THE INFLUENCE OF SUSTAINABLE TECHNOLOGY, ABSORPTIVE CAPACITY ON SMES' INNOVATIVE PERFORMANCE THROUGH ECO-INNOVATION IN CULINARY SMES' IN EAST JAVA

Oleh
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Abstract: *The great potential of culinary SMEs in East Java is still experiencing obstacles in aspects of technology, product quality, synergy, and infrastructure. This research uses a quantitative intervening model with Sustainable Technology (X1), Absorptive Capacity (X2), Eco-Innovation (Z), and Innovative Performance SMEs (Y) to improve the innovative performance of culinary SMEs in a sustainable manner. The test results show that Sustainable Technology has a significant effect on the innovative performance of SMEs, while Absorptive Capacity and Eco-Innovation do not have a significant effect. Therefore, strategies are needed such as investing in sustainability technology, building connectivity of computing services, providing product research and development programs, collaborating with local communities and related culinary industry players, and ensuring the cleanliness and safety of culinary SME products. By implementing this strategy, it is hoped that culinary SMEs in East Java can improve their innovative performance and business sustainability, so that they can compete in an increasingly competitive market*

PENDAHULUAN

The rise of Society 5.0 has become a model of strategic challenges for all companies around the world, including micro, small and medium enterprises (SMEs) in East Java Province (Y. Jiang, 2021). Pacitan has the highest number of SMEs with 40,441 SMEs, while Madiun has the lowest with 10,299 companies. While Pamekasan has the highest number of

employees as many as 453,547 people, and Magetan the lowest as many as 34,248 people. In terms of production value, Sidoarjo has the highest value of 6,163,958,314 thousand rupiah, and the lowest Ngawi of 923,374,530 thousand rupiah. Overall, East Java Province has a total of 862,450 companies with 2,380,673 employees and a total production value of 84,938,207,342 thousand rupiah, further confirming the importance of SMEs in the province (BadanPusatStatistik, 2019).

Culinary SMEs in Indonesia, especially in East Java, are one of the sectors that are very potential and growing rapidly. However, there are still many obstacles in aspects of technology, product quality, synergy, and infrastructure Many culinary businesses in Indonesia have not adopted technology well, including in terms of production management, inventory management, or marketing (Komari et al., 2019, 2021, 2020). This causes a gap between the culinary industry and other industries in terms of efficiency and productivity that will be calibrated with absorptive capacities as exogenous constructs. Although there are many culinary business people who have emerged, there is still a gap between business people who produce high-quality products and business people who only want to seek profit without paying attention to the quality of the products produced (Ginés-Ariza et al., 2022; Zulfikar & Asnawi, 2019). Lack of synergy between culinary business people and the government, educational institutions, or other business people (Djunaedi, 2016; Panjaitan & Djunaedi, 2017). This makes it difficult for business people to obtain support from related parties in terms of product development, technology, or capital. There are still many regions in Indonesia that do not have adequate infrastructure for the culinary industry, such as access to raw materials, hampered product delivery, or difficult access to a wider market (Holger, 2007; Leitão et al., 2023). This is an obstacle for culinary business people to develop their business further.

To strengthen the role of technology adoption, the performance of culinary actors in SMEs, increasing synergy and infrastructure performance of SMEs, new contributions are needed by developing a conceptual framework that includes Sustainable Technology (X1), Absorptive Capacity (X2), Eco-Innovation (Z), and Innovative Performance SMEs (Y) as important factors to improve the competitiveness and sustainability of the East Java Culinary SME sector. By exploring the relationship between these factors, this study aims to provide practical insights for SMEs in implementing sustainable business practices, adopting environmentally friendly innovations as intervening models, increasing absorption capacity, and achieving innovative performance goals.

This research has significant implications for policymakers, managers, and entrepreneurs in the culinary industry, as it provides a comprehensive framework to support the growth and development of SMEs in East Java, while addressing sustainability challenges and global competition.

LITERATURE REVIEW

Technology capabilities need to improve ambidexterity, resilience, SME performance and government support is also important (Trieu et al., 2023). This combination can reduce costs and improve the environmental, financial and social performance of SMEs

comprehensively (Al-Sharafi et al., 2023). Existing technologies with the dynamic development of organizations can create new knowledge among industry practitioners and encourage environmentally friendly innovations (Costa Melo et al., 2023; Shamsuzzoha et al., 2023). This also bridges capital level inclusion, where SMEs with low financial literacy can utilize financial products and services through digital technology that increases sales of their products (Hasan & Rahman, 2023; Nugraha et al., 2022). Technology that is put to good use has an impact on environmentally friendly innovation as a potential for SMEs that are able to perform well (Ismail et al., 2023; Polas et al., 2023). With the role of technology associated with the performance of SMEs, automatically the absorption of resources has the potential to increase validation by 96% (Carrasco-Carvajal et al., 2023; Ismail et al., 2023; Leitão et al., 2023; Riquelme-Medina et al., 2022; Teixeira et al., 2023). The absorption capacity process, introduced and integrated into the framework, shows a potential of 85.3% with more than 20 years of community operation to capture the heterogeneity of absorption capacity comprehensively from existing industries (Müller et al., 2021; Truong & Nguyen, 2023; Weidner et al., 2023). With the Absorptive Capacity will be applied to SMEs in East Java, because its accuracy is more appropriate for SMEs that are still developing (M. S. Khan, 2022).

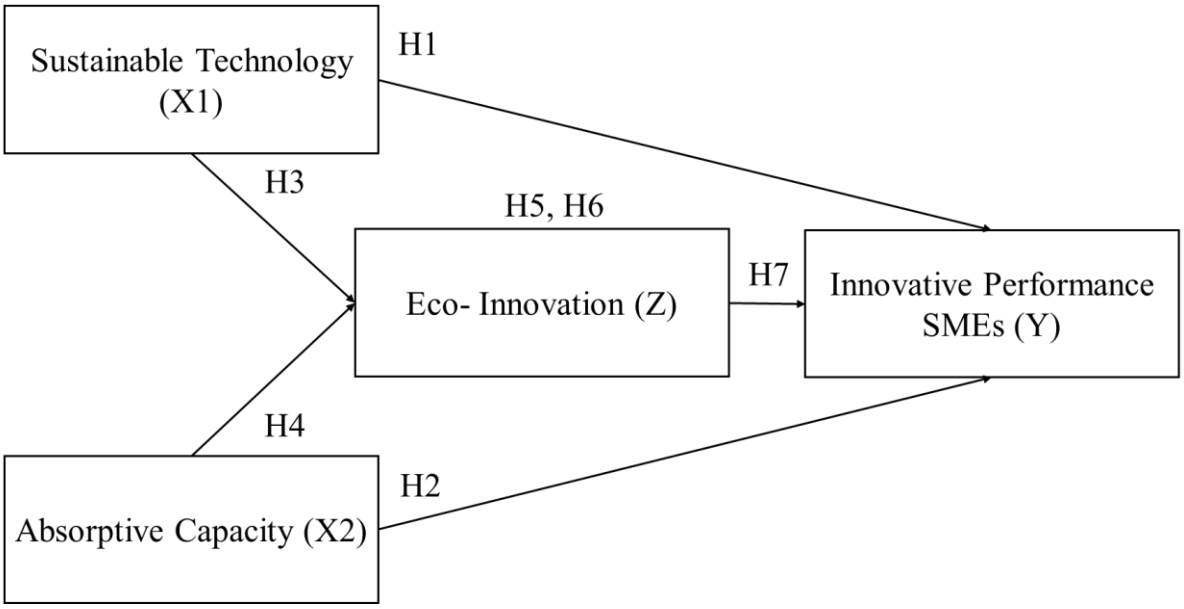

Figure 1. Intervening Model Design

References : (Al-Hakimi et al., 2021; Carrasco-Carvajal et al., 2023; Costa et al., 2023; Hasan & Rahman, 2023; Ismail et al., 2023; M. S. Khan, 2022; Lee, 2023; Litos et al., 2023; Teixeira et al., 2023)

Hipotesis yang dibangun sebagai berikut:

H1 : Sustainable technology Effect on innovative performance SMEs

H2 : Absorptive capacity Effect on innovative performance SMEs

H3 : Sustainable technology Effect on eco- innovation
H4 : Absorptive capacity Effect on eco- innovation
H5 : Sustainable technology Effect on innovative performance SMEs through eco-innovation
H6 : Absorptive capacity Effect on innovative performance SMEs through eco-innovation
H7 : eco- innovation Effect on innovative performance SMEs

METHODS

A. Research Design

This research design uses quantitative intervening models (Mata et al., 2023; Zahoor et al., 2023). This model is an effort to provide accuracy of the impact of exogenous constructs on endogenous constructs (Alqershi et al., 2020; Hasan & Rahman, 2023; Musyaffi et al., 2021; Nugraha et al., 2022). This research with agile design states that eco-innovation as an intervening model, sustainable technology and absorptive capacity as exogenous constructs and innovative performance SMEs as endogenous constructs.

B. Population, Sample Technique and Sample Size

The study population used East Java SMEs with the largest city. The largest cities selected as samples were Kediri, Blitar, Malang and Surabaya. Each city has the number of Culinary SMEs determined by the Proportionate Stratified Random Sampling sampling method, as follows.

Table 1. Sampling Technique

SMEs	Ni	Sampling
Kediri	**4.007**	**22**
Blitar	**3.714**	**20**
Malang	**13.111**	**72**
Surabaya	**15650**	**86**
Sampel Total	**36482**	**200**

(Source: processing data from BPS, 2023)

The number of selected samples was 200 owners of culinary SMEs from the 4 major cities. Operational Variables

This study uses constructs, definitions with accurate references. Each construct uses a Likert scale with intervals of 1 to 5 for quantitative assessment.

a. Sustainable Technology (X1) is the organization and utilization of resources from technological sustainability and additional capabilities in achieving the goals of the culinary industry in East Java (Shamsuzzoha et al., 2023). Consists of technical, managerial, and practical skills to develop and operate dynamic technology applications and manage changes in the business environment (Al-Sharafi et al., 2023; Trieu et al., 2023), with construct items as follows.
    1. Massive investment in building technology sustainability infrastructure with code X11 (Alfian Pradana et al., 2020; Komari, 2023; Trieu et al., 2023)
    2. Connectivity of computing services each of the availability of culinary products with codes X12 (Al-Sharafi et al., 2023)

3. Technology expertise in improving SEO of culinary products with code X13(Shamsuzzoha et al., 2023)
4. Multi-layered security protection for technological sustainability in culinary product communication media with code X14 (Parrilli et al., 2023)
5. Decision-making facilities of trending culinary products to be produced more with code X15 (Nugraha et al., 2022).
6. Consistency in applying the sales algorithm of culinary products marketed with the X16 code (Khalil et al., 2022)

b. Absorptive Capacity (X2) is the extent to which an organization can acquire and utilize knowledge from external sources. By having good absorption capacity, organizations can maximize the benefits of coopetition strategies in improving performance and competitiveness (Hurtado-Palomino et al., 2022; A. Khan et al., 2022; Riquelme-Medina et al., 2022), with construct items as follows.
    1. Research and development efforts of products needed by consumers with the code X21 (Andarini &; Laely, 2019; Djunaedi et al., 2022; Nurlaely et al., 2019; Weidner et al., 2023)
    2. Training efforts with qualification programs for production teams with the code X22 (Abdurrahman et al., 2020; Indrasari et al., 2020; A. Khan et al., 2022; Lestari, 2018)
    3. Job rotation learning efforts with a qualification program for production teams with the code X23 (Abdurrahman et al., 2020; Indrasari et al., 2020; A. Khan et al., 2022; Lestari, 2018)
    4. Incentive structure for all teams involved in the culinary industry to increase product innovation for better culinary industry performance with code X24 (Costa et al., 2023; Mata et al., 2023)
    5. Cultural and innovation facilities for all teams involved in the upstream to downstream process and vice versa with the code X25 (Ismail et al., 2023; Teixeira et al., 2023)
    6. Specific customer service experience from evaluation of information systems used, taste of products consumed to evaluation for culinary product innovation needs with code X26 (Al-Hakimi et al., 2021; Carrasco-Carvajal et al., 2023)

c. Eco-Innovation (Z) is a way of assisting SMEs in accessing new markets and increasing productivity, attracting new investments, increasing profitability across the value chain, and staying ahead of rules and standards (Bhatti et al., 2023; Calvo et al., 2022). Eco-innovation also has dual externalities (Bhatti et al., 2023; Parrilli et al., 2023), namely improving organizational performance by reducing negative environmental impacts. While increasing positive knowledge externalities with the adoption and diffusion of innovative green technologies by other companies (Calafat-Marzal et al., 2023), with the following construct items.
    1. Commitment to protect involved entities such as investors, suppliers, communities, and fully involved parties with Z1 code (Adomako &; Nguyen, 2023; Pozzo, 2022; Srisathan et al., 2023).

2. Increase the efficiency of activities to protect the environment and society with the Z2 code (Hasan &; Rahman, 2023; Lee, 2023; Lidiawan et al., 2021; Panjaitan &; Djunaedi, 2017).
3. Designing strategies to streamline resources and improve the welfare of all teams involved in the culinary industry with the Z3 code (Chang-Muñoz et al., 2021; Truong &; Nguyen, 2023).
4. Re-using the components and reducing chemical waste with the code Z4 (Costantini et al., 2023; Litos et al., 2023; Srisathan et al., 2023).
5. Green management for a healthy environment with code Z5 (Chaparro-Banegas et al., 2023; Srisathan et al., 2023).
6. Appropriate managerial for institutions related to a healthy environment with Z6 code (Chaparro-Banegas et al., 2023; Srisathan et al., 2023).

d. Innovative Performance SMEs (Y) closely related to product innovation in accordance with the market, the application of effective and efficient production processes, dynamic systems with targeted marketing strategies, and adaptive organizational development will contribute to improving the performance and competitiveness of culinary SMEs in East Java, with the following construct items.
   1. Our online channel investment is an overall success with code Y1 (Ballerini et al., 2023; Gao & Ren, 2023; Puspitawati et al., 2022)
   2. Our online channel success exceeds expectations with code Y2 (Ballerini et al., 2023; Komari et al., 2017; Laely et al., 2022; Lynch & Ferasso, 2023)
   3. Our online channel adds substantial value to our products and services with code Y3 (Andarini et al., 2020; Ballerini et al., 2023; Ismail et al., 2023)
   4. High capital turnover with high profits for the right culinary product innovation with with code (Costantini et al., 2023; Laely, 2020; Salfore et al., 2023)
   5. The basis of performance measurement is more objective for the accuracy of the sustainability of the culinary industry in the future with code Y5 (Hasan & Rahman, 2023; Litos et al., 2023)
   6. Monthly evaluation of innovations that have been implemented with code Y6 (Hasan & Rahman, 2023; H. Jiang et al., 2023)

C. Instruments

1. Interview

Interviews were conducted from 16 July 2023 to 18 July 2023 with SME owners in East Java using discussion activities in each city, namely the cities of Kediri, Malang and Surabaya. This interview was conducted to obtain construct data regarding technology used in sustainable marketing strategies (Komari, 2016; Komari et al., 2021, 2020; Panjaitan & Komari, 2018), absorption capacity from external activities (Carrasco-Carvajal et al., 2023 ; Mata et al., 2023; Müller et al., 2021), innovation based on ecology (Hasan & Rahman, 2023; Litos et al., 2023) and performance innovation of each SME (Laely et al., 2021, 2022), which was carried out to representatives with similar products, namely a total of 24 SME owners.

2. Observation

Observations were made to 24 SME owners who were assigned as resource persons

in the interview session. Observations by visiting their locations to determine the level of importance of the constructs that have been included in the interview activity. This observation is a parameter of the success of these SMEs.

3. Research Tools

To conduct interviews using traditional communication media, the research tools used aim to meet the urgency of research and as a more efficient observation strategy, namely checklists on Google Drive (Sadikin & Hamidah, 2020). Meanwhile, for distribution of research forms, the WhatsApps chat application was used by designing a questionnaire via Google Forms (Bui et al., 2022). After that, the results of filling out the questionnaire were tabulated using a spreadsheet and computerized using the SMART-PLS 3.0 analysis tool to determine the intervening model (Gumelar et al., 2020). This is done to obtain the expected research results.

4. Procedural

To carry out good data quality testing, there are several important steps that need to be taken. One important step is to carry out convergent validity testing with a value > 0.500 (Berlin et al., 2022). In addition, it is also necessary to determine the average variance extracted > 0.400 (Purnamadewi & Suresh, 2020) and discriminant validity values with composite reliability > 0.700 (Spivakovsky et al., 2022). After that, the internal model testing process was carried out using R-Adjusted Square in the range of 10% to 100%. Hypothesis testing was carried out using Ttable > 1.96, as well as determining the effect size of the research construct. The final stage is to connect the corrected variables and prove the alternative hypothesis is accepted. All of these stages are carried out to ensure that the data used is of good quality, so that the research results obtained are reliable according to the hypothetical design.

RESULTS AND DISCUSSION

a. Outer Loading Raturi

Table 2. Outer Loading Selected

Item codes	Outer Loading	Lowes limit	Decision
Massive investment in building technology sustainability infrastructure	0.731	0.600	Feasible
Connectivity of respective computing services from the availability of culinary products	0.906	0.600	Feasible
Efforts to research and develop products that consumers need	0.857	0.600	Feasible
Work rotation learning efforts with program qualifications for the production team	0.604	0.600	Feasible
The performance measurement	0.84	0.600	Feasible

basis is more objective for the accuracy of the culinary industry's desires in the future			
Evaluation every month on the innovations that have been implemented	0.685	0.600	Feasible
Increase the efficiency of activities to protect the environment and society	1.000	0.600	Feasible

Culinary SMEs in East Java can improve the quality and sustainability of their business by implementing selected construct item codes. Massive investments in building technological sustainability infrastructure can aid in the development and production of high-quality culinary. In addition, the connectivity of computing services also needs to be improved so that culinary products can be easily accessed by consumers. Research and product development efforts needed by consumers and job rotation learning for production teams are also things that must be considered. To ensure business sustainability, the performance measurement base must be more objective so that the sustainability accuracy of the culinary industry can be measured properly. Monthly evaluation of innovations that have been implemented and improving the efficiency of activities to protect the environment and society also needs to be a concern for culinary SMEs in East Java.

b. Construct Feasibility AVE

Table 3. Kelayakan Konstruk AVE

Konstruks	Composite Reliability	Lowest Limit	Average Variance Extracted (AVE)	Lowest Limit	Decision
Absorptive Capacity (X2)	0.704	0.7	0.55	0.5	Consistent and Achieved Discriminant Validity Requirements
Eco-Innovation (Z)	1.000	0.7	1.000	0.5	Konsisten dan Tercapai Syarat Validitas Diskriminan
Innovative Performance SMEs (Y)	0.738	0.7	0.588	0.5	Konsisten dan Tercapai Syarat Validitas Diskriminan
Sustainable Technology (X1)	0.806	0.7	0.677	0.5	Konsisten dan Tercapai Syarat Validitas Diskriminan

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The results of measurement using the composite reliability method, it is known that the four variables measured, namely Sustainable Technology (X1), Absorptive Capacity (X2), Eco-Innovation (Z), and Innovative Performance SMEs (Y), have all met the lowest limit required for internal consistency with values above 0.7. In addition, all variables have also met the discriminant validity requirements with an Average Variance Extracted (AVE) value greater than the lowest limit determined, which is 0.5.

c. Contribution Model

Table 4. Model Contribution

	R Square Adjusted
Eco- Innovation (Z)	2%
Innovative Performance SMEs (Y)	16.20%

The Eco-Innovation (Z) factor contributes 2% to the overall analysis of innovative performance of SMEs in the culinary sector in East Java. On the other hand, the SME Innovative Performance factor (Y) contributed 16.20%. This shows that SMEs in the culinary sector in East Java are relatively more focused on improving innovative performance than implementing environmentally friendly practices. However, it is important for SMEs to consider environmental innovation as an integral part of their business strategy to ensure sustainable growth and resilience over the long term.

d. Intervening Model

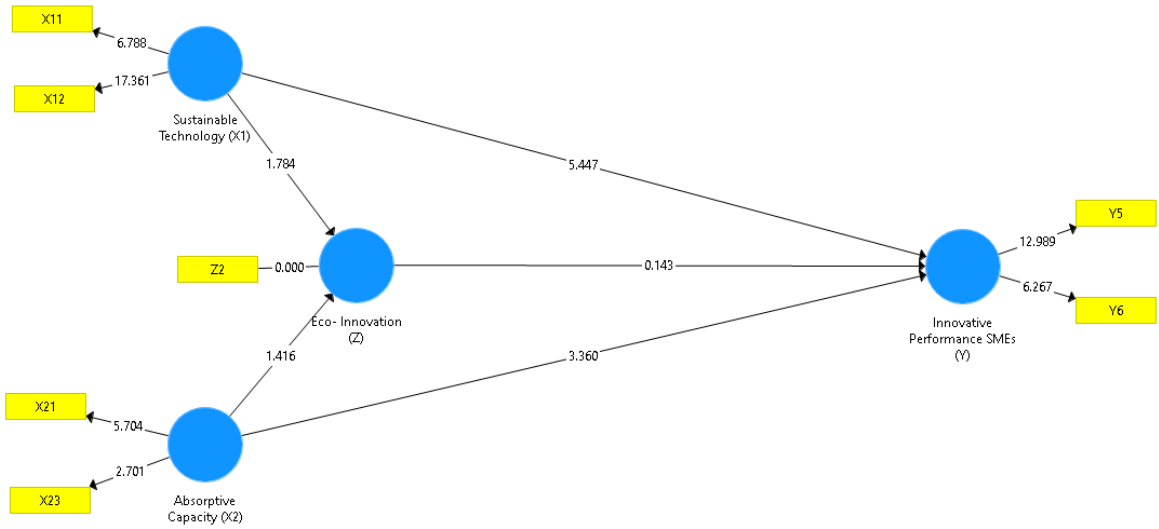

Figure 2. Intervening Model Correction

4. Decision Hypothesis

Table 5. Hypothesis Decision Intervening Model

Path	T Statistics	Tstandar	P Values	Decisions
Sustainable Technology (X1) -> Innovative Performance SMEs (Y)	5.447	1.960	0.000	Alternative hypothesis accepted
Absorptive Capacity (X2) -> Eco- Innovation (Z) -> Innovative Performance SMEs (Y)	0.115	1.960	0.908	Alternative hypothesis rejected
Sustainable Technology (X1) -> Eco- Innovation (Z)	1.784	1.960	0.075	Alternative hypothesis rejected
Absorptive Capacity (X2) -> Eco- Innovation (Z)	1.416	1.960	0.157	Alternative hypothesis rejected
Sustainable Technology (X1) -> Eco- Innovation (Z) -> Innovative Performance SMEs (Y)	0.125	1.960	0.900	Alternative hypothesis rejected
Absorptive Capacity (X2) -> Innovative Performance SMEs (Y)	3.360	1.960	0.001	Alternative hypothesis accepted
Eco- Innovation (Z) -> Innovative Performance SMEs (Y)	0.143	1.960	0.886	Alternative hypothesis rejected

There are two factors that affect the innovative performance of SMEs in the culinary sector in East Java, namely Sustainable Technology and Absorptive Capacity. From the results of the hypothesis test, it can be concluded that Sustainable Technology has a significant effect on the innovative performance of SMEs and alternative hypotheses are acceptable. Meanwhile, Absorptive Capacity does not have a significant effect on the innovative performance of SMEs and alternative hypotheses are rejected. In addition, Eco-Innovation does not have a significant influence on the innovative performance of SMEs. Therefore, as a business owner of SMEs in the culinary sector in East Java, it is necessary to increase the application of Sustainable Technology in business activities in order to improve innovative performance and increase competitiveness.

DISCUSSION

From testing the hypothesis model, strategies derived from items that have passed the test are designed to be more competitive, as follows.

Sustainable Technology (X1) effect to Innovative Performance SMEs (Y)

Massive investment in building technology sustainability infrastructure is important to improve the quality of computing services in the availability of culinary products in East Java (Urbano et al., 2023). With adequate infrastructure, it will make it easier for culinary SMEs to improve the quality of their products and support the progress of the culinary industry in the future.

A more objective performance measurement base also needs to be applied to improve the sustainability accuracy of the culinary industry. This can be done by conducting monthly evaluations on innovations that have been applied to culinary SME objects in East Java. That way, the right strategy can be created for further development.

Connectivity of computing services also needs to be considered to accelerate the dissemination of information about culinary products from SMEs (Hasan & Rahman, 2023)..

In this case, the use of online platforms such as websites or social media can be the right solution to introduce SME culinary products to the public (Al-Sharafi et al., 2023).. With adequate connectivity of computing services, the transaction process will also become easier and more efficient for culinary SMEs.

In order to implement the right strategy, there needs to be close cooperation between related parties, including the government, culinary SME associations, and other culinary industry players (Ates et al., 2013).. With good cooperation, the culinary industry in East Java will be able to develop better and more sustainably.

Absorptive Capacity (X2) through Eco- Innovation (Z) effect to Innovative Performance SMEs (Y)

To improve product quality and sustainability of the culinary industry, with the strength of running product research and development programs that focus on consumer needs (Litos et al., 2023). In this case, culinary SMEs in East Java can take advantage of feedback from customers to identify needs and preferences in terms of taste, packaging, and nutritional value. Implement activity efficiency strategies in production to protect the environment and society (Adomako & Nguyen, 2023). Culinary SMEs in East Java can use environmentally friendly raw materials, reduce waste in the production process, and promote sustainability practices to customers. Develop job rotation and qualification programs for production teams (Zang et al., 2022). Culinary SMEs in East Java can provide training and skill development for employees in various fields to improve product efficiency and quality. Conduct monthly evaluations on innovations that have been implemented (Pozzo, 2022). Culinary SMEs in East Java can regularly monitor and evaluate every innovation implemented to ensure proper quality and effectiveness. Building partnerships and networks with related culinary industry players (Parrilli et al., 2023). Culinary SMEs in East Java can continue to expand networks with related culinary industry players, such as raw material suppliers and distributors, to optimize production processes and provide quality products.

Sustainable Technology (X1) effect to Eco- Innovation (Z)

To improve activity efficiency and protect the environment and society, strategies that can be done for culinary SME objects in East Java are to use organic and local raw materials that are environmentally friendly, so as to reduce negative impacts on the environment and contribute to the sustainability of local agriculture(Polas et al., 2023). Adopt sustainability technologies such as the use of environmentally friendly energy such as solar panels or using electric vehicles for delivery, so as to reduce carbon emissions and make a positive contribution to the environment (Annamalah et al., 2023). Working closely with local communities to ensure that the raw materials used are of high quality and meet food safety standards, so as to provide confidence for customers. Using digital platforms such as food delivery apps and websites to make it easier for customers to place orders and payments, thereby increasing efficiency and ensuring a convenient and safe customer experience (Nugraha et al., 2022). Conducting educational programs to customers about the importance of sustainability and promoting environmentally friendly SME culinary products, so as to increase public awareness and provide added value to products (Komari

et al., 2021).

Absorptive Capacity (X2) effect to p Eco- Innovation (Z)

To improve the cleanliness and safety of culinary SME products in East Java, it can be done by ensuring that the entire production and packaging process is within food hygiene and safety standards (Sitoresmi et al., 2019). This can be done by implementing a HACCP (Hazard Analysis Critical Control Point) system that can help identify and control hazards at all stages of production, from the procurement of raw materials to the packaging of finished products (Christiva et al., 2020; Najah & Putri, 2019; Pinandoyo & Masnar, 2020). In addition, periodic product quality checks can also be carried out to ensure that the products produced meet the hygiene and food safety standards set by the government. Thus, consumers will be more confident and loyal to the culinary SME products produced, so as to increase competitiveness and business sustainability.

Sustainable Technology (X1) through Eco- Innovation (Z) effect to Innovative Performance SMEs (Y)

A strategy that can be applied to culinary SMEs in West Java is to utilize digital technology to expand market reach and increase product marketing (Kirana et al., 2019; Mustika, 2019). By optimizing social media and e-commerce, SMEs can reach potential consumers outside the region and increase customer engagement through interesting content such as food recipes and promotions. In addition, it is also important to ensure product quality and cleanliness, as well as the use of environmentally friendly ingredients in order to increase consumer trust in SME culinary brands and contribute to maintaining environmental sustainability.

Absorptive Capacity (X2) effect to Innovative Performance SMEs (Y)

In order to develop the culinary industry in the East Java region, strategies that can be applied include holding training and workshops to improve packaging skills and safe raw materials as well as technological practices in the production process. In addition, it is also important to build a strong brand image and increase the accessibility of local culinary products to national and international markets through effective marketing strategies and participation in leading bazaars in Indonesia and abroad (Habyba et al., 2019; Panjaitan & Komari, 2018). In addition, collaboration between local industry players, local governments, universities and caring organizations also needs to be built to create synergies and encourage the progress of local culinary SMEs in East Java.

Eco- Innovation (Z) effect to Innovative Performance SMEs (Y)

To increase efficiency and productivity in Culinary SMEs in East Java, the application and use of advanced technological devices at the production and marketing stages, such as inventory data recorders, automatic packaging machines, and digital promotional media, make clear and measurable business plans by compiling regular financial statements, collaborate with the supply of quality and cheap raw materials to reduce production costs, introduce the uniqueness of culinary products and provide reasonable and attractive prices. All these efforts will help South Sulawesi culinary SMEs to become more efficient, so that they can compete in an increasingly competitive market and increase profit results for business actors.

CONCLUSION

Strategies that can be carried out by culinary SMEs throughout East Java to be more competitive based on hypothesis model testing include developing technological sustainability infrastructure and implementing a more objective performance measurement base, increasing connectivity of computing services and expanding networks with related culinary industry players, utilizing consumer feedback for product development, adopting sustainability technology, and running sustainability education programs to increase public awareness about the importance of environmentally friendly culinary products and increase consumer confidence through quality and safe products.

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