

Driving Sustainable Competitive Advantage Through an Innovative Aggregator Business Model in The Creative Economy Sector

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ABSTRACT : The aim of the research is to analyze the influence of the aggregation business model on Sustainable Competitive Advantage (SCA). Through a survey of 216 MSMEs in the creative economy sector selected randomly using an ex post facto causal research approach, an overview of the aggregator business model and its impact on financial resources and SCA was obtained. The aggregator business model plays a role in facilitating increased access to financial resources to meet both available and required working capital for realizing SCA in Malang's Lokanima area. The strength of ABM lies in understanding the resources needed for SCA and the effectiveness of mobilizing services while considering the most cost-effective options, including providing various alternatives in their provision. Financial resources are an important factor supporting the achievement of SCA. Access to financial resources is key to facilitating business growth and sustainability. Theoretical implications: The concept of the aggregator business model emphasizes the efficient and effective collection, aggregation, and distribution of resources in connecting service providers with consumers in an economical and efficient manner. Practical implications: ABM can enhance the performance of financial resource provision by optimizing relationships with MSMEs and financial institutions, leading to business growth and sustainability for MSMEs.

KEYWORDS -Aggregator Business, Creative Economy, Financial Resources, Sustainable Competitive Advantage

I. INTRODUCTION

MSMEs are one of the important economic players in developing countries, including Indonesia (Maksum et al., 2020). However, Setyaningrum et al. (2023) revealed that currently MSMEs are faced with a highly competitive and complex competition situation. Prakash et al. (2023) argue that in the digital era, every small and medium-sized enterprise (SME) faces stiff competition to achieve sustainable and competitive advantages. MSMEs also face challenges in integrating more sustainable business practices (Barros et al., 2021; Lynch, 2022). There is a responsibility related to sustainability in a company's operational activities (Famiola & Wulansari, 2020; M. Kumar & Rodrigues, 2020). This means that MSMEs not only face competitive challenges but also the demand to be more responsible in conducting their businesses. This advantage encompasses not only operational efficiency but also responses to changes in economic paradigms and environmental regulations (Lopes & Farinha, 2019).

To adopt competitive business practices and ensure MSMEs' sustainability, understanding adequate resources is necessary. Estensoro et al. (2022) emphasize that understanding the required resources at various stages of business practice implementation in the current era is crucial. One perspective guiding understanding of resources is the resources-based view (RBV) perspective. RBV, originating from Barney (1991) as stated by Barney & Mackey (2016), emphasizes the importance of an organization's internal resources in achieving competitive advantage (Estensoro et al., 2022). RBV provides guidance for strategic decision-making by understanding and effectively managing internal resources (Shibin et al., 2020). Ly (2021) states that the main influence in forming the theory of competitive advantage includes works such as Barney (1991), highlighting the importance of internal resources and capabilities in achieving competitive advantage, as well as the market-based view proposed by Porter (1980). Although these conceptual frameworks encompass organizations and competitive environments, RBV emphasizes the development and implementation of resources (Agrawal et al., 2024; Ferreira & Ferreira, 2023; Lu et al., 2023; Rodrigues et al., 2021).

There are various resources needed for MSMEs to adopt competitive and sustainable business practices. These resources, which continue to evolve, consist of tangible and intangible resources (Barney & Clark, 2007). MSMEs require financial resource support to achieve Sustainable Competitive Advantage (SCA) (Aslam et al., 2023; Zarrouk et al., 2020; Alkahtani et al., 2020; Lim et al., 2023; Liu et al., 2023). Access to capital is crucial for MSMEs (Irjayanti et al., 2012; Gunawan et al., 2022; Maksum et al., 2020). Although these issues have been widely discussed (Gunawan et al., 2022), there is a need to delve deeper into the root of these problems. There is a lack of understanding regarding financial resources for SMEs. Woschke et al. (2017) suggest the need to operationalize financial resources based on individual perceptions of managers, where managerial opinions are more important than objective financial key figures.

Resources are classic and complex issues for business actors in Indonesia (Irjayanti, 2012; Maksum et al., 2020), including in the sub-sector of creative content in the Malang Special Economic Zone (KEK). Support is needed to ensure resource availability to achieve SCA (Journeault et al., 2021; Hernita et al., 2021; Gunawan et al., 2022). One conceptual framework that can be developed to promote resource availability is the aggregator business model. This model helps address issues in business (Broekhuizen et al., 2021). The aggregation model supports capital access (Kamulegeya et al., 2018). The aggregation-based business model has the potential to create value through resource consolidation and coordination (Lampropoulos et al., 2017). The aggregator business network model is a critical driver of digital transformation in various industries (Saqib & Shah, 2023), including helping to address challenges in achieving competitive advantage (Galli-Debicella, 2021; R. Kumar & Duggirala, 2021). Maksum et al. (2020) emphasize the importance of social entrepreneurship availability to assist MSMEs.

However, there are challenges in implementing the aggregator business model that have implications for the success of the model (Okur et al., 2020). The aggregation model has limitations in mobilizing services to help MSMEs obtain resources. Moreover, knowledge about the success of the model in the context of MSMEs in the creative economy sector is still lacking. There is no quantitative evidence available to empirically test the success of the aggregator business model in the context of digital creative content economy MSMEs. Previous studies have shown the success of business aggregator models in transportation service mobility (Wong & Hensher, 2020), energy (Berntzen et al., 2021; Bertolini & Morosinotto, 2023; Chen et al., 2019; Iria & Soares, 2023; Ponds et al., 2018; Vatanparvar et al., 2015). Okur et al. (2020) state that there are various roles in the aggregator business model that require further study.

The contribution of this research is 1) to broaden understanding of the resource needs for MSMEs in the context of the digital creative content economic sector based on the RBV perspective, particularly financial resources from a more comprehensive perspective, and 2) to demonstrate the important role of aggregators in context by integrating the RBV conceptual framework and aggregator business model. Integrating Resource-Based View (RBV) with the theory of the aggregator business model provides valuable insights into how aggregator platforms manage resources to create added value and sustainable competitive advantages. The research objective is to explain the role of the aggregator business model in moderating the influence of financial resources on sustainable competitive advantage in the digital creative content economic sector in Indonesia.

II. RESEARCH METHOD

The research approach utilized ex-post facto with a causal research type according to the research objectives. Causal research is deemed suitable for situations where the variables are complex and it's not feasible to manipulate and control variables as in experimental research. Secondly, this type of research allows variables to be intensively measured in real settings. Thirdly, causal research enables researchers to obtain a significant level of association between the aggregator business model, financial resources, reputation, and SCA under investigation. Data collection technique employed a survey with questionnaires distributed to 281 MSMEs in Malang City's Digital Content sector, successfully collected from 400 questionnaires distributed.

The aggregator business model was constructed and measured based on Okur et al. (2020) with 5 indicators as follows: 1) Trading flexibility in the day-ahead market, 2) Trading flexibility in the intra-day market. Measurement of Financial resources was developed based on Mishina et al. (2004) and Barney et al. (1991), referring to a company's monetary assets, including equity, loan capital, retained earnings, and debt capacity to meet available or required working capital needs. Operationalization of financial resources refers to Woschke et al. (2017), where operationalization of financial resources is used to assess the scarcity of financial resources by asking companies whether financial resource scarcity has been a constraint in the past, leading them not to have sustainable product/service advantages.

Sustainable competitive advantage was constructed and measured based on Ahmad et al. (2023), consisting of 8 indicators such as: 1) Return on investment (ROI), 2) Profits as a percentage of sales, 3) Decreasing product or service delivery cycle time. Responses used a Likert scale ranging from strongly disagree (1) to strongly agree (5) for positive statements. Inferential analysis employed regression approach using SPSS 25. The analysis technique used t-tests to test differences in aggregator model implementation and the continued

influence of ABM's role on SCA, then demonstrating the model's ability to moderate the influence of financial resources on sustainable competitive advantage.

III. RESULT

According to the proposed model that has been submitted, as can be seen in the submitted proposed model, it is as follows:

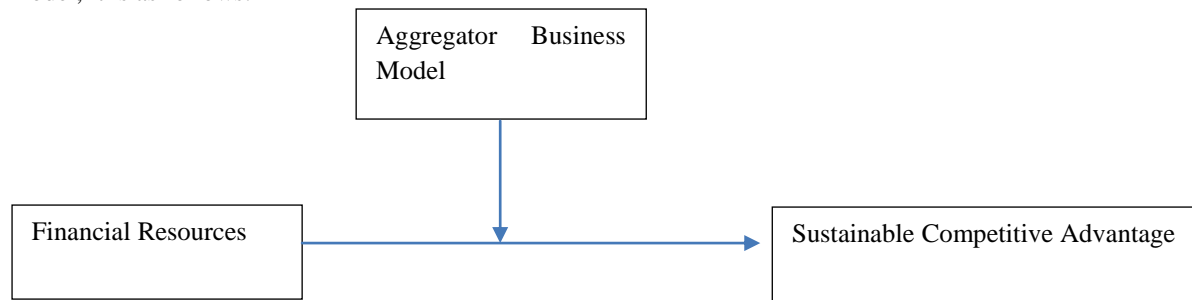


Fig 1. Proposed model

A. Descriptive Analysis Results

The analysis of descriptive data from the research indicates that the aggregator business model operates based on its role as a supplier to meet the needs of MSMEs in Lokanima Malang. The average score for ABM is 4.2 on a scale of 1 to 5, meaning this role has been implemented at 84% of the ideal score. The availability of financial resources is at a moderate level with a score of 3.7 or 74% of the ideal score. There are various internal and external processes to access financial resources that do not fully support the implementation of the ABM role in mobilizing financial resource needs services. The level of SCA is at a moderate level with an average score of 3.6 or 72% of the ideal score. The description of research variables is as follows:

Table 1. Variable description

Variables	Mean	Std	Conclusion
Aggregator Business Model	4.2	0.058	High
Financial Resources	3.7	0.522	Middle
Sustainable Competitive Advantage	3.6	0.171	Middle

Source: Data processing (2024)

The aggregator business model has an average of 4.2, indicating high assessment of the effectiveness and efficiency of the business model. The low standard deviation on this variable, at 0.058, suggests that respondents' evaluations tend to be consistent and stable towards the aggregator business model. Financial resources have an average of 3.7, with a high standard deviation of 0.522, indicating significant variation in respondents' perceptions of financial resource availability. The level of sustainable competitive advantage has an average of 3.6, with a standard deviation of 0.171, indicating moderate variation in respondents' opinions. The descriptive analysis results highlight the strengths and challenges of the aggregator business model, with potential to improve consistency and gain stronger support from financial resources and sustainable competitive advantages.

B. Inferential Testing Results

The results of inferential analysis are as follows:

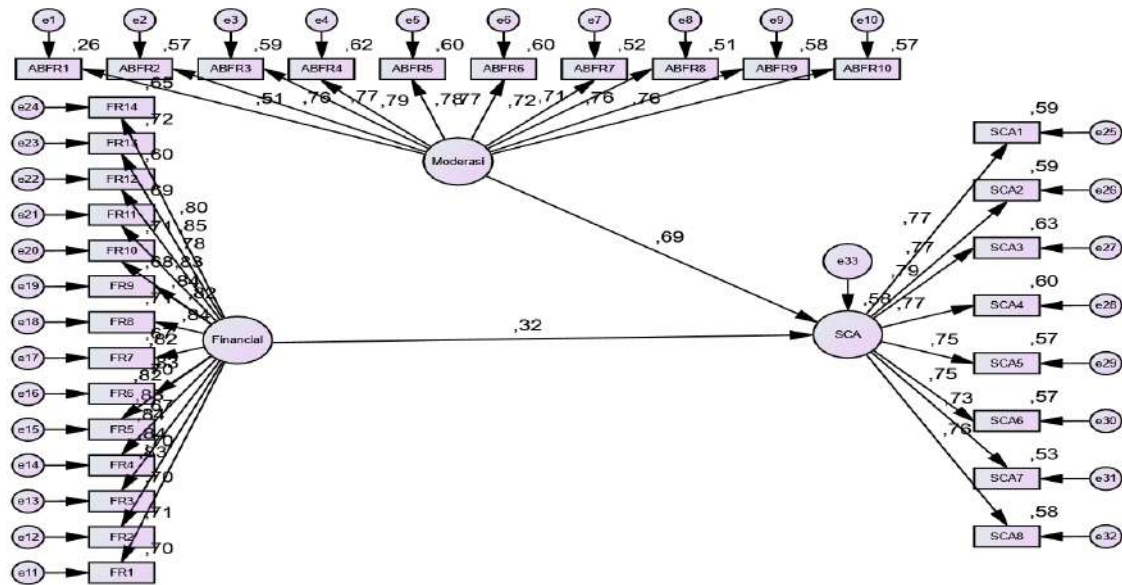


Fig 2. Model Testing Results

1) Defining individual constructs

Before being used on the designated sample, the researcher conducted a pre-testing of variable construction involving 50 micro SMEs in Bandung City operating in the same field as non-sample participants. The sample for testing the individual construct of each variable is similar to the population. The results of the validity test show that each instrument has a validity score > 0.30 with reliability test results > 0.7.

2) Developing and specifying the measurement model

The second step is to test the relationship between indicators and latent variables. The test results indicate that the measurement model is acceptable. The indicators have a significant relationship with the latent variable constructs. All reported factor loading values (0.602 - 0.882) indicate that the observed variables reflect the latent variables. The results of the factor loading test indicate that the construction of each latent variable is as follows:

Table 2. The results of the factor loading test

Path		Estimate	S.E.	C.R.	P	Standardized Regression Weight
ABM1	<--- ABM1	1,000				0.732
ABM2	<--- ABM2	0.848	0.069	12,349	***	0.729
ABM3	<--- ABM3	1,064	0.078	13,627	***	0.798
ABM4	<--- ABM4	1,076	0.077	14,046	***	0.819
ABM5	<--- ABM5	1,026	0.074	13,938	***	0.818
ABM6	<--- ABM6	1,000	0.075	13,330	***	0.787
ABM7	<--- ABM7	1,133	0.08	14,252	***	0.837
ABM8	<--- ABM8	1,018	0.076	13,445	***	0.799
ABM9	<--- ABM9	0.976	0.074	13,155	***	0.782
ABM10	<--- ABM10	0.946	0.072	13,201	***	0.783
FR1	<--- Financial	1,000				0.834
FR2	<--- Financial	0.996	0.055	17,991	***	0.841
FR3	<--- Financial	1,009	0.057	17,785	***	0.838
FR4	<--- Financial	0.999	0.057	17,636	***	0.834
FR5	<--- Financial	0.924	0.054	17,051	***	0.817
FR6	<--- Financial	0.928	0.052	17,697	***	0.834
FR7	<--- Financial	0.946	0.056	17,037	***	0.816
FR8	<--- Financial	1,009	0.056	17,940	***	0.842
FR9	<--- Financial	0.95	0.055	17,275	***	0.824
FR10	<--- Financial	1,010	0.056	17,887	***	0.841
FR11	<--- Financial	0.949	0.054	17,624	***	0.833
FR12	<--- Financial	0.858	0.054	15,759	***	0.775
FR13	<--- Financial	1,003	0.055	18,103	***	0.847

FR14	<---	Financial	0.902	0.054	16,641	***	0.803
SCA1	<---	SCA	1,000				0.77
SCA2	<---	SCA	0.993	0.067	14,749	***	0.768
SCA3	<---	SCA	1,015	0.067	15,263	***	0.792
SCA4	<---	SCA	0.982	0.066	14,913	***	0.772
SCA5	<---	SCA	0.968	0.067	14,413	***	0.754
SCA6	<---	SCA	0.936	0.065	14,416	***	0.754
SCA7	<---	SCA	0.905	0.065	13,854	***	0.729
SCA8	<---	SCA	0.942	0.065	14,596	***	0.761
ABFR1	<---	Moderasi	1,000				0.834
ABFR2	<---	Moderasi	1,522	0.178	8,542	***	0.841
ABFR3	<---	Moderasi	1,561	0.18	8,648	***	0.838

The results of the causality test are as follows:

Table 3. Causality test results unstandardized regression weight and standarized regression weight

Path		Estimate	S.E.	C.R.	P	Standardized Regression Weight	
SCA	<---	Financial	0.26	0.043	6,111	***	0.318
SCA	<---	Moderasi	1,516	0.206	7,362	***	0.692

Source: Unstandardized regression weight Data processing (2024)

The test results show a Critical Ratio > 1.96 and a p-value < 0.05. This means that the path of financial resources, both directly and after moderated by the aggregator business model, is significant with varying estimated values.

3) *Designing a study to produce empirical results*

The results of the AVE test, composite reliability, and discriminant validity are as follows:

Table 4. AVE, CR and discriminant validity test

Variables	AVE	Composite Reliability	1	2	3
Financial Resources	0.685	0.945			
Aggregator Business Model	0.623	0.959	0.089		
SCA	0.617	0.950	0.272	0.148	

The results of the discriminant validity test indicate that the observed variables have higher correlations with their respective latent variables compared to other latent variables. For example, the observed variable for financial resources has a correlation of 0.685 with its latent variable compared to 0.089 with the aggregator business model and 0.272 with SCA. The observed variable for SCA has a higher correlation with its latent variable at 0.617 compared to 0.148 with the aggregator business model.

Next, we examine whether our data meet the assumptions of the ML (Maximum Likelihood) estimation technique. The sample size meets the criteria of 200 to 500 observations. In this study, a sample size of 284 was obtained. The normality test using skewness and kurtosis on the observed data indicates normal data. This is indicated by the P-Value of 0.605, which is greater than 0.05. Furthermore, when testing the model, we did not encounter any problems in identifying the model according to the tool used. Assumptions about multicollinearity (strong relationships between predictors) and singularity (issues of linear dependence) have been met.

The evaluation results show that both univariate and multivariate data do not exhibit extreme values or highly influential data, with significance levels of p less than 0.001. The results indicate that the Mahalanobis D-squared value in the AMOS calculations is lower than the chi-square value at a significance level of 0.001. This indicates the absence of multivariate outliers in our data.

4) *Assessing measurement model validity*

The results of individual model testing indicate that the measurement models for each construct, both exogenous and endogenous, are acceptable. The data align with the variable constructions. The individual model fit test results show that the GOF (Goodness of Fit) values are acceptable, as seen in the following table:

Table 5. Model test result

Latent Variables	Individual Goodness of Fit						Conclusion
	CMIN	RMSEA	AGFI	CFI	PNFI	PGFI	

Financial resources	1.405	0.038	0.924	0.991	0.822	0.693	Accepted
Aggregator Model Business	2.626	0.076	0.890	0.972	0.743	0.592	Accepted
SCA	1.764	0.046	0.976	0.972	0.707	0.548	Accepted

5) *Specifying the structural model*

We can estimate a value for social competitive advantage using the following equation:

$$\hat{y} \text{ SCA} = 0.32 (\text{FR}) + 0.69 (\text{ABM Interaction} * \text{FR})$$

6) *Assessing the structural model validity*

The improvement results indicate that criteria in each assessment are represented, thus the model is considered to meet the requirements, as shown below:

Table 6. Model test result

Parameters	Norm	Stage 1	Respecification	Conclusion
Absolute fit measure				
p-value (Sig.)	>0.05	0.071	0.000	Bad Fit
CMIN	≤ 2	5.219	1.720	Fit
GFI (Goodness of Fit)	>0.90	0.723	0.875	Moderate fit
RMSEA (Root Mean square Error of Approximation)	≥ 0.08	0.122	0.050	Fit
Incremental fit measure				
AGFI (Adjusted Goodness of Fit Index)	>0.95	0.683	0.845	Moderate Fit
CFI (Comparative Fit Index)	≥ 0.95	0.776	0.965	Fit
Incremental Fit Index (IFI)	≥ 0.90	0.777	0.965	Fit
Relative Fit Index (RFI)	≥ 0.90	0.719	0.907	Fit
Parsimonious fit measure				
PNFI (Parsimonious Normed Fit Index)	≥ 0.60	0.688	0.791	Fit
PGFI (Parsimonious Goodness of Fit Index)	≥ 0.90	0.632	0.706	Moderate Fit

Source: Data processing (2024)

According to the test results, it can be inferred that the criteria of goodness of fit, such as absolute fit indices, incremental fit indices, and parsimony indices, were represented in the assessment based on the improvement results. The field data align with the proposed research model construction.

The next step is to test the hypotheses.

Table 7. The hypothesis test results standardized regression weight

Hypothesis	Estimate	P-Value	Conclusion of Hypothesis Testing
Financial resources have a significant influence on sustainable competitive advantage	0.318	0.000	Supported
The aggregator business model moderates the influence of financial resources on sustainable competitive advantage	0.692	0.000	Supported

Source: 2024 Data Processing Results

The study results indicate that the proposed hypotheses are accepted. The hypothesis that financial resources have a significant influence on sustainable competitive advantage is accepted with an estimated value of 0.318. The hypothesis that ABM moderates the influence of financial resources on sustainable competitive advantage is accepted with an estimated value of 0.692.

IV. DISCUSSION

The research findings highlight the importance of ABM as a crucial moderator variable in building competitive advantage. Business aggregators serve as mechanisms developed to support sustainable competitive advantage (Galli-Debicella, 2021). The aggregator business model aids in designing a strategic plan on how a company generates value that is rare, difficult to imitate, valuable, including expanding target markets, creating value propositions, revenue streams, and low-cost structures. Planning begins with the support of financial resources obtained through the mobilization of services provided by the aggregator business platform.

The study results indicate that financial resources have a positive impact on Sustainable Competitive Advantage (SCA) in the context of MSMEs in the digital creative economy sector. These findings are in line

with the Resource-Based View (RBV) framework, which emphasizes the importance of internal resources, including financial resources, in building sustainable competitive advantage. In the study by Estensoro et al. (2022), RBV is identified as a concept in strategic management that provides decision-making guidance by understanding and managing internal resources effectively. This is reinforced by Shibin et al.'s (2020) research, which asserts that RBV provides a foundation for organizations to gain competitive advantage by focusing on the development and management of financial resources.

The optimal function of ABM will enhance the influence of FR on SCA, making it stronger. The study results align with the concept of ABM proposed by Okur et al., 2020. ABM can mobilize services to enhance resources, addressing the classic problem of financial resources in MSMEs. Through ABM, MSMEs have the ease of improving financial resources such as working capital, both available, such as cash and cash equivalents, accounts receivable, inventory, and required working capital, including business debt and outstanding expenses. This implies that according to the concept of ABM (Broekhuizen et al., 2021; Lampropoulos et al., 2017), the aggregator business model not only helps MSMEs access financial resources but also manages financial risks by diversifying funding sources, reducing dependence on a single funding source, and overall reducing financial risk.

V. CONCLUSION

Financial resources have a positive influence on MSMEs' Sustainable Competitive Advantage (SCA). This aligns with RBV, which emphasizes the importance of internal resources. The gap lies in the understanding and operationalization of financial resources. The aggregator business model can be a solution to help MSMEs access financial resources and achieve SCA.

Theoretical Implications: The research provides valuable insights into the role of the aggregator business model in relation to financial resources and sustainable competitive advantage for MSMEs. The aggregator business model can be developed as a business concept that is closely linked to sustainable competitive advantage.

Practical Implications: One solution that can be adopted to address classic MSMEs' problems and build sustainable competitive advantage is through the implementation of the aggregator business model. Optimal application of ABM can strengthen the influence of financial resources on SCA, aligning with the RBV concept that emphasizes the importance of managing internal resources. The business model helps MSMEs access financial resources more efficiently and effectively. Through the aggregator platform, MSMEs can connect with various parties providing financial resources, such as investors, financial institutions, or crowdfunding platforms. MSMEs can gain access to the capital needed to increase both available working capital and working capital required to build sustainable competitive advantage. The aggregator business model can also provide additional benefits by enhancing visibility and market access for MSMEs. The aggregator business platform expands MSMEs' market reach and increases opportunities for growth and development in the increasingly competitive digital creative economy sector.

VI. LIMITATION

The research sample is limited to 281 MSMEs in the digital content sector in the city of Malang. The findings of this study may not be generalizable to MSMEs in other sectors or regions. The research data were obtained from questionnaires filled out by respondents. Self-reported data can be vulnerable to bias and inaccuracies. Therefore, data collection with diverse respondents is needed.

The study only verifies the relationship between the FR and SCA variables moderated by ABM. Further research is needed to explore how ABM helps MSMEs in managing financial risks and compare the effectiveness of the aggregator business model with other business models in assisting MSMEs in achieving SCA using various research designs such as mixed methods or quasi-experiments. The ex post facto research design does not allow researchers to draw strong causal conclusions.

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