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# Strategies for Strengthening Business Agility through Business Ecosystems in Culinary MSMEs in Regency

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***Abstract-*** ***This study is intended to test and analyze the effect of business ecosystem on business agility (survey on culinary micro, small and medium enterprises in Garut Regency). Micro, small and medium enterprises have a very fast role in increasing economic growth. Findings reveal that operations, research and development, transformation, and strategy are important dimensions in business agility. The purpose of this study was to determine the effect of business ecosystem on business agility in small and medium culinary businesses in Garut Regency. The population in this study were culinary micro, small and medium enterprises in Garut Regency. This type of research is explanatory survey research using a quantitative approach. The sample used in this study was 399 respondents, then processed using SPSS statistic 26 using purposive sampling technique. The analytical tools used in this research are simple linear regression, instrument test, classical assumption test, and hypothesis testing. The results of this study state that the business ecosystem variable has an influence of 62.8% on business agility. The conclusion from the results of this study is that the ability in business agility is very necessary and cannot be separated from bringing together harmony between ecosystem components in a company.***
***Keywords: Business Ecosystem, Business Agility***

## I. INTRODUCTION

Today's business environment is growing and changing faster every year. This has led to the emergence of many new businesses in various categories, both goods and services. The development of the business world is also characterized by strong competition. Competition between Micro, Small and Medium Enterprises is increasing and the goal of Micro, Small and Medium Enterprises cannot survive alone, because Micro, Small and Medium Enterprises must be able to win the competition. Therefore, in order for a company to maintain its business, it is currently important to be able to understand and manage technology and be able to absorb new knowledge that the company needs to be agile, to ensure further development and to keep the company agile [1][2].

The development of the business world is also characterized by increasingly intense competition. This is especially true for Micro, Small, and Medium Enterprises (MSMEs), which face mounting pressure not only from peers but also from larger corporations and shifting consumer demands. In this competitive environment, MSMEs cannot rely solely on internal strengths but must actively engage in strategic innovation, networking, and adaptation to market dynamics in order to survive and grow. According to the resource-based view, firms gain competitive advantage by effectively managing their unique resources and capabilities, which is especially critical for MSMEs with limited assets [3]. Additionally, the dynamic capabilities theory suggests that the ability to integrate, build, and reconfigure internal and external competencies is key for firms to respond to environmental changes and sustain competitive advantage [4].

Although the importance of business agility in today's rapidly evolving market environment is well acknowledged, there remains a gap in understanding how micro, small, and medium enterprises (MSMEs) particularly in the culinary sector can strategically build agility through business ecosystems [5]. Much of the current literature focuses on large corporations and digital enterprises, leaving MSMEs underrepresented in studies on agile transformation and adaptive capability [6]. Furthermore, while business ecosystems are increasingly seen as meta-organizations that foster collaboration and innovation, the mechanisms by which MSMEs engage and benefit from such ecosystems, especially in regional culinary industries, are still unclear [7]. Recent work also highlights the role of digital platforms and global networks in ecosystem-based value creation, but often overlooks localized, sector-specific dynamics such as those in culinary MSMEs [8]. This creates a pressing need to investigate how business ecosystems can be leveraged to foster agility in culinary MSMEs at the regional level, where resources, digital readiness, and




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strategic partnerships may differ significantly from larger or more urban enterprises.

Therefore, every Small Micro and Medium Enterprise must quickly adapt to these changes. As a result, business actors must act more agile and flexible [1]. It is explained that business agility can be applied at different business levels. Business agility encompasses various activities carried out by Micro, Small and Medium Enterprises to create value in an unpredictable environment[9]. These activities systematically involve specific processes, products and structures. Micro, Small and Medium Enterprises' lack of initiative to respond to external challenges to the business requires companies to deploy different resources to maintain a high level of control and speed to be flexible in an international context. Business agility is the ability not only to allocate sufficient resources to develop and implement all specific functions, but also to remain agile by dynamically balancing these functions. [10]

There are many themes in various contexts related to business agility that have been discussed by previous researchers. Business agility themes in the organizational context are organizational agility, corporate agility, and strategic agility. The themes of business agility in a functional context are supply chain agility, Information Technology agility, Human Resources agility, manufacturing agility, labor agility, marketing agility, value chain agility, value stream agility, global risk agility, and sales force agility. Business agility themes in the group context are team agility and leadership agility. Business agility themes in the individual context are learning agility and agility. [11]

Table 1. Data on the Number of Micro, Small, and Medium cultural Enterprises in Garut Regency

| Number of MSMEs in Garut Regency | |
|---|---|
| **Year** | **Total** |
| 2018 | 292200 |
| 2019 | 310279 |
| 2020 | 329477 |
| 2021 | 349863 |

*Source : [12]*

According to the Office of Cooperatives and Small Businesses (Diskuk), the number of Micro, Small and Medium Enterprises in Garut Regency in 2018 reached 292,200, in 2019 reached 310,279, in 2020 reached 329,477, and in 2021 reached 349,863, indicating that Micro, Small and Medium Enterprises in Garut Regency have experienced a significant increase every year.

Table 2. Number of Culinary Micro, Small and Medium Enterprises in Garut Regency

| Number of Culinary MSMEs in Garut Regency | |
|---|---|
| **Year** | **Total** |
| 2018 | 104559 |
| 2019 | 111028 |
| 2020 | 117897 |
| 2021 | 125192 |

*Source : [12]*

According to the Department of Cooperatives and Small Businesses (Diskuk), the number of Culinary Micro, Small and Medium Enterprises in Garut Regency in 2018 reached 104,559, in 2019 reached 111,028, in 2020 reached 117,897, and in 2021 reached 125,192, indicating that Culinary Micro, Small and Medium Enterprises in Garut Regency have experienced a significant increase every year [13].

Because market conditions coupled with technology result in increasing conditions, an in-depth study of business models that pay attention to current conditions and conditions is needed so that companies can survive and compete in the market. Micro, Small and Medium Enterprises strive to improve existing (modern) business processes [14] So, Richardus Eko Indrajit, 2021 Business ecosystems enable economic sectors to become competitive by introducing new values . [15]

Business ecosystem is a global network system that includes interacting parts of the real world. Along with the increasing confidence of Micro, Small and Medium Enterprises, the business environment needs to be managed carefully. Every business actor has a greater chance of survival and growth if they understand the ideal business model and identify the right ecological environment[16][17] . Micro, Small and Medium Enterprises can change something new by adopting a business ecosystem .[18]

There are two basic types of business ecosystems: the first is a solution ecosystem that creates or provides products or services by coordinating multiple contributors. In these ecosystems, customers are usually not active members, but have significant influence on the selection and combination of offerings from core and complementary businesses. In addition, intermediaries (such as retailers and other commercial agents) may participate in the ecosystem, as the



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activities of business actors must be separated from the activities of other actors. Second, transaction ecosystems that take place through digital platforms or connect bilateral market participants. The purpose of the transaction ecosystem is to identify the best match between the specific needs of customers and the specific offers of producers, and facilitate subsequent transactions[19] . Business ecosystem has a positive and significant effect on business agility . [20]

Business actors who play an active role in the business environment are indispensable in the business ecosystem. Successful companies exhibit unique behaviors when business people are the best in their business .[21]

## II. LITERATURE REVIEW

### 2.1 Business Agility

Business agility is the ability of a company to renew, adapt, transform, and succeed in a rapidly changing environment. It can also be defined more broadly as the ability to quickly reorient strategies, structures, processes, people and technology towards value creation and defensive capabilities[20] . Business agility refers to the capacity of a business to anticipate, detect and respond to market volatility in ways that provide competitive advantage[22] . Business agility is a business characteristic that describes the capacity of Micro, Small and Medium Enterprises to recognize and respond quickly to ongoing market developments and helps the growth of Micro, Small and Medium Enterprises[23] . Business agility is the ability of an entire enterprise to deal with often unexpected changes in the business environment through rapid and innovative responses by using change as an opportunity for growth and development ([24] . Business agility can be understood as the capacity of a business to adapt quickly to changing market dynamics, customer demands, and industry standards in a profitable and cost-effective manner without compromising quality [25].

Business agility is increasingly conceptualized as a dynamic capability that empowers organizations to adapt rapidly to changes in the external environment, such as market shifts, technological advancements, and evolving customer preferences. It encompasses more than just operational flexibility it also includes strategic responsiveness supported by digital infrastructure, real-time data use, and an adaptive organizational culture. Recent research emphasizes that agility enables firms not only to respond quickly but also to align their actions with long-term strategic goals, making it a core component of sustainable competitive advantage in volatile environments [26].

Based on the theory that has been presented, the researcher concludes that what is meant by business agility is a business that can adapt and develop quickly to market changes, so that it can respond appropriately and flexibly to customer demand. In this study, the dimensions chosen to measure business agility variables are: Operations, Research & Development, Transformation and Strategy,

### 2.2 Business Ecosystem

The business ecosystem is a set of institutional networks with the aim of encouraging entrepreneurial success through all stages of the new venture creation and development process[27] ). Business ecosystems are informal networks of companies and people that create valuable products and services[28] . The business ecosystem has no center and its boundaries are not clear. Each business ecosystem has many smaller business ecosystems. At the same time, it is part of the wider business ecosystem. This means that boundaries can be established in real situations. The definition varies greatly for a particular organization within the business ecosystem at the same time. [29]A business ecosystem is a collection of innovative, mainly independent economic actors that work together to produce goods or services. The big idea known as the business ecosystem includes a marketplace that contains many producers of goods and services and potential consumers[30] . Business ecosystems are complex living entities, but at the same time they are also artifacts . [31]

The concept of a business ecosystem refers to a dynamic and interconnected network of organizations that collaborate and compete to create and capture value. This structure moves beyond traditional value chains by incorporating a wide array of stakeholders such as suppliers, partners, customers, and even competitors who interact in complex and adaptive ways. A key theory proposed characterizes ecosystems as loosely coupled yet interdependent structures where each participant maintains autonomy while benefiting from collective value creation [32]. Additionally, Adner introduces the notion of



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ecosystem orchestration, highlighting the role of a focal firm in coordinating joint activities and ensuring alignment among ecosystem members to reduce interdependence risks and enhance innovation outcomes [33].

Based on the theory that has been presented, the researcher concludes that what is meant by the business ecosystem is a group of individuals or companies consisting of sellers, suppliers, resellers, distributors, and competitors who are involved in cooperation and delivery of business products so that there is a symbiotic mutualism

## III. RESEARCH METHODS

Research methods provide the foundation for conducting systematic inquiry and validating knowledge in academic and applied settings. There are three primary approaches to research qualitative, quantitative, and mixed methodseach with distinct philosophical assumptions and methodological procedures tailored to different types of inquiry [34]. Quantitative methods emphasize objectivity, measurement, and statistical analysis to test hypotheses and examine relationships between variables [34]. In contrast, qualitative methods focus on exploring phenomena in depth through open-ended data collection, often involving interviews, observations, and content analysis [35]. Mixed methods integrate both quantitative and qualitative techniques to capture the complexity of research problems, offering a more holistic view of the studied phenomena [34]. Methodological rigor, research ethics, and the alignment between research questions and chosen techniques are critical components of a strong study design [35].

In completing this study, researchers used an explanatory survey approach. This study aims to determine the impact of the Business Ecosystem on Business Agility. This research will be conducted by all groups of Culinary Micro, Small and Medium Enterprises with the aim of explaining the reasons for conducting the research, namely to keep the Business Ecosystem on Business Agility remains one of the main references for companies in maintaining and improving service quality and market competitiveness. The population in this study, which has been recorded, is 117,897 Culinary Micro, Small and Medium Enterprises. the sample taken in this study after rounding was 400 respondents. This research combines two different data categories, namely primary data and secondary data. Researchers conducted an information or data collection method by providing questionnaires to participants to be answered via G-From online.

The data analysis technique in this quantitative study utilized a statistical approach. The technique of analyzing the data in this study was a regression. Regression is a versatile and powerful analytical method that can be used to model the effect of independent variables on the dependent variable Research Method. Regression analysis can combine two primary objectives: 1) Predicting the dependent variable based on the independent variable and 2) Understanding the relationship between the dependent and independent variables.

The program used to analyze the data with the regression method was Statistical Product and Service Solution (SPSS). An interval scale was utilized to meet the data analysis criteria using regression. It allowed researchers to perform arithmetic calculations on the data collected from respondents. The measurement does not have zero value because the measurement of entrepreneurial behavior in entrepreneurship research was the Likert scale. It is a scale that asks respondents whether they agree or disagree about a perceived object. To avoid misunderstanding in analyzing and interpreting the title sentence and research variables, the variables were referred to as Business Ecosystem (independent variable), and social Business Agility (dependent variable). In this study, the dimensions chosen to measure business ecosystem variables are: (1) finance, (2) marketing, (3) sales, (4) operations adopted from research (Ervina Waty, 2021)

## IV. RESULT AND DISCUSSION

### 4.1 Classical Assumption Test

In data analysis, the normality test is one part of the classic assumption test requirements. The normality test is used to test whether the residual value is normally distributed or not. The normality test is needed to test other variables by assuming that the residual values follow a normal distribution. If this assumption is violated, the statistical test becomes invalid and parametric statistics cannot be used. The normality test in this study uses the Kolmogrov Smirnov method. A good regression analysis model should be normally distributed or close to normal.

The results of the normality test are presented as follows:




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Table 1. Measurement Results of Normality Test

| One-Sample Kolmogorov-Smirnov Test | | |
|---|---|---|
| **Residuals** | | **Unstandardized** |
| N | | 399 |
| Normal Parameters[a,b] | Mean | .0000000 |
| | Std. Deviation | 368.101.713 |
| Most Extreme Differences | Absolute | .042 |
| | Positive | .020 |
| | Negative | -.042 |
| Test Statistic | | .042 |
| Asymp. Sig. (2-tailed) | | .087[c] |
| a. Test distribution is Normal. | | |
| b. Calculated from data. | | |
| c. Lilliefors Significance Correction. | | |

*Source: [36]*

Based on table 4.9, it is known that the significance value of Asymp. Sig. (2tailed) of 0.087 this value is greater than 0.05. So in accordance with the basis for decision making in the Kolmogrov Smirnov normality test, it can be concluded that the residual value is standardized or the data is normally distributed. Thus, the assumption or statement of normality in regression has been fulfilled.

### 4.2 Heteroscedasticity Test

Table 2. Heteroscedasticity Test Processing Results

| Correlations | | | | |
|---|---|---|---|---|
| | | | **Unstandardized Residual** | **Business Ecosystem** |
| Spearman's rho | Unstandardized Residual | Correlation Coefficient | 1.000 | .032 |
| | | Sig. (2-tailed | . | .519 |
| | | N | 399 | 399 |
| | Business Ecosystem | Correlation Coefficient | .033 | 1.000 |
| | | Sig. (2-tailed | .519 | |
| | | N | 399 | 399 |

*Source: [36]*

Based on the results of processing the heteroscedasticity test in table 4.10, it can be seen that the output above shows the Sig. value on the independent variable or business ecosystem is 0.519, this value is greater than 0.05, so it is in accordance with the basis for decision making that the data does not occur heteroscedasticity, so the simple linear regression model has met the assumption of heteroscedasticity.

### 4.3 Autocorrelation Test

Table 3. Testing the Autocorrelation Test

Model Summary

| Model | R | R Square | Adjusted R Square | Std. error of Estimate | Durbin Watson |
|---|---|---|---|---|---|
| 1 | .792 | .628 | .627 | 3.686 | 1.800 |

a. Predictor : (constant), Business Ecosystem

b. Dependent Variable: Business Agility

*Source: Researcher, 2024.*

From the results of the autocorrelation test output above, there is a Durbin-watson value of 1.800. To find out whether this value has autocorrelation symptoms or not, it can be identified by looking at the Durbin Watson (D-W) value. From the results of the Durbin Watson table above, it can be concluded that the D-W value of 1.800 is below -2 to +2, meaning that the data does not occur autocorrelation symptoms in regression or the autocorrelation test assumptions have been met.

### 4.4 Analysis of Business Ecosystem on Business Agility

The first analysis using the partial test (t test) was conducted to determine the value of the regression coefficient on the business ecosystem variable on business agility. Based on the results of data processing shows that table 4.12, namely the results of the t test (partial) shows that the significant value of the effect of the level of business ecosystem (X) on business agility (Y) is 0.000 <0.005 and the value of t count 25.884> t table value 1.96594, meaning that there is a significant influence of business ecosystem on business agility.

Table 4. Effect of Business Ecosystem on Business Agility





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**Coefficientsa**

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 1 | (Constant) | 15.804 | 1.318 | | 11.987 | .000 |
| | Business Ecosystem | .707 | .027 | .792 | 25.884 | .000 |

*Source: [36]*

The second analysis was conducted to determine the value of the correlation or relationship (R) between the business ecosystem and business agility. Expressed with an R value of 0.792. From the output, the coefficient of determination (R2) value of 0.628 is obtained, which implies that the business ecosystem is influenced by business agility by 62.8%, while 37.2% is influenced by other variables not mentioned in this study. Based on the criteria for the R-Square value, the coefficient of determination test has 3 criteria, including if the RSquare value is 0.25, it can be categorized as weak. If the R-Square value is 0.50, it can be categorized as moderate and if the R-Square value is 0.75, it can be categorized as strong [37]. In this study, it obtained an R-Square value of 0.628, which means that the business ecosystem is influenced by business agility with moderate criteria results.

Table 5. Test Results of the Coefficient of Determination (R Square)

**Model Summary[b]**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .792 | .628 | .627 | 3.686 |

*Source: [36]*

The results of this study indicate that there is a positive influence between the business ecosystem on business agility in Micro, Small and Medium Enterprises in Garut Regency. Based on the partial calculation of the effect of the business ecosystem on business agility, the regression coefficient value is 0.707. At the 5% significance level with a significance value of 0.000. Because the regression coefficient has a positive and significant value (p) <0.05, it can be concluded that the higher the business ecosystem, the greater the business agility. This also applies vice versa, namely if the business ecosystem is low, then business agility is also low. The level of business ecosystem on business agility is expressed with R of 0.792, which means there is a strong relationship between business ecosystem and business agility. If interpreted according to the criteria for the close correlation of the business ecosystem to business agility, it is strong because it ranges from 0.600 - 0.799. Then the value of R2 is 0.628, expressed as the coefficient of determination which means that the business ecosystem is influenced by business agility by 62.8% while 37.2% is influenced by other variables not mentioned in this study. This means that H1 is accepted, these results prove that the business ecosystem has a significant effect on business agility (survey of Culinary Micro, Small and Medium Enterprises in Garut Regency).

Business ecosystem is a very big thing and needs to be targeted specifically because it will give confidence to Micro, Small and Medium Enterprises. A business ecosystem is a collection of innovative economic actors, especially independent ones, who work together to produce goods or services. The big idea known as the business ecosystem includes a market that contains many producers of goods and services and potential consumers[9] . This is supported by research that has been conducted in research[14] states that the business ecosystem has financial, marketing, sales, and operations dimensions that affect business agility.

## V. CONCLUSION AND SUGGESTION

Based on the results of the research discussion regarding the effect of the business ecosystem on business agility in culinary Micro, Small and Medium Enterprises in Garut Regency, it can be concluded that the business ecosystem has a positive effect on business agility in culinary Micro, Small and Medium Enterprises in Garut Regency. The results of this study indicate that the business ecosystem has an influence of 62.8% on business agility, which means that H1 is accepted. The higher the business ecosystem, the higher the business agility. This also applies vice versa, namely if the business ecosystem is low, then business agility is also low.

To support business growth, there needs to be an ecosystem that facilitates the growth of Micro, Small and Medium Enterprises, such as providing access to training, guidance, financing and networks to Micro, Small and Medium Enterprises. Micro, Small and Medium Enterprises are not born by themselves but through a process and develop well in a business



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ecosystem. An innovation can be successful if the creation and implementation of processes, products, services, and methods can produce effective and efficient quality improvement results. Business agility innovation can be done in the form of product innovation and marketing innovation. With continuous changes in the business environment, the improvement and development of the business ecosystem in the company itself will be very important.

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