108/INMR-01-2018-001

Anderson, N., Potočnik, K., & Zhou, J. (2014). Innovation and Creativity in Organizations: A State-of-the-Science Review, Prospective Commentary, and Guiding Framework. *Journal of Management*, *40*(5), 1297–1333. https://doi.org/10.1177/0149206314527128

Azeem, M., Ahmed, M., Haider, S., & Sajjad, M. (2021). Expanding competitive advantage through organizational culture, knowledge sharing and organizational innovation. *Technology in Society*, *66*(January), 101635. https://doi.org/10.1016/j.techsoc.2021.101635

Basadur, M. (1997). Organizational development interventions for enhancing creativity in the workplace. *Journal of Creative Behavior*, *31*(1), 59–72. https://doi.org/10.1002/j.2162-6057.1997.tb00781.x

Battisti, G., & Stoneman, P. (2010). How innovative are UK firms? Evidence from the fourth UK community innovation survey on synergies between technological and organizational innovations. *British Journal of Management*, *21*(1), 187–206. https://doi.org/10.1111/j.1467-8551.2009.00629.x

Bidault, F., & Castello, A. (2009). Trust and creativity: Understanding the role of trust in creativity-oriented joint developments. *R and D Management*, *39*(3), 259–270. https://doi.org/10.1111/j.1467-9310.2009.00557.x

Bodla, A. A., Tang, N., Jiang, W., & Tian, L. (2018). Diversity and creativity in cross-national teams: The role of team knowledge sharing and inclusive climate. *Journal of Management and Organization*, *24*(5), 711–729. https://doi.org/10.1017/jmo.2016.34

Brook, J. W., & Pagnanelli, F. (2014). Integrating sustainability into innovation project portfolio management - A strategic perspective. *Journal of Engineering and Technology Management - JET-M*, *34*, 46–62. https://doi.org/10.1016/j.jengtecman.2013.11.004

Chaubey, A., Sahoo, C. K., & Das, K. C. (2022). Examining the effect of training and employee creativity on organizational innovation: a moderated mediation analysis. *International Journal of Organizational Analysis*, *30*(2), 499–524. https://doi.org/10.1108/IJOA-06-2020-2271

Chen, Y., Yu, C., Yuan, Y., Lu, F., & Shen, W. (2021). The Influence of Trust on Creativity: A Review. *Frontiers in Psychology*, *12*(August). https://doi.org/10.3389/fpsyg.2021.706234

Chua, K., Thinakaran, R., & Vasudevan, A. (2023). Knowledge Sharing Barriers in Organizations - A Review. *TEM Journal*, *12*(1), 184–191. https://doi.org/10.18421/TEM121-24

Ciulli, F., & Kolk, A. (2019). Incumbents and business model innovation for the sharing economy: Implications for sustainability. *Journal of Cleaner Production*, *214*, 995–1010. https://doi.org/10.1016/j.jclepro.2018.12.295

Cramer, R. D. (1993). Partial Least Squares (PLS): Its strengths and limitations. *Perspectives in Drug Discovery and Design*, *1*(2), 269–278. https://doi.org/10.1007/BF02174528

Cundawan, A., Marchyta, N. K., & Santoso, T. (2021). Mediating effect of creative self-efficacy on the influence of knowledge sharing towards innovative work behavior among millennial knowledge workers. *Jurnal Manajemen Dan Pemasaran Jasa*, *14*(2), 149–164. https://doi.org/10.25105/jmpj.v14i2.8873

Deng, P., & Lu, H. (2022). Transnational knowledge transfer or indigenous knowledge transfer: which channel has more benefits for China's high-tech enterprises? *European Journal of Innovation Management*, *25*(2), 433–453. https://doi.org/10.1108/EJIM-07-2020-0269

Fatimah, N., Wahyono, D., Hamdi, & Kustiningsih, N. (2022). Resilience in the Development of Start Up in Indonesia Based on Job Demand Resource and Behavior Intention Perspective. *International Journal of Engineering Technologies and Management Research*, *9*(4), 19–35. https://doi.org/10.29121/ijetmr.v9.i4.2022.1127

Ferdinand, A. (2014). *Metode Penelitian Manajemen*. Universitas Diponegoro.

Giustiniano, L., Lombardi, S., & Cavaliere, V. (2016). How knowledge collecting fosters organizational creativity. In *Management Decision* (Vol. 54, Issue 6). https://doi.org/10.1108/MD-04-2015-0111

Gupta, G., Tan, K. T. L., Ee, Y. S., & Phang, C. S. C. (2018). Resource-based view of information systems: Sustainable and transient competitive advantage perspectives. *Australasian Journal of Information Systems*, *22*, 1–10. https://doi.org/10.3127/ajis.v22i0.1657

Hendi, Basri, Y. Z., & Arafah, W. (2022). Analysis of the Relationship between Resource-Based View and Knowledge Management with Firm Performance. *Journal of Research in Business and Management*, *10*(2), 8–13. www.questjournals.org

Herli. (2018). *Menuju era baru pertumbuhan start up di Surabaya*.

Hon, A. H. Y., & Lui, S. S. (2016). Employee creativity and innovation in organizations: Review, integration, and future directions for hospitality research. *International Journal of Contemporary Hospitality Management*, *28*(5), 862–885. https://doi.org/10.1108/IJCHM-09-2014-0454

Hughes, D. J., Lee, A., Tian, A. W., Newman, A., & Legood, A. (2018). Leadership, creativity, and innovation: A critical review and practical recommendations. *Leadership Quarterly*, *29*(5), 549–569. https://doi.org/10.1016/j.leaqua.2018.03.001

Hussain, S. T., Abbas, J., Lei, S., Jamal Haider, M., & Akram, T. (2017). Transactional leadership and organizational creativity: Examining the mediating role of knowledge sharing behavior. *Cogent Business and Management*, *4*(1). https://doi.org/10.1080/23311975.2017.1361663

Idrees, H., Xu, J., Haider, S. A., & Tehseen, S. (2023). A Systematic Review of Knowledge Management and New Product Development Projects: Trends, Issues, and Challenges. *Journal of Innovation & Knowledge*, *8*(100350), 1–10.

Jogiyanto, & Abdillah, W. (2019). *Konsep & Aplikasi PLS (Partial Least Square) untuk Penelitian Empiris*. BPFE-Yogyakarta.

Khan, T. A., & Niazi, A. (2023). Knowledge Sharing and Creativity: A Systematic Literature Review. *NUST Business Review*, *4*(2), 1–20. https://doi.org/10.37435/nbr22122201

Kim, S. J., & Park, M. (2015). Leadership, knowledge sharing, and creativity: The key factors in nurses' innovative behaviors. *Journal of Nursing Administration*, *45*(12), 615–621. https://doi.org/10.1097/NNA.0000000000000274

Kremer, H., Villamor, I., & Aguinis, H. (2019). Innovation leadership: Best-practice recommendations for promoting employee creativity, voice, and knowledge sharing. *Business Horizons*, *62*(1), 65–74. https://doi.org/10.1016/j.bushor.2018.08.010

Liao, S. H., Fei, W. C., & Chen, C. C. (2007). Knowledge sharing, absorptive capacity, and innovation capability: An empirical study of Taiwan's knowledge-intensive industries. *Journal of Information Science*, *33*(3), 340–359. https://doi.org/10.1177/0165551506070739

Lin, H. (2007). Knowledge sharing and firm innovation capability: an empirical study. *International Journal of Manpower*, *28*(3/4), 315–332. https://doi.org/10.1108/01437720710755272

Litchfield, R. C., Ford, C. M., & Gentry, R. J. (2015). Linking Individual Creativity to Organizational Innovation. *Journal of Creative Behavior*, *49*(4), 279–294. https://doi.org/10.1002/jocb.65

Martins, E. C., & Terblanche, F. (2003). Building organisational culture that stimulates creativity and innovation. *European Journal of Innovation Management*, *6*(1), 64–74. https://doi.org/10.1108/14601060310456337

Naqbi, E. Al, Alshurideh, M., AlHamad, A., & Kurdi, B. Al. (2020). The Impact of Innovation on Firm Performance: A Systematic Review. *International Journal of Innovation, Creativity and Change*, *14*(5), 31–58.

Naqshbandi, M. M., Oliva, F. L., Fontana, S., & Aura, C. (2024). Knowledge exchanges for collaborative innovation and organizational effectiveness: insights from Indian enterprises. *Journal of Knowledge Management*, *28*(10), 2889–2911. https://doi.org/10.1108/jkm-01-2024-0090

Nugroho, R. A. (2023). Enhancing Innovation Behavior of Digital Start-up Employees: The Role of Knowledge Sharing and Creativity. *International Research Journal of Economics and Management Studies*, *2*(2), 50–63. https://doi.org/10.56472/25835238/IRJEMS-V2I2P106

Park, Y., & Joo, B.-K. (2022). Determinants of Knowledge Sharing: The Roles of Learning Organization Culture, Empowering Leadership, and Learning Goal Orientation. *International Journal of Applied Management and Technology*, *21*(1), 47–60. https://doi.org/10.5590/ijmat.2022.21.1.04

Pinarbasi, F., Sonmez Cakir, F., Güner Gültekin, D., Yazici, M., & Adiguzel, Z. (2024). Examination of the effects of value creation, intellectual property and organizational creativity on artificial intelligence focused enterprises. *Business Process Management Journal*, *30*(1), 317–337. https://doi.org/10.1108/BPMJ-07-2023-0551

Rumanti, A. A., Rizana, A. F., & Achmad, F. (2023). Exploring the role of organizational creativity and open innovation in enhancing SMEs performance. *Journal of Open Innovation: Technology, Market, and Complexity*, *9*(2), 100045. https://doi.org/10.1016/j.joitmc.2023.100045

Salamzadeh, A., & Kesim, H. K. (2017). The enterprising communities and start-up ecosystem in Iran. *Journal of Enterprising Communities: People and Places in the Global Economy*, *11*(4), 1750–6204. https://doi.org/10.1108/JEC-07-2015-0036

Sarooghi, H., Libaers, D., & Burkemper, A. (2015). Examining the relationship between creativity and innovation: A meta-analysis of organizational, cultural, and environmental factors. *Journal of Business Venturing*, *30*(5), 714–731. https://doi.org/10.1016/j.jbusvent.2014.12.003

Sitepu, S. N. B. (2017). Pengaruh Faktor Internal terhadap Keberhasilan Start-up Bisnis di Kota Surabaya. *Jurnal Manajemen Teori Dan Terapan*, *10*(1), 37.

StartupBlink. (2024a). *The Startup Ecosystem of Jakarta*. Www.Startupblink.Com. https://www.startupblink.com/startup-ecosystem/jakarta-id?page=1

StartupBlink. (2024b). *The Startup Ecosystem of Surabaya*. Www.Startupblink.Com. https://www.startupblink.com/startup-ecosystem/surabaya-id?page=1

Statista Research Department. (2023). *Startups in Indonesia - statistics & facts*. https://www.statista.com/topics/10216/startups-in-indonesia/#topicOverview

Supriyatno, H. (2020). *Jawa Timur Kembangkan Industri Ekonomi Digital*. https://www.harianbhirawa.co.id/jawa-timur-kembangkan-industri-ekonomi-digital/

Sutanto, E. M. (2017). The influence of organizational learning capability and organizational creativity on organizational innovation of Universities in East Java, Indonesia. *Asia Pacific Management Review*, *22*(3), 128–135. https://doi.org/10.1016/j.apmrv.2016.11.002

Van Den Hooff, B., & Ridder, J. A. (2004). Knowledge sharing in context: The influence of organizational commitment, communication climate and CMC use on knowledge sharing. *Journal of Knowledge Management*, *8*(6), 117–130. https://doi.org/10.1108/13673270410567675

Wang, C., Chen, K., Feng, J., & Chen, J. (2024). Donating or collecting? Differential impact mechanisms of knowledge sharing through enterprise social media on employees' innovative work behavior. *Information Technology and People*. https://doi.org/10.1108/ITP-01-2024-0003

Wang, S., & Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. *Human Resource Management Review*, *20*(2), 115–131. https://doi.org/10.1016/j.hrmr.2009.10.001

Wen, Q., & Qiang, M. (2016). Coordination and Knowledge Sharing in Construction Project-Based Organization: A Longitudinal Structural Equation Model Analysis. *Automation in Construction*, *72*, 309–320. https://doi.org/10.1016/j.autcon.2016.06.002

Wiraning, B. (2024). *Jakarta Peringkat 27 Kota dengan Ekosistem Startup Terbaik di Indonesia*. Indiekraf. https://indiekraf.com/jakarta-peringkat-27-kota-dengan-ekosistem-startup-terbaik-di-indonesia/

Yeboah, A. (2023). Knowledge sharing in organization: A systematic review. *Cogent Business and Management*, *10*(1). https://doi.org/10.1080/23311975.2023.2195027

Zhao, S., Jiang, Y., Peng, X., & Hong, J. (2020). Knowledge sharing direction and innovation performance in organizations: Do absorptive capacity and individual creativity matter? *European Journal of Innovation Management*, *24*(2), 371–394. https://doi.org/10.1108/EJIM-09-2019-0244

This page intentionally left blank