

-RESEARCH ARTICLE-

DIGITAL INNOVATION, AGILITY, AND THE GOVERNMENT INTERVENTION IN THE CULINARY SECTOR SMALL AND MEDIUM ENTERPRISES: BUSINESS RESILIENCE IN INDONESIA AFTER TURBULENCE

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Abstract

Due to the technology and the pandemic, the culinary industry's small and medium-sized enterprises (SMEs) are among the most susceptible to economic instability following

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the Covid-19 pandemic. Therefore, this study demonstrates the need to investigate the factors that influence the survival and profitability of SMBs in the culinary sector. This study will conduct empirical tests on six variables contributing to business resilience in Indonesian Culinary SMEs: networking capabilities, entrepreneurial orientation, digital adoption, business agility, business model innovation, business agility, business resilience, and government intervention. This study analysed descriptive and explanatory quantitative data collected via a questionnaire with a Likert scale ranging from 1 to 4 using SEM-Lisrel. This study employed Stratified Random Sampling to ensure that each population element has an equal chance of being selected. Adjustments were made by selecting a sample of 300 respondents. According to the study, business resilience can be enhanced through business agility, whereas business agility can be improved through networking capabilities, an entrepreneurial orientation, and business model innovation. The high entrepreneurial orientation of culinary SMBs impacts business model innovation. With these elements, culinary SMBs can strengthen their business resilience. Due to the limitations of this study, additional research involving various types of businesses is anticipated to be required to identify additional factors of business resilience.

Keywords: Digital Innovation, Business Resilience, Culinary Sector SMEs, Business Agility, Government Intervention, Network Capabilities, Entrepreneurship Orientation, Business Model Innovation

1. INTRODUCTION

The decrease in economic growth in Indonesia went from 4.9% (Q4-2019) to -5.3% (Q2-2020) when the Covid-19 pandemic case entered in 2020. Because of this, many other facets are impacted due to the occurrence of this pandemic, and one of these is small and medium businesses, abbreviated as "SMEs." The instability brought on by the pandemic has made it difficult for many SMEs to meet their daily and monthly profit targets, which has stifled the growth of both small and medium-sized enterprises (SMEs) and micro businesses (MSMEs). In addition, while the Covid-19 pandemic was going on, the government enacted incomplete rules, leading to the corporate world's decline. The introduction of the PSBB policy is one example. This policy has stopped numerous firms from selling their wares or services directly to individual customers (Pujowati & Sufaidi, 2021).

Small businesses are thought to be the ones the COVID-19 problem has struck the worst. As a result, many small firms have been forced to close their doors temporarily and are dealing with difficulties in their cash flow (Baker & Judge, 2020). The most visible consequence on SMEs is a decreased income, which can lead to layoffs, alterations in operation hours, lower operating costs, and even insolvency in extreme circumstances. In addition, the culinary industry's small and medium-sized enterprises (SMEs) face the highest vulnerability while encountering economic turmoil during the Covid-19 epidemic (Aldianto et al., 2021; Amriza et al., 2022). These findings were published in

two separate studies. This is because the ingredients used to create food only have 12 to 18 hours of shelf life. Because of this, retailers cannot resell food or beverages that have not been consumed within 24 hours if they still have some left over. Because of this, culinary SMEs cannot expand their income to the point where they can once again purchase raw materials. Small and medium-sized businesses (SMEs) and micro businesses, especially SMEs in the food service industry, must adapt to continue their place in the market and continue to exist. According to Surya et al.'s research from 2022, their position will be jeopardized if they cannot adjust effectively.

Building up one's resilience is one of the things that may be done to make the disruption less severe. According to [Duchek \(2020\)](#), resilience is defined as the capacity to find solutions and adapt to challenging situations or difficulties that arise in one's life, to have the ability to endure stressful situations, and even to cope with adversity or trauma that one has encountered in their lifetime. When applied to the business world, resilience refers to an organization's or a company's capacity to adjust to new developments and environmental shifts, whether such shifts result from a pandemic or market trends. This kind of resilience is referred to as corporate resilience. According to [Klein and Todesco \(2021\)](#), business resilience refers to a company's capacity to make decisions and reinforce its organization's foundation to ensure its continued viability in an era marked by rapid technological advancement. According to [Aldianto et al. \(2021\)](#), business resilience can increase a small to medium-sized enterprise's (SME) ability to make challenging and difficult decisions under pressure. If the resilience of businesses can be improved, it is anticipated that small and medium-sized businesses will also be able to adjust well to the situation after the pandemic.

Several studies have focused on the elements that contribute to the business resilience of an organization or a corporation. First, according to the findings of a study that was carried out by [Conduah and Essiaw \(2022\)](#), resilience is a function of either an individual or entrepreneurship; resilience generates the intention of the entrepreneur; entrepreneur behaviour increases organizational resilience; and resilience in the context of entrepreneurial failure, entrepreneurship, and culture; as well as resilience as a process of recovery and transformation.

In addition, research conducted by [Mohammed and Adamu \(2020\)](#) indicates that a competitive strategy hurts the performance of small and medium-sized enterprises (SMEs) in Nigeria, but the influence is not significant; an innovative strategy has a good impact on performance; a risk-taking approach hurts performance. On the other hand, [Achtenhagen \(2020\)](#) claims that several dimensions of entrepreneurial orientation play a part in the operations of media firms and that the relevance of these dimensions varies over time. According to the research that was described earlier, one may conclude that not a great deal of attention has been paid to the topic of business resilience in the post-turbulence Culinary SME industry in Indonesia.

As a result, the researcher is interested in doing a study incorporating several variables, including network capabilities, entrepreneurial orientation, digital adoption, business model innovation, business agility, government involvement, and company resilience. This study aims to combine a variety of variables based on the problem identification and literature assessment associated with the primary topic, which is the degree to which culinary small and medium-sized enterprises (SMEs) in developing countries are resilient in terms of their businesses. This research will present a fresh viewpoint that can serve as a reference for small and medium-sized culinary businesses (SMEs) in recognizing the significance of thriving through times of turmoil and disaster. This research will also offer a real contribution to the Micro, Small, and Medium-Sized Enterprises (SMEs) in the culinary industry in Indonesia, helping them to be able to get up and be productive again after the turmoil.

2. LITERATURE REVIEW

2.1 Business Resilience

The capacity of small and medium-sized enterprise owners to confront, prevail over, and fortify their company in the face of adversity is known as resilience. According to Jia et al.'s research from 2020, the capacities of an organization are not only to establish the preventive capacity to meet unforeseen interruptions but also to take the necessary and swift steps to respond to and recover from those disruptions to ensure the continued viability of the business. According to [Wieland and Durach \(2021\)](#), this competence can give businesses the ability to adapt, learn, and transform. In addition, "business resilience" refers to an organization's capacity to resist the negative effects of stress and sustain or enhance its operations despite challenges. It is necessary to have individuals in the organization who are strong on an individual level to support organizational resilience. Proactive and reactive points of view are frequently used when defining and discussing the concept of organizational resilience. Both viewpoints are quite significant in organizational resilience since they can offer insights into various fields and settings regarding how the two distinct forms of organizational resilience are related.

2.2 Network Capabilities

Network competence is defined by [Garousi Mokhtarzadeh et al. \(2020\)](#) as a company's ability to originate, create, and leverage both internal organizational and external inter-organizational relationships. The capabilities of networks enable businesses to obtain access to a variety of resources, recognize possibilities, and react swiftly to ever-changing marketing requirements. This variable refers to a company's capacity to cultivate and use interactions between other organizations to acquire access to a variety of resources that third parties control. The capability of an organization to build, improve, and use both internal and external organizational relationships is referred to as network capability. Four components make up the network capability, and they are as follows: internal communication, coordination, relationship skills, and partner knowledge.

An organization's networking capabilities can potentially boost the business agility of the organization during its implementation. This is reinforced by a study by Kurniawan, Manurung, and others in 2021, which claims that network capability can considerably improve the degree to which a business's agility can be increased. In addition, findings from studies conducted by [Lin et al. \(2020\)](#) and [Rashnavadi et al. \(2021\)](#) conclude that network capabilities impact businesses' agility. According to [Kurniawan et al. \(2021\)](#), [Liu & Yang \(2019\)](#), and [Pang et al. \(2019\)](#), the relationship between network capabilities and business agility can be mediated by the innovation of business models, which can influence the relationship that exists between the two variables. Therefore, the theory that has been formed is described below.

H1: Does networking capability have a positive and significant effect on the business agility of Culinary SMEs after turbulence?

H6: Does networking capability have a positive and significant effect on business agility by mediating business model innovation for Culinary SMEs after turbulence?

2.3 Entrepreneurship Orientation

Entrepreneurship is widely recognized as a novel strategy to improve existing businesses' operations. Companies that are making initial steps toward recovering from the economic depression brought on by the protracted crisis are required to have a positive reaction to this development. The practice of entrepreneurship is held up as a potential spearhead (pioneer) for achieving long-term and highly competitive economic growth in corporations. The ability of a corporation to explore creative ideas, define the future and act on those definitions, and prosper in an uncertain environment by depending on a mix of decision-making, managerial philosophy, strategy, and entrepreneurial behaviour is what we mean when we talk of entrepreneurial orientation. [Arabeche et al. \(2022\)](#), [Rank & Strenge \(2018\)](#), and [Zighan et al. \(2022\)](#). "Entrepreneurial orientation" refers to the processes, practices, and decision-making activities leading to the new entry. In addition to innovation, being proactive, and risk-taking, entrepreneurial orientation also refers to the inclination to operate autonomously and to be combative towards competitors.

According to [Lovely et al. \(2021\)](#), an organization will experience an increase in its business agility whenever there is an improvement in the entrepreneurship orientation of the organization. This is confirmed by the statement made by [Saputra et al. \(2022\)](#), which asserts that an entrepreneurial attitude has a considerable positive effect on an organization's agility. In addition, [Wairimu et al. \(2022\)](#) argue that an organization's business agility will be greater if its entrepreneurial orientation is stronger and more obvious. On the other hand, research conducted by [Yaskun \(2021\)](#) indicates that business model innovation can act as a mediator in the connection between an entrepreneurial mindset and company agility. This is about the study carried out by Saraswati and her colleagues in the year 2022, which found that business model innovation has the

potential to act as a mediator in the relationship between entrepreneurial orientation and company agility. Therefore, the theory that has been formed is described below.

H2: Does entrepreneurial orientation have a positive and significant effect on the business agility of Culinary SMEs after the turbulence?

H7: Does entrepreneurial orientation have a positive and significant effect on business agility by mediating business model innovation for Culinary SMEs after turbulence?

2.4 Digital Adoption

According to [Bressanelli et al. \(2018\)](#) and [Rupeika-Apoga et al. \(2022\)](#), the process of digital adoption refers to the process of adapting traditional business models to new technologies and unleashing the potential of digital technology to collect data, recognize patterns, and make more informed business decisions. "Technological innovation" refers to a creative process that develops from experience or abilities and is closely tied to actions that produce new products or modify existing items to give more useful features and satisfy consumer preferences in the marketplace. The process of accepting new things is a necessary step in the adoption of technological innovation. This process, which can only be observed by observing the behaviour of the individual who is concerned, can be seen to be in progress. At this point, the implementation of technical innovation is universally acknowledged as a significant instrument in improving services provided by an organization or firm. In most cases, technical innovation has a major impact on a corporation's productivity level. This effect won't be fully realized until such technical advancements are adopted on a wider scale and utilized to their full potential.

According to [Moustaghfir et al. \(2020\)](#), an increase in the adoption of digital technology can help an organization and firm become more agile in their commercial operations. This point is confirmed by research by [Williams et al. \(2020\)](#), which argues that digital technology affects businesses' agility. In addition, [Kiyabo and Isaga \(2020\)](#) claim that the level of business agility an organization or firm possesses is directly proportional to the degree to which it has adopted digital adoption. The flexible business model innovation has the potential to act as a mediator between these two features and their relationship with one another. [Lovely et al. \(2021\)](#) concluded that business model innovation has the potential to act as a mediator in the relationship between digital adoption and business agility. According to [Foss and Saebi \(2018\)](#), there is a connection between the use of digital technology and the agility achieved by developing new business models. Therefore, the theory that has been formed is described below.

H3: Does digital adoption have a positive and significant effect on the business agility of Culinary SMEs after turbulence?

H8: Does digital adoption have a positive and significant effect on business agility by mediating business model innovation for Culinary SMEs after turbulence?

2.5 Business Agility

Business agility refers to the ability of a small to medium-sized enterprise (SME) owner to recognize possibilities for innovation, capitalize on competitive market openings, expand their knowledge, and adapt to fast-paced and unpredictable circumstances. The capability of the company's wide business activity includes the ability of the organization to manage internal factors such as structural adjustments, utilization of information systems, management of company logistics, and creating the mindset of employees to be more agile in dealing with market dynamics (Ameen Ishaq & Prakash, 2020; Chan et al., 2019). The ability of a company's wide business activity includes the ability of the organization to manage internal factors such as structural adjustments. Because of this capacity, an organization or corporation can innovate through collaboration, enabling them to predict business difficulties and possibilities even before these shifts take place.

According to the study's findings (conducted by Mohammed and Adamu, 2020), increasing a company's business agility can lead to an increase in the company's business resilience. This assertion is confirmed by findings from a study carried out by Cho and Lee (2020), which show that the degree to which a business is agile has a significant relationship to the degree to which it is resilient. In addition, Zighan et al. (2022) claim a connection between the two concepts of business agility and business resilience. Therefore, the theory that has been formed is described below.

H4: Does business agility have a positive and significant effect on the business resilience of Culinary SMEs after turbulence?

2.6 Business Model Innovation

To be innovative requires a person to make an effort to create new things for themselves and the world around them by drawing on their thoughts, their imagination, the many stimulants available to them, and the people in their immediate area. The innovation of a business model consists of a combination of unique and complementary activities that, in addition to providing value, boost productivity and efficiency. According to Clauss et al. (2019), the primary components of business model innovation include determining whom to serve (target customers), what to offer (value proposition), and how to operate it (value delivery systems), in addition to taking into account external factors such as technology, shifting customer needs, enterprise-level issues, regulation & economy, and competition.

This innovation in the business model can boost the company's agility when it is put into practice. This information was acquired from a study done by Elali (2021), which claims that the higher the business agility of a company, the greater the number of business model innovations an organization carries out. In addition, Gerald et al. (2020) indicate that there is a considerable beneficial influence on the association between business model innovation and business agility. This effect is cited as having a large positive impact. Therefore, the theory that has been formed is described below.

H5: Does business model innovation have a positive and significant effect on the business agility of Culinary SMEs after turbulence?

2.7 Government Intervention

In controlling the economic system's dynamics, the government develops the primary role of the economy, which is to use fiscal policy to promote long-term economic development and productivity and to tame the negative excesses of the business cycle, such as inflation and unemployment. This is the primary function of the economy. Government assistance proactively responds to the compensation for people's losses, to avoiding bankruptcy with the right political steps, to preparing and implementing mechanisms that are right on target, and to developing new strategies that are optimal for the post-crisis period (Alves et al., 2020; Cucculelli & Peruzzi, 2020; Wójcik & Ioannou, 2020).

According to Hadjielias et al. (2022), in a business or organization, the government's intervention in regulating the firm can strengthen the relationship between business agility and business resilience. This idea was also presented by Harjowiryo (2020) in his research; specifically, the government's involvement can mitigate the connection between company agility and business resilience. Therefore, the theory that has been formed is described below.

H9: Does business agility have a positive and significant effect on business resilience by moderating government intervention in Culinary SMEs after turbulence?

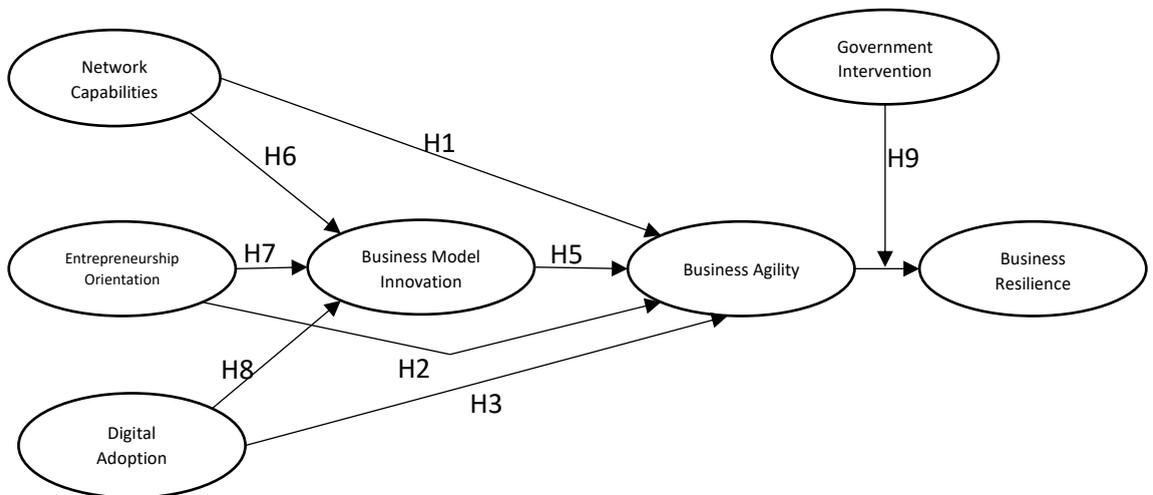


Figure 1. Hypothesis Framework

3. METHODOLOGY

3.1 Research Design

In this study, both descriptive and explanatory quantitative methods were applied. Explanatory research is a research method that intends to explain the position of the variables studied and the influence that one variable has on another. Descriptive quantitative research tests and measures hypotheses based on statistical calculations using surveys, observations, or interviews. Descriptive quantitative research is a type of research that is used to test and measure hypotheses based on statistical calculations. The researcher wants to examine the association between variables by providing an empirical description/description. Therefore, this is what they propose to do.

3.2 Research Subject

3.2.1 Population

In a study, the designated population is closely connected to the investigated problem. The universe's population represents the total number of elements to be analysed. This study's demographic consisted of culinary SME owners from three provinces: West Java (Bandung), Central Java (Semarang), and East Java (Surabaya).

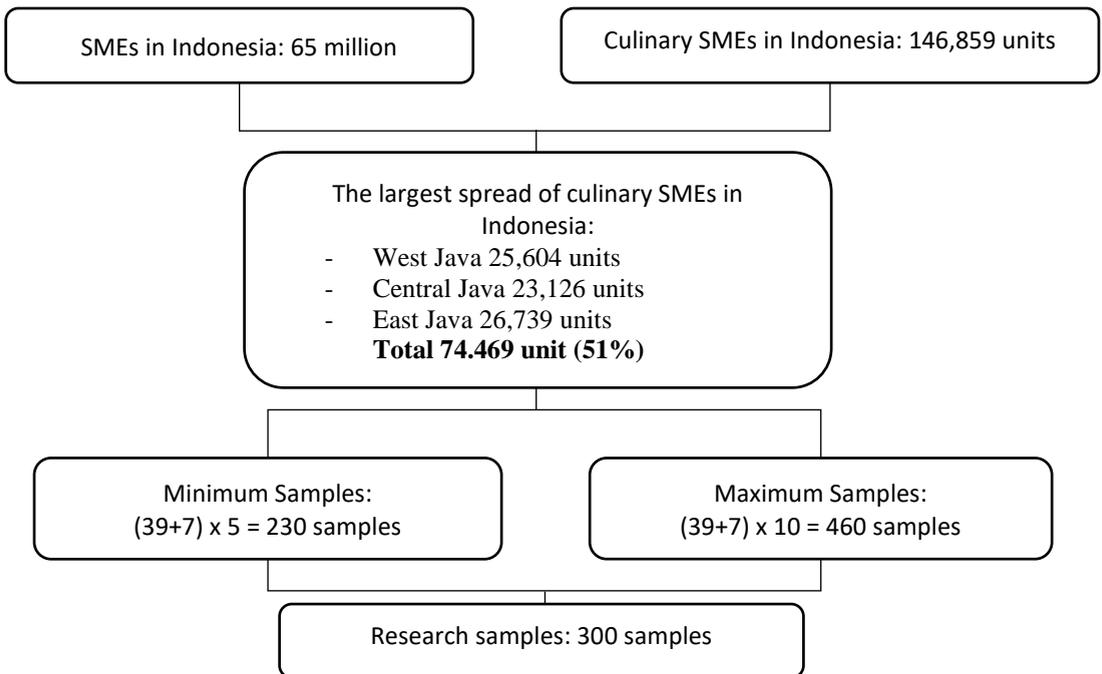


Figure 2. Sampling Framework

3.2.2 Sample

This study employed Stratified Random Sampling to ensure that each population element has an equal chance of being selected. As for determining the number of samples, the Hair Method was utilized in this study. According to (Hair et al., 2014), the minimum sample size must be 100 or more. Generally, the minimum sample size should be at least five times the number of items to be analysed, and a sample size ratio of 10:1 is more acceptable.

Consequently, the sample calculation using 39 indicators yielded a minimum of 230 samples and a maximum of 460 samples. Adjustments were made by selecting a sample of 300 respondents. The procedure for determining the sample in this investigation is depicted in Figure 2.

3.2.3 Data Collection Technique

This study's data were collected using a Google Forms-distributed questionnaire, allowing the data to be obtained and reach multiple locations. The questionnaire employed a Likert scale ranging from 1 to 4 to avoid a neutral preponderance of respondents to obtain a reasonably accurate response from the submitted questionnaire.

3.2.4 Measurement

Business Resilience. The measurement used for these variables was obtained from (Davari et al., 2021; Gunadi et al., 2021; Iancu et al., 2022; Kosasih et al., 2021; Nyikos et al., 2021; Župerkienė et al., 2021; Zutshi et al., 2021) with a total of 4 dimensions and 8 indicators.

Business Agility. The measurement used for these variables was obtained from (AITaweel & Al-Hawary, 2021; Elali, 2021; Gerald et al., 2020; Ivanov, 2020; Nururly, 2022; Saputra et al., 2022; Seyadi & Elali, 2021; Walter & Raetze, 2021) with a total of 3 dimensions and 6 indicators.

Business Model Innovation. The measurement used for these variables was obtained from (Alhassani & Al-Somali, 2022; AITaweel & Al-Hawary, 2021; Burström et al., 2021; Clauss et al., 2019; Esazadeh et al., 2020; Foss & Saebi, 2018; Lungu, 2018; Nan & Park, 2022) with a total of 2 dimensions and 4 indicators.

Government Interventions. The measurement used for these variables was obtained from (Adam & Alarifi, 2021; Amoah et al., 2022; Belitski et al., 2022; Gunadi et al., 2021; Thukral, 2021) with a total of 3 dimensions and 5 indicators.

4. RESULTS

First-Order Confirmatory Factor Analysis (First-Order CFA)

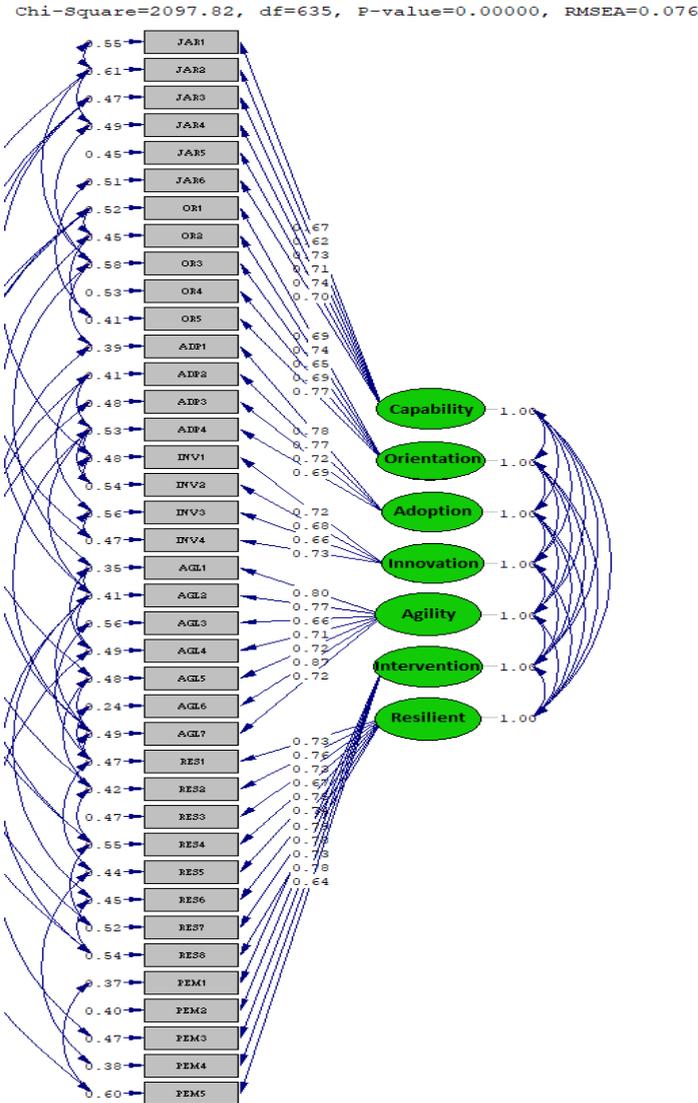


Figure 3. Confirmatory Factor Analysis Result (CFA)

Network Capabilities. The measurement used for these variables was obtained from (Foguesatto et al., 2021; Kurniawan, Budiastuti, et al., 2021; Kurniawan & Hamsal, 2019; Liu & Yang, 2019) with a total of 3 dimensions and 6 indicators.

Entrepreneurship Orientation. The measurement used for these variables was obtained from (Achtenhagen, 2020; Cho & Lee, 2020; Fadda, 2018; Kiyabo & Isaga, 2020;

Mohammed & Adamu, 2020; Moustaghfir et al. 2020; Okoli et al., 2021; Rezaei & Ortt, 2018; Yaskun, 2021; Zighan et al., 2022) with a total of 3 dimensions and 5 indicators.

Digital Adoption. The measurement used for these variables was obtained from Klein & Todesco (2020); Lee & Mangalaraj (2022); Lovely et al. (2021); Melián-Alzola et al. (2020); Mihardjo et al. (2020); Qosasi et al. (2019); Ravichandran (2018); Saputra et al. (2022) with the total of 2 dimensions and 6 indicators.

4.1.1 Data Analysis Technique

The collected data were analyzed with SEM-Lisrel. Lisrel was utilized in this study due to the method's precision in determining the relationship between latent and manifest variables. How well-suited the hypotheses are to the actual data in the field model is the data analysis technique used to obtain the results of this study.

In this study, confirmatory factor analysis (CFA) was used to assess the validity and reliability of the data collection results. CFA is a constructed test for latent dimensions applied to its indicators. An initial step in the analysis is the development of a structural model. Previously, it was observed that the feasibility of the research model's suitability was used to determine its goodness of fit. Modification indices have been applied to the results of the goodness-of-fit values.

Table 1. Loading Factor Analysis Results

Indicators	LF	Error	CR
JAR1	0.670	0.550	0.850
JAR2	0.620	0.610	
JAR3	0.730	0.470	
JAR4	0.710	0.490	
JAR5	0.740	0.450	
JAR6	0.700	0.510	
Total	4.170	3.080	
OR1	0.690	0.520	0.834
OR2	0.740	0.450	
OR3	0.650	0.580	
OR4	0.690	0.530	
OR5	0.770	0.410	
Total	3.540	2.490	
ADP1	0.780	0.390	0.829
ADP2	0.770	0.410	
ADP3	0.720	0.480	
ADP4	0.690	0.530	
Total	2.960	1.810	
INV1	0.720	0.480	0.792
INV2	0.680	0.540	

INV3	0.660	0.560	
INV4	0.730	0.470	
Total	2.790	2.050	
AGL1	0.800	0.350	0.901
AGL2	0.770	0.410	
AGL3	0.660	0.560	
AGL4	0.710	0.490	
AGL5	0.720	0.480	
AGL6	0.870	0.240	
AGL7	0.720	0.490	
Total	5.250	3.020	
RES1	0.730	0.470	0.895
RES2	0.760	0.420	
RES3	0.730	0.470	
RES4	0.670	0.550	
RES5	0.750	0.440	
RES6	0.740	0.450	
RES7	0.690	0.520	
RES8	0.680	0.540	
Total	5.750	3.860	
PEM1	0.790	0.370	0.862
PEM2	0.780	0.400	
PEM3	0.730	0.470	
PEM4	0.780	0.380	
PEM5	0.640	0.600	
Total	3.720	2.220	

It is clear from [Table 1](#) that is located above that the acquisition of Composite reliability values for each variable is necessary. Variables with a composite reliability of less than 0.7 were found to have been acquired from the calculation results. This demonstrates that the items used to measure each variable have a high-reliability level and can accurately assess the investigated construct.

4.2 Structural Model Development Analysis

The study used to prove the hypothesis was called the Structural Equation Modeling study. However, to apply Structural Equation Modeling Analysis, some requirements must be satisfied first. One of these requirements is that Structural Equation Modeling Analysis must satisfy the Goodness of Fit criteria.

a. Normality Test

The normality test is carried out to assess the distribution of data in a group of data or variables, whether the data distribution is normally distributed or not.

Table 2. Normality Test of Univariate Normality for Continuous Variable

Variables	Skewness		Kurtosis		Skewness and Kurtosis	
	Z-score	p-score	Z-score	p-value	Chi-square	p-value
JAR1	-0.273	0.785	0.284	0.777	0.155	0.926
JAR2	1.056	0.954	-0.007	0.994	0.003	0.998
JAR3	-1.461	0.144	0.346	0.729	2.253	0.324
JAR4	-2.068	0.039	-0.986	0.324	5.249	0.072
JAR5	0.190	0.849	3.497	0.000	12.265	0.002
JAR6	-1.624	0.104	2.682	0.007	9.834	0.007
OR1	-1.251	0.211	5.097	0.000	27.545	0.046
OR2	-1.017	0.309	1.264	0.206	2.630	0.260
OR3	0.622	0.534	0.080	0.936	0.393	0.822
OR4	-0.945	0.344	2.774	0.006	8.587	0.014
OR5	1.397	0.162	4.321	0.000	20.626	0.000
ADP1	-1.197	0.231	-2.172	0.030	6.151	0.046
ADP2	-1.406	0.160	0.705	0.481	2.472	0.291
ADP3	-1.649	0.099	2.701	0.007	10.016	0.007
ADP4	-1.445	0.149	1.915	0.056	5.753	0.056
INV1	0.232	0.817	0.312	0.755	0.151	0.927
INV2	-0.789	0.430	0.547	0.584	0.922	0.631
INV3	-2.162	0.031	-1.943	0.052	8.449	0.015
INV4	-1.770	0.077	-2.854	0.004	11.281	0.004
AGL1	-1.227	0.220	-0.462	0.644	1.719	0.432
AGL2	-1.155	0.248	0.845	0.398	2.047	0.359
AGL3	-0.601	0.548	-0.269	0.788	0.434	0.805
AGL4	-1.502	0.133	2.098	0.036	6.659	0.036
AGL5	-1.707	0.088	2.938	0.003	11.543	0.003
AGL6	-1.624	0.068	-0.328	0.743	3.435	0.179
AGL7	-1.580	0.114	-0.435	0.663	2.687	0.261
RES1	-2.047	0.041	-0.831	0.406	4.880	0.087
RES2	-1.320	0.187	-0.911	0.362	2.527	0.276
RES3	-1.186	0.236	-0.682	0.495	1.871	0.392
RES4	-1.358	0.174	-0.105	0.916	1.857	0.395
RES5	-1.055	0.292	-0.730	0.465	1.645	0.439
RES6	-1.326	0.185	0.130	0.897	1.774	0.412
RES7	-1.610	0.107	0.745	0.456	3.148	0.207
RES8	-1.086	0.278	1.839	0.066	4.560	0.102
PEM1	-0.191	0.849	-3.187	0.001	10.191	0.006
PEM2	-0.675	0.383	-0.635	0.525	1.165	0.558

PEM3	-1.313	0.189	-0.408	0.683	1.891	0.388
PEM4	-1.634	0.102	-3.137	0.000	22.476	0.000
PEM5	-0.884	0.377	-3.137	0.002	10.622	0.005
MOD	0.016	0.988	-0.008	0.993	0.000	1.000

Relative Multivariate Kurtosis = 1.040

Test of Multivariate Normality for Continuous Variables

Table 3. Univariate Normality Test Results

Skewness			Kurtosis			Skewness and Kurtosis	
Value	Z-score	P-Value	Value	Z-score	P-Value	Chi-Square	P-Value
131.728	1.774	0.070	746.086	1.704	0.060	1.184	0.071

If the Skewness Value is less than two and the Kurtosis Value is less than seven, then the data is said to have a normal distribution level. However, based on the table that was provided earlier, it can be observed that the Skewness Value is 0.070, and the Kurtosis value is 0.060.

Table 4. The Goodness of Fit Results

<i>The goodness of the Fit index</i>	Criteria	<i>Cut of value</i>	Information
<i>Absolut Fit Measure</i>			
<i>Chi-square</i>		50839.54	Not Fit
<i>Significant Probability</i>	≥0,05	0.000	Not Fit
RMSEA	≤0,08	0.076	Fit
GFI	≥0,90	0.790	Not Fit
RMR	≥0,05	0.022	Fit
<i>Incremental Fit Measures</i>			
NFI	≥0,90	0.960	Fit
AGFI	≥0,90	0.740	Not Fit
IFI	≥0,90	0.910	Fit
CFI	≥0,90	0.910	Fit
<i>Parsimonious Goodness Of Fit</i>			
PGFI	PGFI <GFI	0.555	Fit
PNFI	PNFI <NFI	0.530	Fit
CAIC	The value must be ≤ CAIC <i>Independent Model</i> and the <i>saturated model</i>	3111.58 (IM: 64228.81 and SM: 5453.34)	Fit to be replicated in the further research Fit

Additionally, the Skewness and Kurtosis have a p-value of 0.071 and a Chi-Square value of 2.184. Because the evaluated data reveals that it is generally presented in a multivariate fashion, it is possible to conclude that the requirements for a Skewness magnitude of less than two and a Kurtosis value of less than seven have been satisfied.

b. The Assumption of Goodness of Fit

Based on [Table 4](#) above, there are existing criteria, namely (1) Absolute Fit Measure Criteria, there are 2 not fit (Chi-Square and p-value)→[Thakkar \(2020\)](#), assuming the Chi-Square only for samples <200), 2 fits (RMSEA, ECVI, and RMR); (2) Incremental Fit Measures Criteria, there are 2 not fit, and 2 are in fit condition; (3) Parsimonious Goodness of Fit criteria, there are 3 in fit condition and 1 marginal fit.

The goodness-of-fit test is used to establish whether or not a population follows a particular distribution. However, despite several indices not meeting the requirements, these criteria can still be used and tested thanks to the application of changes.

Considering the three standards mentioned above, one can conclude that the model utilized in this research is high quality. The goodness of fit results was previously obtained as part of an effort to improve the model by measuring modification indices. The model can be measured using modification indices, and the value of the modification indices corresponds to the occurrence of a drop in Chi Squares if the coefficient is estimated. If the coefficient is estimated, the value of the modification indices is the same. The modification indices, abbreviated as MI, can be considered Chi-square statistics with one degree of freedom. If the parameters are supplied, the Chi-Square value will be reduced by a conservatively estimated amount using each of these MIs. According to [Fernandes et al. \(2005\)](#), one of the primary purposes of employing MI is to create a model better suited to the data. The following provides an overview of the structural picture the modification indices' findings paint.

5. HYPOTHESIS RESULT

The testing of the model in the Structural Equation Model is carried out with two tests, namely the model suitability test and the causality significance test through the regression coefficient test. The structural equation model based on the analysis results is as follows.

Equality 1

INNOVATION = 0.12*CAPABILITY + 0.22*ORIENTATION + 0.54*ADOPTION + 0.0*INTERVEN + 0.0*MODERATE, Errorvar.= 0.21, R² = 0.79

(0.073)	(0.044)	(0.045)
1.63	5.00	12.18

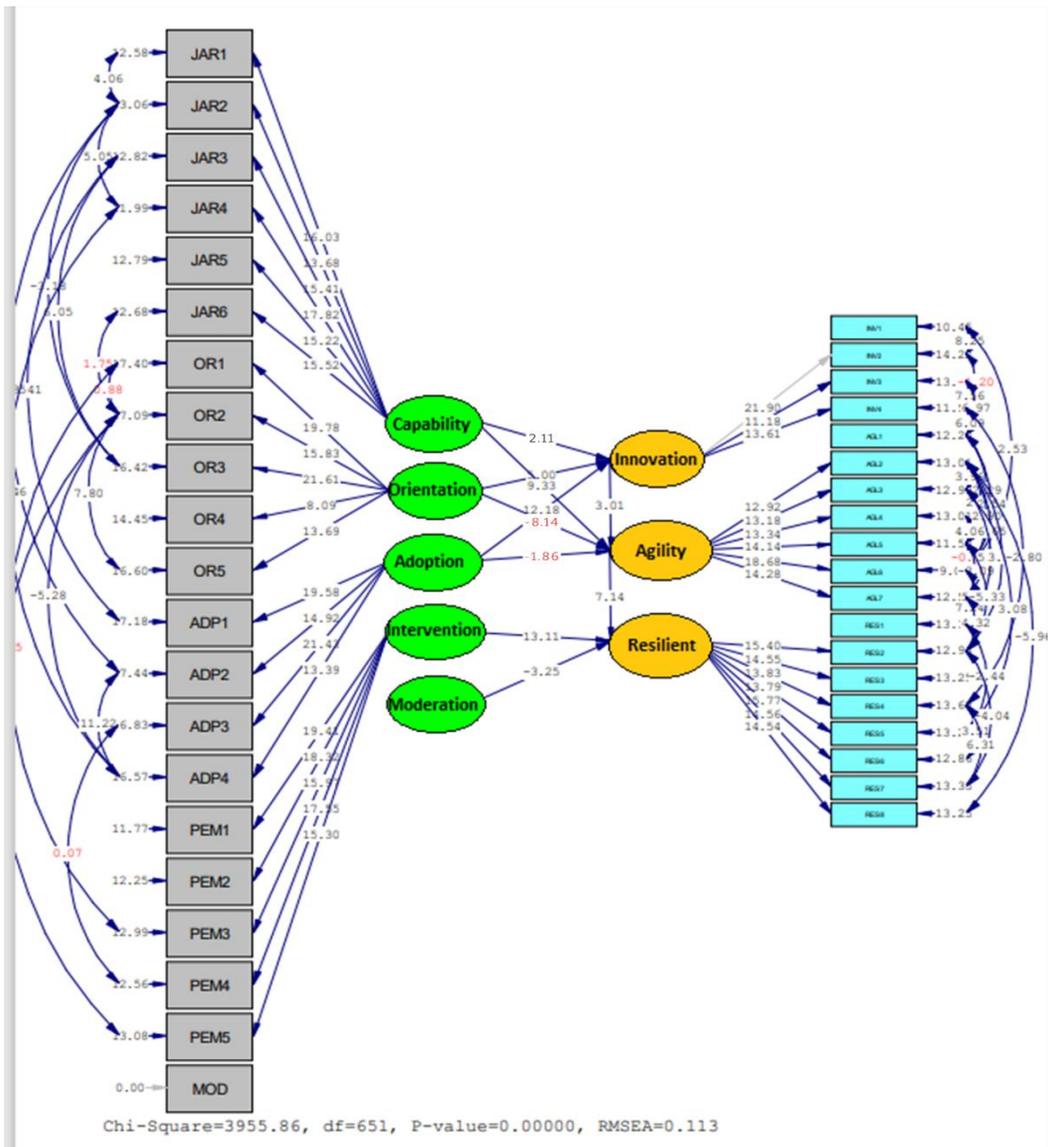


Figure 4. Structural Result after Modification Indices

After the model meets the requirements, what needs to be done next is the Regression Weight-test. This test is carried out in the same way as the t-test on the Regression Weight Coefficient Model. The test results are shown in [Table 5](#) below.

Equality 2

$$AGILITY = 0.74 * CAPABILITY + 0.031 * ORIENTATION + 0.090 * ADOPTION + 0.0 * INTERVEN + 0.0 * MODERATE, Errorvar.= 0.30, R^2 = 0.70$$

(0.075)	(0.032)	(0.030)
9.90	0.99	2.99

Equality 3

RESILIENCE = 0.27*CAPABILITY + 0.011*ORIENTATION + 0.032*ADOPTION + 0.67*INTERVEN - 0.18*MODERATE, Errorvar.= 0.080, R² = 0.92

(0.040) (0.012) (0.012) (0.051) (0.055)
6.55 0.98 2.75 13.11 -3.25

Table 5. Result of the influence between variable

The Influence Between Variables		The direction of the influence	T- score	Information	
Capability	<---	Agility	+	9.300	Hypothesis Accepted
Orientation	<---	Agility	+	12.180	Hypothesis Accepted
Adoption	<---	Agility	-	1.860	Hypothesis Rejected
Agility	<---	Resilience	+	6.250	Hypothesis Accepted
Innovation	<---	Agility	+	3.010	Hypothesis Accepted
Innovation	<---	Capability	+	2.110	Hypothesis Accepted
Innovation	<---	Agility	+	2.550	Hypothesis Accepted
Innovation	<---	Adoption	-	8.140	Hypothesis Rejected
Intervention	<---	Agility	+	3.520	Hypothesis Accepted

The critical t-value, the value, will be compared to the needed statistical limit greater than 1.96. This will allow the hypothesis to be tested. If the data processing findings indicate a value equal to or greater than these prerequisites, then the proposed study hypothesis can be accepted. The testing of the research hypothesis will be covered in greater depth below, step by step, following the hypothesis presented in the following section.

Hypothesis 1: Network capability has a positive and significant effect on business agility

It has been determined through data processing that the value of the t in the table presented before is 9,300. The findings of this value indicate that there is an influence of network capabilities on business agility. This value satisfies the conditions that require the t-value to be more than 1.96 ($9,300 > 1.96$). Hence the findings indicate that there is such an effect. The conclusion that may be drawn from this is that the hypothesis is correct.

Hypothesis 2: Entrepreneurial orientation has a positive and significant effect on business agility

It has been determined through data processing that the value of the t in the table presented before is 12,180. Because this value fits the conditions where the t-value is above 1.96 ($12,180 > 1.96$), it is possible to say that the hypothesis is accepted because the results of this value offer information indicating an influence of entrepreneurial orientation on company agility. This is because the t-value is higher than 1.96.

Hypothesis 3: Digital Adoption Does Not Have a Positive and Significant Impact on Business Agility

The data processing has revealed that the value of t in the table presented earlier is 1,860. The results of this value provide information that digital adoption does not influence business agility since it does not match the criteria where the t-value is below 1.96 ($1,860 < 1.96$). As a result, the hypothesis can be rejected because it does not meet the conditions under which the t-value is below 1.96. This resistance is caused by many actors from culinary SMEs who do not have sufficient digital planning, which causes them to spend more time learning how to apply it rather than focusing on the sales business. This refusal is causing a problem.

Hypothesis 4: Business Agility Has a Positive and Significant Influence on Business Resilience

As a result of processing the data, we know that the value of t in the table presented earlier is 6,250. Because this value fits the conditions where the t-value is greater than 1.96 ($6,250 > 1.96$), it is possible to say that the hypothesis is accepted because the findings of this value offer information that business agility influences business resilience. This is because the t-value is greater than 1.96.

Hypothesis 5: Business Model Innovations Have a Positive and Significant Impact on Business Agility

The data processing has revealed that the value of the t column in the table that is located above has the number 3,010. Because this value satisfies the conditions and has a t-value greater than 1.96 ($3,010 > 1.96$), the results indicate that business model innovation influences business agility. Since the hypothesis can be considered to be accepted, this value's results give information indicating there is such an influence.

Hypothesis 6: Network capability has a positive and significant effect on business agility by mediating business model innovation

It has been determined through processing that the value of the t in the table presented earlier is 2,110. Because the t-value is lower than 1.96 ($2,110 < 1.96$), this value's findings show that network capability affects business model innovation. Since this value satisfies the conditions, one can conclude that the hypothesis may be accepted. The results of this value offer information that there is an effect of network capability on business model innovation. This rejection is because SMEs in the culinary industry do not receive sufficient financial support due to Covid-19, which means that digital adoption will not affect the innovation of business models.

Hypothesis 7: Entrepreneurial orientation has a positive and significant effect on business agility by mediating business model innovation

It has been determined through the data analysis that the value of the t in the table presented before is 2,550. Because this value fits the conditions where the t-value is above 1.96 ($2,550 > 1.96$), it is possible to say that the hypothesis is accepted because the findings of this value offer information that entrepreneurial orientation influences business model innovation. This can be said because the results show an influence of entrepreneurial orientation on business model innovation.

Hypothesis 8: Digital adoption has no positive and significant effect on business agility mediated by business model innovation

The data processing has revealed that the value of t in the table above is in the range of -8,140. Because the results of this value provide information that digital adoption does not affect business model innovation, it fulfills the conditions where the t-value is over 1.37 ($-8,140 < 1.96$). As a result, it is possible to say that the hypothesis is rejected. The results of this value provide information that digital adoption does not affect business model innovation. This rejection is due to a lack of necessary skills and knowledge from the actors involved in developing creative business models, which means that network capabilities will not affect the innovation of business models.

Hypothesis 9: Business agility has a positive and significant effect on business resilience moderated by government intervention

It has been determined through the data processing that the value of t in the table presented before is 3,520. The findings of this value indicate a moderating influence of government intervention on the effect of business agility on business resilience. This value fulfills the prerequisites where the t-value is above 1.96 ($3,520 > 1.96$), and as a result, it is possible to state that the hypothesis is accepted. The results of this value provide information that government intervention has a moderating influence on business agility's effect on business resilience.

6. DISCUSSION

There are at least six accepted and three rejected hypotheses based on the data analysis performed in this study. The obtained results indicate that network capabilities influence business agility, entrepreneurial orientation influences business agility, business agility impacts business resilience, business model innovation affects business agility, entrepreneurial orientation influences business model innovation, and government intervention moderates the influence of business agility on business resilience. In addition, the results indicate that digital adoption does not affect business agility, network capabilities have no effect on business model innovation, and digital adoption has no impact on business model innovation. This demonstrates the renewal of the implementation of the conducted research.

During the Covid-19 pandemic, the culinary industry's small and medium-sized enterprises (SMEs) were among the most severely impacted sectors (Abhari et al., 2022). Certain agricultural sectors had no sales in the first two to four months. The affected sub-sectors are the snack food sector and the snack food sector, typically used as city souvenirs. Therefore, culinary SMEs must-have business resilience or the capacity to adapt to events impacting sales and profits (Lindsay-Smith et al., 2022).

Based on the results of this study, it can be demonstrated that business resilience is influenced by business agility, as proposed in Hypothesis 4. In practice, business agility enables culinary SME enterprises to explore new market opportunities and exploit opportunities in the penetrated market. In addition, business agility allows culinary SMBs to execute competitive actions with broader dimensions, such as volume, action, duration, complexity, and other actions that competitors cannot anticipate. Consequently, when SMEs increase their agility, they will be better able to direct competition and anticipate the next steps, enhancing the business's resilience. In addition, several factors, such as network capability, entrepreneurship orientation, and business model innovation, can increase business agility (Troise et al., 2022).

Government intervention can maintain or strengthen the relationship between business agility and business resilience to preserve it. This is explained in light of these research findings. The government's role is important in influencing prices and policies to balance various aspects of the economy, including implementing a company's business. The government has the authority to intervene in multiple company business implementations, including those of culinary SMEs. (Herbane, 2019) The network capability is a factor that can increase the resilience of SME enterprises. A positive review or recommendation from one individual to another about a product is crucial for increasing sales. This recommendation may originate from word of mouth among the general public or online reviews. Customers are more likely to purchase a well-known product that appears on Google, or many people frequently discuss that. Therefore, culinary SMBs must enhance their networking skills to thrive in the post-pandemic era.

In addition, entrepreneurship orientation is a company orientation based on identifying and exploiting opportunities. For culinary SMEs, entrepreneurial orientation is a desire to be the first in market innovation, a risk-taking disposition, and a proactive attitude toward market changes, particularly during and after the Covid-19 pandemic. On the other hand, this business agility can be enhanced through the renewal of business model innovation. Understanding how companies generate, deliver, and capture value requires thoroughly comprehending the business model. SME business agility can be increased when a company's business model can be updated and adapted to changing market conditions and economic phenomena. (Kordos & Vojtovic, 2016) This business model allows culinary SMEs to easily navigate their critical period, particularly after the Covid-19 pandemic.

Business model innovation demonstrates that a company, including a culinary SME, must plan and administer a well-executed business model, which is an absolute requirement for most companies today because it can help them outperform competitors. This study demonstrates that culinary SMEs must improve and employ suitable business models to survive during business implementation before and after the pandemic (Hadjielias et al., 2022). The ability of small and medium-sized enterprises in the culinary industry to innovate about this business model can amplify the effect of the increasing emphasis on entrepreneurship. When small and medium-sized enterprises (SMEs) in the culinary industry alter their company orientation to entrepreneurship and focus, they can increase their capacity for business model innovation.

Nonetheless, new research indicates that digital innovation appears to have no impact on the business adaptability of culinary SMEs (Patrucco & Kahkonen, 2021). Because the adoption of digital technology requires careful planning and the proper strategy for success, this event occurred. Without careful planning, the use of digital technology can become inefficient and result in unanticipated expenditures, posing a threat to small and medium-sized enterprises (SMEs), particularly in the culinary industry. This is evidenced by the fact that many actors in culinary SMBs lack digital planning, forcing them to spend the majority of their time learning how to implement it rather than focusing on the sales business. In addition, digital adoption in culinary SMBs necessitates a substantial financial investment, either for hardware or software or for creating applications and informative digital platforms. If an SME lacks sufficient financial support, digital adoption does not affect the innovation of its business model. This occurrence in culinary SMEs during the pandemic has decreased income and profits, so implementing digital adoption is insufficient to influence digital model innovation (Lovely et al., 2021).

Network capabilities can facilitate the information and knowledge interchange between small and medium-sized enterprises. Due to a lack of sufficient skills and knowledge to develop innovative business models, network capabilities will not influence business model innovation for SMBs in the culinary industry. Culinary SMBs have become, in some respects, one of the SMB sectors for which it is of the utmost importance to address

problems caused by the Covidian-19 pandemic as soon as possible because the pandemic has a significant impact on the produced or offered product that is perishable. For SMEs in the culinary sector to survive post-covid-19 pandemic turbulence, some factors must be improved, including business resilience. These factors include increasing network capabilities, entrepreneurial orientation, business agility, and government intervention (Turulja & Bajgoric, 2018).

Kurniawan et al.'s (2021) research supports this study's findings, indicating that network capabilities can considerably increase business agility. According to Okoli et al. (2021), entrepreneurial organizations influence the business agility of Nigerian SMEs. Lin et al. (2020) state that digital adoption impacts business agility. According to Mohammed and Adamu (2020), enhancing a company's business agility can increase its resilience. According to Alhassani and Al-Somali (2022), there is a positive correlation between the independent variable of business innovation capability and the dependent variable of organizational agility. According to Gerald et al. (2020), business model innovation and business agility have a significant positive effect. The findings of this study are supported by Mat Zin and Engku Hassan Ashari's (2020) assertion that the greater an organization's entrepreneurial orientation, the greater the business model innovation. Lovely et al. (2021) state that digital adoption affects business model innovation. The findings of this study are consistent with the findings of Hadjelijias et al. (2022), who found that government intervention in regulating a company or organization can strengthen the relationship between business agility and business resilience.

7. CONCLUSION

It is possible to conclude the findings and analysis presented in this study that culinary small and medium-sized enterprises (SMEs) need to improve their ability to survive, particularly after the upheaval brought on by the Covid-19 pandemic, for the implementation of culinary SMEs to improve through the development of business resilience that is moderated by the intervention of the government. The resilience of a firm can be strengthened by increasing its agility. On the other hand, a more capable network, an attitude toward entrepreneurship, and innovative business model creation can all contribute to increased company agility. In the meantime, the high entrepreneurial orientation displayed by culinary SMEs affects the invention of business models. By addressing these variables, small and medium-sized culinary businesses can improve their resistance to economic shocks.

It is impossible to separate the existence of challenges and restrictions from the operation of a firm. Challenges can be a growing medium for the business to thrive in a company such as a small or medium-sized enterprise (SME). Resilience in business can help small and medium-sized enterprises (SMEs) face the challenges they confront. A corporation or organization engaged in business is said to have business resilience when it can rebound from challenges, setbacks, and difficulties to survive and adapt to its environment. Business resilience became one of the characteristics that helped small and

medium-sized enterprises (SMEs) in the culinary industry to continue to increase profits and endure all of the repercussions of the post-COVID-19 pandemic instability that occurred. Therefore, one of the most significant things to develop to deal with the post-turbulence caused by the aftermath of Covid-19 is a small and medium-sized enterprise's (SME) ability to become more resilient as a firm.

8. IMPLICATIONS

This research is anticipated to contribute to the existing body of literature on the elements that strengthen the business resilience of enterprises, particularly SMEs operating in the culinary industry. In the meantime, from a more pragmatic standpoint, this research offers suggestions to small and medium-sized enterprises (SMEs) operating in the culinary industry regarding how they can enhance their capabilities in networking, entrepreneurial orientation, digital adoption, and business model innovation. This will allow them to improve their ability to continue operating and increase their profits in the post-pandemic era of Covid-19. In the era of post-covid-19 instability, the government also needs to identify policies that can have a lasting influence on small and medium-sized enterprise (SME) players, particularly in the culinary industry.

9. LIMITATIONS & DIRECTIONS

Because this study only focuses on business agility, business model innovation, government intervention, networking capability, entrepreneurial orientation, and digital adoption to determine whether or not these factors can influence or increase business resilience in culinary small and medium-sized enterprises (SMEs), additional research is required to determine other factors of business resilience by involving a different type of company.

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