

EXPLORING THE IMPACT OF GENERATIONAL DYNAMIC CAPABILITIES AND CULTURAL MODERATORS ON COMPETITIVE ADVANTAGE SUSTAINABILITY

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Abstract

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Business in the fast-changing digital world has great potential (Haleem et al., 2024). Born between the mid-1990s and early 2010s, Generation Z is distinguished by its high levels of creativity, reliance on technology, and demand for flexible work schedules (Hassoun et al., 2023). This study aims to analyze the pattern of dynamic capabilities (resilient, innovative, independent, and wise) and proficiency capabilities as Gen Z characters in maintaining sustainable competitive advantage. The sample consisted of 768 respondents, with the model and hypothesis testing method using partial least squares structural equation modeling (PLS-SEM). The results show that proficiency capabilities have a positive effect on sustainable competitive advantage. Dynamic capabilities, resilient capabilities, and volatility, uncertainty, complexity, and ambiguity (VUCA) capabilities also have a positive effect on proficiency capabilities. However, the capabilities of the dynamic, innovative, and independent generations have not been proven to have a positive effect on proficiency capabilities. In addition, brittle, anxious, nonlinear, and incomprehensible (BANI) conditions and cultural values do not moderate the relationship between proficiency capabilities and sustainable competitive advantage.

Keywords: Dynamic Capabilities (Resilient, Innovative, Independent, and Wise), Proficiency Capabilities, Sustainable Competitive Advantage of Multi-Stakeholder Cooperatives, VUCA, BANI, Cultural Values

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1. INTRODUCTION

The business potential in the digital era is very large (Haleem et al., 2024). Born between the mid-1990s and early 2010s, Generation Z was distinguished by their level of high creativity, dependence on technology, and demand timetable flexible work (Hassoun et al., 2023). Generational differences in mindset and behavior require companies to provide an attractive environment for young talent (Bińczycki et al., 2023).

Business knowledge management involves developing key capabilities, including dynamic capabilities, creative adaptability, innovation performance, and competitive advantage (Sumantri et al., 2020, 2023b, 2023a). Small and medium-sized enterprises (SMEs) that enhance their competitive advantage can reduce business performance vulnerability by up to 25%. Key strategies include engaging business support organizations, improving financial management, and retaining skilled personnel (International Trade Centre, 2023).

21st-century capabilities, critical thinking, creativity, communication, and collaboration (4Cs) are essential in complex and high-tech business environments (Seevaratnam et al., 2023). Younger generations are looking for flexible workplaces that support lifelong learning to adapt to the volatility, uncertainty, complexity, and ambiguity (VUCA) era (Browne & Foss, 2023). Digital multi-stakeholder cooperatives that develop these capabilities will be more resilient, innovative, independent, and wise in facing global challenges (Zeng & Rojniruttikul, 2025). Dynamic capabilities — the ability to integrate, build, and restructure resources in rapid change — occur through organizational routines and knowledge management (Gonzalez-Samaniego et al., 2023; Mushangai, 2023).

Strong cultural values, such as mutual cooperation, kinship, and deliberation, are an important part of Indonesian culture. These values shape the way people work together to achieve success, create a family-like business environment, and make decisions through collective deliberation. This people-centered economic culture emphasizes community empowerment in managing economic resources and equitable distribution of the results for the common good (Holle et al., 2023). In addition, the principle of the Pancasila people's economy is in line with the concept of an inclusive economy, which aims to ensure that economic benefits are distributed fairly (Krysovaty et al., 2023). By implementing the principle of inclusiveness, social and economic inequality can be reduced, so that the values of togetherness in Indonesian culture are maintained. Therefore, this study highlights the importance of equal access to economic opportunities for all people in order to support sustainable growth and reflect the character of Indonesian culture. In line with Indonesian cultural values that emphasize togetherness and inclusiveness in the economy, the concept of multi-party cooperatives (*koperasi multi pihak* [KMP]) emerged as one of the innovations in managing mutual cooperation-based businesses.

The concept of KMP in Indonesia is one of the new modern cooperative concepts in the last three years, which is based on the Regulation of the Minister of Cooperatives and SMEs No. 8 of 2021 concerning cooperatives with a multi-party model. According to data from the Ministry of Cooperatives' Official Development Strategies (ODS) until

August 2024, there were 182 KMP, after the issuance of Regulation No. 8 of 2021 concerning operations with a multi-party model. In 2022, there were 19 cooperatives. In 2023, there were 77 cooperatives, and in 2024, there were 71 cooperatives, which were new establishments and 15 cooperatives which were conversions from conventional models (which were established between 1972–2021). Quality of KMP in Indonesia, until the end of August 2024, there are 182 KMP, 167 are new establishments (seven cooperatives have been certified and 160 cooperatives have not been certified), and 15 cooperatives are conversions from conventional models (five cooperatives have been certified and 10 cooperatives have not been certified). Five types of KMP are classified (64 types of producer cooperatives, 20 types of marketing cooperatives, 38 types of consumer cooperatives, 47 types of service cooperatives, and 13 types of savings and loan cooperatives)¹.

Sustainable competitive advantage is very important in business life. Therefore, this study describes dynamic capabilities (resilient, innovative, independent, and wise), proficiency capability as a characteristic of Gen Z to diagnose competitive advantage sustainability. This research has never been done before. Moving on from the above considerations, we address eight research questions:

RQ1: Does proficiency capability have a positive impact on sustainable competitive advantage?

RQ2: Does dynamic capabilities-wise generation have a positive impact on proficiency capability?

RQ3: Do the dynamic capabilities-innovative generation have a positive impact on proficiency capability?

RQ4: Do the dynamic capabilities-independent generation have a positive impact on proficiency capability?

RQ5: Do the dynamic capabilities-resilient generation have a positive impact on proficiency capability?

RQ6: Can brittle, anxious, nonlinear, and incomprehensible (BANI) conditions moderate proficiency capability to sustainable competitive advantage?

RQ7: Can cultural values and conditions moderate the proficiency capability to sustainable competitive advantage?

RQ8: Does VUCA capability have a positive impact on proficiency capability?

The structure of the research is as follows. Section 1 provides an introduction to the phenomenon of gaps and research gaps. Section 2 presents a review of the literature. Section 3 analyzes the methodology, including sampling, measurement of variables, and data analysis. Section 4 describes the results of data analysis. Section 5 discusses the findings of the research. Section 6 concludes this research.

2. LITERATURE REVIEW

2.1. VUCA capability

The VUCA condition describes modern business challenges that are fluctuating, uncertain, complex, and ambiguous. (Zhou et al., 2024) In this context, entrepreneurs are required to have adaptive skills and dynamic capabilities to respond to change effectively. Companies with a strong foundation of dynamic capabilities and learning experiences tend

¹ <https://nik.depkop.go.id/>

to be more prepared to face VUCA challenges compared to those that are not ready (Atanassova et al., 2025). In addition, today's managers need to adopt flexible and adaptive leadership to maintain organizational resilience and competitiveness amid uncertainty (Baczyńska et al., 2024).

2.2. BANI conditions

Brittle, anxious, nonlinear, and incomprehensible (BANI) reflects the challenges of modern business that are fragile, anxious, unpredictable, and difficult to understand. To deal with it, business people need flexibility, empathy, adaptability, and intuition. (Badakhshan & Bahadori, 2024). The BANI framework helps explain that fragility is overcome with resilience, anxiety with care, uncertainty with understanding context, and market ambiguity with transparency (Abdullah et al., 2024).

2.3. Cultural value conditions

The Pancasila people's economy is based on Indonesian cultural values such as mutual cooperation, kinship, and deliberation, which encourage cooperation, a family atmosphere, and collective decision-making in business (Holle et al., 2023). This concept emphasizes community empowerment in managing resources and distributing economic outcomes fairly. This principle is also in line with an inclusive economy, which emphasizes fair sharing of benefits and equal access to economic opportunities (Krysovaty et al., 2023). Its implementation can reduce social inequality and support sustainable economic growth.

2.4. Proficiency capability

Proficiency skills, such as 4Cs, are essential in dealing with a dynamic, technology-based business environment (Seevaratnam et al., 2023). The younger generation now prefers flexible workplaces that support continuous learning to adapt in the VUCA era (Browne & Foss, 2023). With these skills, digital multi-stakeholder cooperatives can increase competitiveness and build organizations that are resilient, innovative, independent, and responsive to global challenges.

2.5. Dynamic capabilities of the resilient, innovative, independent, and wise generation

The dynamic capabilities of the resilient generation reflect the ability to bounce back from failure, manage emotions, collaborate, communicate effectively, and resolve conflicts constructively. The dynamic capabilities of the innovative generation include the courage to try new ideas, problem-solving, leveraging technology, cross-disciplinary collaboration, initiative-taking, risk management, and social and environmental awareness. Technologies such as multiscale convolutional networks also strengthen innovative capabilities in data analysis (Ge et al., 2023). Self-generating dynamic capabilities emphasize the importance of developing internal resources for organizational sustainability, supported by data-driven approaches such as hierarchical modeling (Cai et al., 2023). Wisdom-based dynamic capabilities involve ethical and insightful decision-making, which promotes social justice and creates sustainable business value (Brienza et al., 2024; Morita et al., 2023).

2.6. Sustainable competitive advantage — Multi-party cooperatives

Cooperatives that develop dynamic capabilities, such as innovation and adaptation, tend to be better able to maintain competitive advantage. The importance of adopting green technology and commitment to sustainability to create long-term competitiveness (Nawab & Shafiq, 2024). Multi-stakeholder cooperatives can also leverage social networks and collaboration, with social capital as a mediator between shared goals and competitive advantage (Alomari et al., 2023). Collaboration between members and stakeholders builds synergies that strengthen market positions. Digital leadership and ecological innovation contribute to sustainable competitive advantage (Hussein et al., 2024).

Dynamic capabilities are proven to increase the competitiveness of micro, small, and medium-sized enterprises (MSMEs) (Kurniawan & Nuringsih, 2023). which is relevant for cooperatives. In addition, effective leadership is a key factor in strengthening competitive advantage (Karoney et al., 2024).

2.7. Hypotheses formulation

The *H1* states that skill capabilities, including character, creativity, and communication, contribute significantly to sustainable competitive advantage. Strong managerial capabilities, especially communication and creativity, enhance organizational performance in competitive environments (Kulkarni et al., 2024). Character development and communication through education also strengthen organizational resilience, supporting competitive advantage (Godfrey & Munoz-Chereau, 2024).

H1: Proficiency capability has a positive effect on sustainable competitive advantage.

The *H2* highlights the influence of generational dynamic capabilities on skill capabilities. The ability to adapt and learn from experience is essential in skill development. (Heubeck, 2024). Collaboration and collective learning strengthen individual and organizational capabilities and support character and creativity (Mangan & Ward, 2024). Collaboration and collective learning strengthen individual and organizational capabilities and support character and creativity.

H2: Dynamic capabilities-wise generation has a positive effect on proficiency capability.

The *H3* states that the dynamic capabilities of the innovative generation contribute positively to the proficiency capability. Innovation from dynamic capabilities increases the ability of the organization to adapt and innovate (Xueyun et al., 2024). In a crisis, innovative capabilities are essential to maintain and develop capabilities (Ledesma-Chaves & Arenas-Gaitán, 2023). Thus, an innovative, adaptive, and solution-oriented generation strengthens the organization's proficiency capability.

H3: Dynamic capabilities-innovative generation has a positive effect on proficiency capability.

The *H4* emphasizes the role of independent generation of dynamic capabilities in enhancing proficiency. Independence in decision making and action strengthens individual communication and innovation capabilities. (Kwiatkowska, 2024). An adaptive and proactive independent generation is able to improve organizational skills.

H4: Dynamic capabilities-independent generations have a positive effect on proficiency capability.

The *H5* states that the dynamic capabilities of the resilient generation have a positive effect on proficiency capabilities. Organizational resilience in a crisis increases the ability of individuals to adapt and innovate (Fagbemi et al., 2025) and strengthen character and creativity (Budiarto et al., 2024). In this way, a resilient generation encourages increased proficiency capabilities.

H5: Dynamic capabilities-resilient generations have a positive effect on proficiency capability.

The *H6* states that BANI conditions moderate the relationship between competency capabilities and sustainable competitive advantage. In complex situations, adaptation and innovation become crucial (Faezipour et al., 2023). So that BANI can influence how effective these capabilities are in driving competitive advantage.

H6: BANI conditions can moderate proficiency capability to sustainable competitive advantage.

The *H7* focuses on the role of cultural values as a moderating factor in the relationship between proficiency capability and competitive advantage. Strong cultural values can support the development of proficiency capability in organizations (Kwiatkowska, 2024). Thus, cultural values can

serve as a moderating factor that strengthens the relationship between proficiency capability and sustainable competitive advantage.

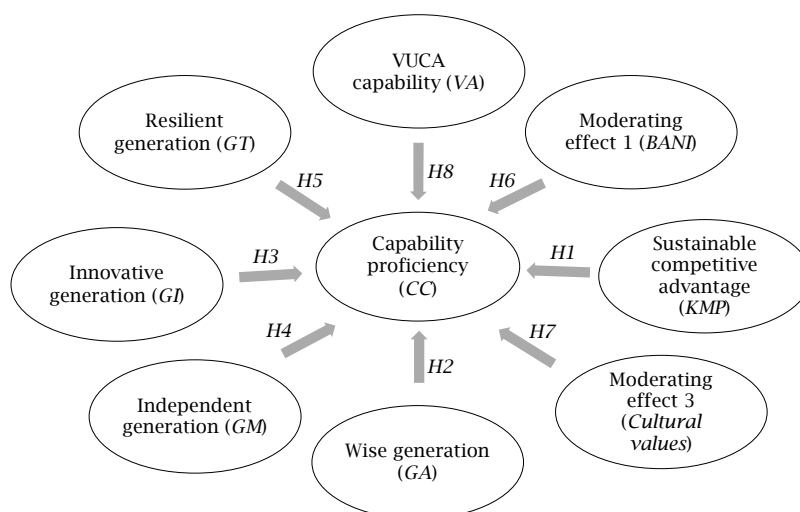
H7: Cultural value conditions can moderate proficiency capability to sustainable competitive advantage.

The eighth hypothesis states that VUCA capabilities have a positive effect on competency capabilities, which include character, creativity, and communication. Adaptability is the key to organizational transformation, both in the digital context and business sustainability, because the VUCA environment often demands innovation and rapid response (Niehaus & Mocan, 2024). To survive and thrive, businesses need agile operating models, collaboration capabilities, and the courage to innovate amidst decision-making ambiguity (Pascalau, 2023). Thus, VUCA capabilities encourage flexibility, innovation, and effective communication in dealing with business dynamics.

H8: VUCA capability has a positive effect on proficiency capability.

The eight hypotheses proposed are explained visually through the relationship patterns in Figure 1, which depicts this research model.

Figure 1. Research model



Source: Authors' elaboration.

3. RESEARCH METHODOLOGY

3.1. Sample selection

The population in this study was students in East Java Province and the Special Region of Yogyakarta who were willing to be respondents in the period October 1-30, 2024. The number of respondents collected was 768 students, consisting of 592 respondents via the Google Form questionnaire and 176 respondents via the manual (paper) questionnaire.

3.2. Measurement variables

This study has two independent variables, namely VUCA capabilities (VA) and *Dynamic capabilities* that include the resilient (GT), innovative (GI), independent (GM), and wise (GA) generation. There are two dependent variables: first, *21st-century skills capabilities* (character, creativity, and communication)

as a mediating variable; second, sustainable competitive advantage (KMP) as the main variable. This study also involves two moderating variables: 1) BANI conditions (brittle, anxious, non-linear, and incomprehensible), and 2) Indonesian *Cultural values* rooted in the Pancasila people's economy (mutual cooperation, kinship, and deliberation). All variables are measured using a five-point Likert scale (Likert, 1932), with a range from 1 (strongly disagree) to 5 (strongly agree), and a middle value of 3 as a neutral option. The variable measurement instrument and external value table are presented in the Appendices.

3.3. Data analysis

Descriptive analysis with IBM SPSS was used to describe the demographic characteristics of respondents. Testing of causal relationships between constructs was carried out through the partial least squares structural equation modeling (PLS-SEM) using SmartPLS. Validity was tested with convergent validity through factor loading values and average

variance extracted (AVE) (Fornell & Larcker, 1981), while reliability was tested using Cronbach's alpha and composite reliability (CR) (Cronbach, 1951). The structural equation modeling (SEM) method allows the analysis of latent variables that are indirectly measured through indicators, and takes into account measurement errors (Chin, 1998). SEM consists of two approaches: 1) covariance-based SEM (CB-SEM) to test theories based on covariance matrices, and 2) PLS-SEM for theory exploration with a focus on explaining the variance of dependent variables (Hair et al., 2021).

4. RESULTS

4.1. Profile of the respondent

Of the 768 questionnaire respondents, 192 people (25%) were male, and 400 people (52%) were female who filled in via Google Form. While in the manual questionnaire, there were 74 men (9.6%) and 102 women (13.4%). The results of the respondent profile are shown in Table 1.

Table 1. Respondent profile

Source respondents	Gender	Number of people	Percentage (%)
Google Form questionnaire	Man	192	25
	Woman	400	52
Questionnaire manual paper	Man	74	9.6
	Woman	102	13.4
Total		768	100

Source: Authors' estimation.

4.2. Validity and reliability of measurement

All indicators have factor loading values above 0.5, indicating adequate construct validity in measuring research variables. CR values above 0.7 confirm that

the instrument is reliable. AVE exceeding 0.5 also indicates very good reliability (Hair et al., 2010). In addition, Cronbach's alpha values above 0.6 for all variables indicate a high level of internal consistency (Appelbaum et al., 2018).

Table 2. Validity and reliability instrument study

Variables	Cronbach's alpha	rho A	CR	AVE
Capability proficiency (CC)	0.808	0.809	0.886	0.722
Wise generation (GA)	0.894	0.904	0.916	0.611
Innovative generation (GI)	0.917	0.925	0.931	0.598
Independent generation (GM)	0.840	0.844	0.866	0.608
Resilient generation (GT)	0.863	0.874	0.901	0.647
Sustainable competitive advantage (KMP)	0.847	0.866	0.895	0.682
Moderating effect 1 (BANI)	0.936	1.000	0.946	0.635
Moderating effect 3 (Cultural values)	0.916	1.000	0.929	0.567
VUCA capability (VA)	0.848	0.852	0.929	0.868

Source: Authors' estimation.

4.3. Structural model analysis

Based on Table 3, hypotheses *H1*, *H2*, *H5*, and *H8* are accepted because the t-statistic value is > 1.96 and p-value < 0.05 :

- *H1*: CC has a positive and significant effect on KMP, indicating that increasing skills supports organizational competitiveness.
- *H2*: Dynamic capability-GA is proven to increase CC, reflecting that wisdom contributes to strengthening organizational capacity.
- *H5*: Dynamic capability-GT has a positive effect on CC, emphasizing the importance of resilience in building skills.
- *H8*: VA has a significant effect on CC, proving that readiness to face volatility and uncertainty strengthens organizational capacity.

Meanwhile, hypotheses *H3*, *H4*, *H6*, and *H7* are rejected because the t-statistic value is < 1.96 or p-value > 0.05 :

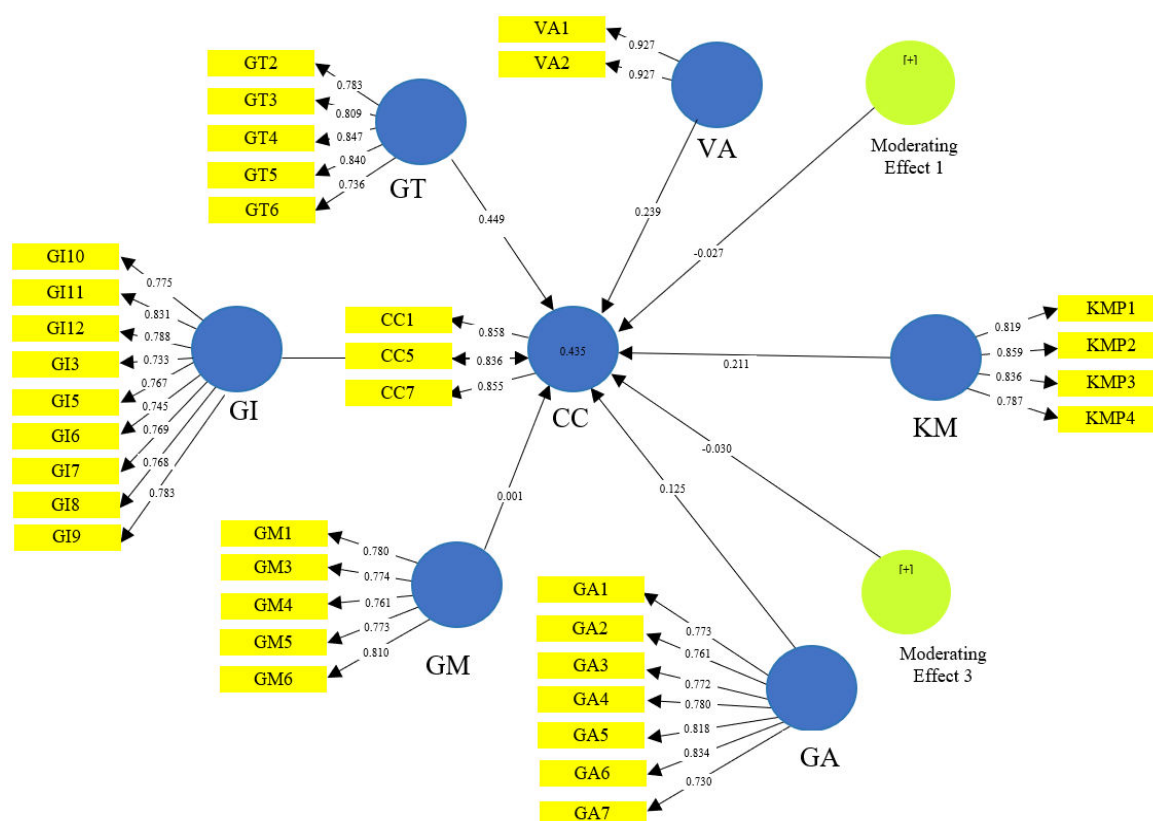
- *H3*: Dynamic capability-GI does not have a significant effect on CC, indicating that innovation does not always directly increase skills.
- *H4*: Dynamic capability-GM does not have a significant effect on CC, indicating that independence is not strong enough to strengthen skills.
- *H6*: BANI conditions moderation is not significant on the relationship between CC and KMP, meaning that conditions such as fragility and anxiety do not moderate the relationship.
- *H7*: Cultural values also do not significantly moderate the relationship, indicating that Cultural values have not been proven to influence the strengthening of organizational skills.

Table 3. Causal relationship hypothesis testing

Hypothesis	Independent variables	Dependent variables	Original sample (O)	T-statistics (O/STDEV)	p-values	Results
H1	CC	KMP	0.211	5.523	0.000	Support
H2	GA	CC	0.125	2.019	0.044	Support
H3	GI	CC	0.012	0.237	0.813	Does not support
H4	GM	CC	0.001	0.021	0.984	Does not support
H5	GT	CC	0.449	7.694	0.000	Support
H6	Moderating effect 1 (BANI)	CC	-0.027	0.443	0.658	Does not support
H7	Moderating effect 3 (Cultural values)	CC	-0.030	0.528	0.598	Does not support
H8	VA	CC	0.239	4.965	0.000	Support

Source: Authors' estimation.

Figure 2. Constructs and indicators relationship model



Source: Authors' estimation.

5. DISCUSSION

The results of this study provide several important findings related to the influence of capabilities on sustainable competitive advantage. The acceptance of hypothesis *H1* confirms that capability proficiency — which includes character, creativity, and communication — is a key element in strengthening organizational competitiveness, especially in facing the pressures of a rapidly changing business environment. This finding is in line with previous studies (Godfrey & Munoz-Chereau, 2024; Kulkarni et al., 2024), which emphasize the importance of 21st-century skills in forming long-term competitive advantage.

The accepted hypotheses *H2* and *H5* indicate that dynamic capabilities based on wisdom and resilience play an important role in forming capability proficiency. Wisdom supports reflective and ethical decision-making, while resilience helps individuals and organizations recover from stress and crisis. This supports the literature that highlights the importance of tough and wise character in transformative leadership and strengthening organizational human resources (Brienza et al., 2024; Fagbemi et al., 2025). *H8*, which was also accepted, confirms the importance of VUCA capabilities in strengthening organizational capabilities. In an unstable and uncertain context, the ability to understand, anticipate, and respond to environmental dynamics becomes a competitive advantage in itself (Atanassova et al., 2025; Baczyńska et al., 2024).

However, the rejection of hypotheses *H3* and *H4* provides interesting insights. Innovative and independent capabilities are not yet significant

enough in increasing capabilities. This may be due to innovation that has not been systemically integrated or a lack of organizational support for individual innovation processes. Contextual factors, such as commercial and technological feasibility, play an important role in determining the success or failure of innovation. Innovation failure ultimately has a negative impact on organizational performance (Chatterjee et al., 2023). Likewise, independence that is not balanced with collaboration or Direction strategies can lead to a disconnect between personal initiative and organizational goals. Independence strategies without collaboration or direction can lead to misalignment with organizational goals. Healthy collaboration needs to value individual contributions and balance teamwork with personal ingenuity. Dominant groupthink risks silencing introvert voices, so it is important to ensure that all voices are heard fairly (Reavis, 2023). These findings suggest that innovation and independence need to be developed contextually and integrated into organizational culture.

Furthermore, the rejected *H6* and *H7* indicate that neither BANI conditions nor cultural values have been shown to moderate the relationship between competence and competitive advantage. This may reflect that although psychosocial aspects (such as anxiety and depth) and local values are conceptually important, they have not been effectively internalized in organizational practices, especially among the younger generation. This potential moderation may only become apparent when cultural values and the BANI adaptation framework are made an explicit part of the organization's learning strategy.

The statement that BANI conditions have not been shown to moderate the relationship between competency and competitive advantage is correct. Although BANI illustrates the complexity of today's world, there is no convincing empirical evidence that these conditions directly moderate the relationship between individual or organizational competency and the achievement of competitive advantage.

Overall, these results highlight the importance of building a foundation of capabilities that are wise, resilient, and adaptive in the face of business disruption. Meanwhile, innovative, independent, and moderating values require a more systematic and contextual strengthening approach in youth-based organizations.

6. CONCLUSION

The results of the study indicate that capability proficiency plays a significant role in driving sustainable competitive advantage. There are four accepted hypotheses, namely *H1*, *H2*, *H5*, and *H8*. This means that capability proficiency directly increases organizational competitiveness, dynamic capabilities derived from wisdom and resilience contribute positively to forming skills, and the capability to face VUCA situations also strengthens organizational readiness.

On the other hand, four hypotheses are rejected, namely *H3*, *H4*, *H6*, and *H7*. Dynamic capabilities based on innovation and independence do not show a significant effect on skills, indicating that these two factors are not strong enough to encourage increased organizational skills.

In addition, BANI conditions and cultural values are not proven to moderate the relationship between capability proficiency and sustainable competitive advantage, indicating that neither has been able to significantly strengthen the effect of skills on competitive advantage. Overall, this study confirms the importance of skills, wisdom, resilience, and readiness to face VUCA in building sustainable organizational competitive advantage.

This study has several limitations that need to be considered in interpreting the results and developing further studies. First, the sample only includes students in East Java and the Special Region of Yogyakarta, so the findings cannot be generalized nationally, especially in the context of multi-party cooperative actors. Second, innovative and independent capabilities do not have a significant effect on capability proficiency, due to possible limitations of indicators or minimal practical experience of respondents related to innovation and independence. Third, BANI moderation and cultural values are not significant, indicating that these external factors have not been strongly internalized due to respondents' limited experience in the real world of work. Fourth, the cross-sectional research design is unable to capture the dynamics of changes in capabilities and competitive advantages over time. A longitudinal approach is recommended for further studies. Fifth, all data are sourced from respondents' perceptions through questionnaires, which have the potential to cause subjective bias because they are not supported by objective data or field observations.

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APPENDIX A. VALID INDICATOR RESULTS AS MODELING

VUCA capability (VA)
In your opinion, how important is it for an entrepreneur to have the skills to face the challenges of VUCA (volatility, uncertainty, complexity, and ambiguity) situations in today's business world (number 1/VA1)?
In your opinion, how important is it for business leaders to have the ability to face the challenges of VUCA situations (volatility, uncertainty (number 2/VA2)?
Moderating effect 1/BANI condition
In your opinion, how important is it for an entrepreneur to have the ability to deal with BANI (Brittle/camouflaged fragility) conditions (number 9/BA1)?
How often do you feel that some aspect of your business could suddenly collapse or face major, unexpected problems (number 10/BA2)?
How much anxiety do you feel when facing important business decisions (number 11/BA3)?
How often do you feel that the path to success in your business is not linear or faces unexpected turns (number 12/BA4)?
How often do you feel that certain aspects of the business or market are incomprehensible or too complex (number 13/BA5)?
Moderating effect 3/Condition of cultural values of Indonesian society: Mutual cooperation, kinship, deliberation
How important do you think teamwork is in achieving business success? Mutual cooperation (number 19/NB1).
In a business context, how important is it for you to create a work environment that is similar to a family environment? Family (number 20/NB2).
How often do you hold group discussions to make important decisions in your business deliberation (number 21/NB3)?
Capability proficiency (CC; framework competency capability: character, creative, communication)
How important do you think it is to have strong integrity and ethics in running a business (number 22/CC1)?
How important is it for you to develop creative and innovative ideas in business (number 26/CC5)?
How important is effective communication in running your business (number 28/CC7)?
Dynamic capability-resilient generation (GT)
I am able to bounce back from failure or adversity and continue to adapt and grow (number 30/GT2).
I am able to recognize, understand, and manage my own emotions and empathize with others (number 31/GT3).
I am able to work together with others to achieve common goals, both in a personal and professional context (number 32/T4).
I am able to convey ideas and information clearly and listen actively to others (number 33/GT5).
I am able to resolve differences of opinion and conflicts constructively (number 34/GT6).
Dynamic capabilities-innovative generation (GI)
I have a desire to explore and try new ideas without fear of failure (number 44/GI2).
I am able to identify problems and find practical and effective solutions (number 45/GI3).
I am able to use and utilize the latest technology to support innovation (number 47/GI5).
I am able to work with digital tools, software, and online platforms (number 48/GI6).
I am able to take the initiative in developing and launching new projects or businesses (number 49/GI7).
I am able to assess and manage risks associated with innovative ventures (number 50/GI8).
I am able to work collaboratively with others in a multidisciplinary team to achieve common goals (number 51/GI9).
I build and leverage professional and community networks for support and resources (number 52/GI10).
I have awareness and responsibility for the social and environmental impacts of the innovations carried out (number 53/GI11).
Dynamic capability-independent generation (GM)
I am able to make decisions independently with mature consideration and full responsibility (number 55/GM1).
I am able to manage time well and complete tasks efficiently (number 57/GM3).
I manage my personal finances wisely, including budget planning and savings (number 58/GM4).
I am able to perform various daily tasks such as cooking, cleaning the house, and self-care (number 59/GM5).
I am able to face and recover from difficulties or challenges without losing motivation. (number 60/GM6).
Dynamic capability-wise generation (GA)
I am able to make decisions based on careful consideration and a thorough understanding of the situation (number 67/GA1).
I have extensive knowledge and in-depth experience gained through learning and life experience (number 68/GA2).
I am able to understand and feel the feelings of others, and provide appropriate support (number 69/GA3).
I am able to manage my own emotions well and interact effectively with others (number 70/GA4).
I have strong moral and ethical principles and am consistent in my daily actions (number 71/GA5).
I maintain integrity and am responsible for decisions and actions (number 72/GA6).
I am able to manage stress and life pressures in a healthy and balanced way (number 73/GA7).
Sustainable competitive advantage (KMP)
Are you interested in a multi-party production cooperative (for example: processing paddy into rice; processing raw wood materials into furniture; factory (number 79/KMP1)?
Are you interested in a multi-party marketing cooperative (e.g., promoting, selling, and distributing products or services) (number 80/KMP2)?
Are you interested in a consumer multi-party cooperative (e.g., a cooperative model that involves multiple parties in providing and managing the products or services consumed) (number 81/KMP3)?
Are you interested in a multi-party service cooperative (e.g., a cooperative model where multiple parties, such as service providers, transportation consumers, and partners (number 82/KMP4)?

APPENDIX B. OUTER VALUE

Relationship	Original sample (O)	Sample mean (M)	Std. dev. (STDEV)	T-statistics ((O-STDEV))	p-values
CC1 ← CC	0.858	0.857	0.019	45.139	0.000
CC5 ← CC	0.836	0.834	0.021	39.572	0.000
CC7 ← CC	0.855	0.855	0.016	54.492	0.000
GA1 ← GA	0.773	0.771	0.023	32.903	0.000
GA2 ← GA	0.761	0.759	0.024	32.309	0.000
GA3 ← GA	0.772	0.770	0.025	31.463	0.000
GA4 ← GA	0.780	0.779	0.023	33.342	0.000
GA5 ← GA	0.818	0.818	0.019	42.709	0.000
GA6 ← GA	0.834	0.834	0.015	54.767	0.000
GA7 ← GA	0.730	0.728	0.026	27.875	0.000
GI10 ← GI	0.775	0.775	0.024	32.929	0.000
GI11 ← GI	0.831	0.831	0.016	53.323	0.000
GI12 ← GI	0.788	0.786	0.022	36.123	0.000
GI3 ← GI	0.733	0.732	0.025	29.461	0.000
GI5 ← GI	0.767	0.768	0.022	34.141	0.000
GI6 ← GI	0.745	0.746	0.024	30.526	0.000
GI7 ← GI	0.769	0.766	0.024	32.451	0.000
GI8 ← GI	0.768	0.765	0.026	29.604	0.000
GI9 ← GI	0.783	0.784	0.024	32.821	0.000
GM1 ← GM	0.780	0.778	0.024	32.794	0.000
GM3 ← GM	0.774	0.775	0.027	28.197	0.000
GM4 ← GM	0.761	0.758	0.024	31.299	0.000
GM5 ← GM	0.773	0.771	0.023	33.341	0.000
GM6 ← GM	0.810	0.808	0.020	40.039	0.000
GT2 ← GT	0.783	0.781	0.023	34.392	0.000
GT3 ← GT	0.809	0.808	0.021	38.217	0.000
GT4 ← GT	0.847	0.847	0.015	55.317	0.000
GT5 ← GT	0.840	0.839	0.018	47.259	0.000
GT6 ← GT	0.736	0.736	0.032	23.369	0.000
KMP1 ← KMP	0.819	0.821	0.025	32.661	0.000
KMP2 ← KMP	0.859	0.859	0.022	39.858	0.000
KMP3 ← KMP	0.836	0.831	0.029	28.373	0.000
KMP4 ← KMP	0.787	0.785	0.033	23.626	0.000
VA1 ← VA	0.927	0.926	0.012	76.141	0.000
VA1 * GM1 ← Moderating effect 3	0.730	0.704	0.114	6.427	0.000
VA1 * GM3 ← Moderating effect 3	0.641	0.610	0.140	4.585	0.000
VA1 * GM4 ← Moderating effect 3	0.779	0.760	0.092	8.431	0.000
VA1 * GM5 ← Moderating effect 3	0.708	0.678	0.119	5.923	0.000
VA1 * GM6 ← Moderating effect 3	0.782	0.760	0.098	7.964	0.000
VA1 * GT2 ← Moderating effect 1	0.800	0.782	0.077	10.339	0.000
VA1 * GT3 ← Moderating effect 1	0.805	0.790	0.071	11.388	0.000
VA1 * GT4 ← Moderating effect 1	0.827	0.815	0.078	10.586	0.000
VA1 * GT5 ← Moderating effect 1	0.867	0.856	0.081	10.652	0.000
VA1 * GT6 ← Moderating effect 1	0.813	0.801	0.084	9.698	0.000
VA2 ← VA	0.937	0.936	0.014	67.613	0.000
VA2 * GM1 ← Moderating effect 3	0.773	0.751	0.121	6.416	0.000
VA2 * GM3 ← Moderating effect 3	0.720	0.692	0.133	5.408	0.000
VA2 * GM4 ← Moderating effect 3	0.816	0.796	0.101	8.057	0.000
VA2 * GM5 ← Moderating effect 3	0.730	0.701	0.124	5.873	0.000
VA2 * GM6 ← Moderating effect 3	0.826	0.800	0.109	7.581	0.000
VA2 * GT2 ← Moderating effect 1	0.788	0.766	0.078	10.145	0.000
VA2 * GT3 ← Moderating effect 1	0.801	0.782	0.074	10.776	0.000
VA2 * GT4 ← Moderating effect 1	0.811	0.793	0.073	11.087	0.000
VA2 * GT5 ← Moderating effect 1	0.862	0.847	0.069	12.466	0.000
VA2 * GT6 ← Moderating effect 1	0.788	0.776	0.087	9.068	0.000