**Economic Resilience Reports**
How to Cite: - How to Cite: Aisyah, S., Ilham, S., & Murali, S. (2026). The influence of digital transformation and entrepreneurial orientation on the economic resilience of the creative industry:
The mediating role of agile supply chain. Economic Resilience Reports.
Doi: -
Website Journal: https://journal.dealingspublishing.com/index.php/ERR/en/

**RESEARCH - Article**

# The Influence of Digital Transformation and Entrepreneurial Orientation on the Economic Resilience of the Creative Industry with Agile Supply Chain Mediation

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Received:
15/08/2026

Accepted:
16/08/2026

**Abstract**

The creative industry faces technological changes, demand patterns, competition, and supply chain uncertainty that require high adaptability. Digital transformation and entrepreneurial orientation are sources of strategic capabilities, while Agile Supply Chain has the potential to be a mechanism that connects these two capabilities with economic resilience. This study aims to analyze the influence of Digital Transformation and Entrepreneurial Orientation on the Economic Resilience of the creative industry, analyze the influence of both on Agile Supply Chain, and examine the role of Agile Supply Chain as a mediating variable and the differences in relationships based on business scale. The study used a quantitative approach with 300 creative industry actors as respondents consisting of micro and small business groups. Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM), mediation testing, and Multi-Group Analysis. Digital Transformation has a positive effect on Agile Supply Chain (β=0.348; p<0.001) and Economic Resilience (β=0.210; p<0.001). Entrepreneurial Orientation has a positive effect on Agile Supply Chain (β=0.361; p<0.001) and Economic Resilience (β=0.252; p<0.001). Agile Supply Chain has a positive effect on Economic Resilience (β=0.384; p<0.001). Digital Transformation (β=0.134) and Entrepreneurial Orientation (β=0.139) mediation are also significant. MGA shows no significant differences based on business scale. Agile Supply Chain is a strategic mechanism that strengthens the influence of Digital Transformation and Entrepreneurial Orientation on Economic Resilience.The novelty of this research lies in the integration of these three capabilities in one mediation model and the proof that the structural relationship mechanism is relatively consistent in micro and small businesses.

**Keywords** Digital Transformation, Agile Supply Chain, Economic Resilience

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**INTRODUCTION** [with 12 font size]

The creative industry holds a strategic position in the Indonesian economy because it combines economic value with creativity, knowledge, technology, and innovation. Data from the Central Statistics Agency (BPS) shows that the creative economy will contribute IDR 1,611.2 trillion, or 7.28%, to Indonesia's Gross Domestic Product in 2024. This sector also continues to expand its workforce, with the number of creative economy workers reaching approximately 27.4 million by 2025. This condition shows that the sustainability of the creative industry is not only related to the success of individual entrepreneurs, but also related to economic stability and national job creation.

The creative industry faces an increasingly dynamic business environment. Changing consumer preferences, the development of digital platforms, supply disruptions, technology-based competition, and shifting distribution patterns require businesses to adapt quickly (Tai, 2026). The pandemic experience shows that some creative subsectors can leverage digital platforms to maintain economic activity, particularly in the games, apps, culinary, crafts, and content production subsectors. The ability to utilize these digital channels is one factor supporting the continuity of economic activity when conventional business mechanisms are disrupted (Allah, 2026).

Digital transformation extends beyond the use of social media, marketplaces, or software in isolation. It encompasses strategic changes in how organizations manage technology, human resources, business processes, information, and relationships with customers and business partners (Haffar, 2025). Studies on digital transformation in MSMEs show that the success of transformation is determined not only by technology adoption, but also by the organization's ability to develop a digital orientation and integrate it into the value creation process. Recent research also shows that the relationship between digital orientation and performance is not always linear, making the depth and maturity of the transformation important aspects to consider (Abreu, 2025).

Entrepreneurial orientation is another strategic factor in facing changes in the business environment. This orientation reflects an organization's tendency to be innovative, proactive, and willing to take calculated risks in exploring business opportunities. Creative industry players with an entrepreneurial orientation can be more proactive in developing products, seeking new markets, responding to changing demand, and exploiting opportunities arising from technological advancements (G. Wang, 2024). Studies on new venture resilience also show that the combination of digital transformation with entrepreneurial orientation and strategic change can form a configuration that supports business resilience in a competitive environment (Leonas, 2026).

Agile Supply Chain becomes a relevant operational capability as the creative industry faces changing demand and supply uncertainty. This concept emphasizes the supply chain's ability to acquire information, respond to change, coordinate activities between actors, and quickly adjust the flow of goods, information, and resources. Research shows that digital transformation can strengthen supply chain agility through the use of data and connectivity between actors. This transformation enables organizations to improve their ability to respond to environmental changes and maintain performance during supply chain disruptions (Haval, 2025).

Huda, (2026) explains that organizational excellence and resilience can be built through the management of valuable and difficult-to-imitate resources and capabilities. The Dynamic Capability View expands this perspective by emphasizing an organization's ability to sense change, seize

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opportunities, and reconfigure resources as the environment changes. This perspective is relevant to the creative industries because digital transformation provides new resources and infrastructure, entrepreneurial orientation guides the exploration of opportunities, and Agile Supply Chain is a capability that enables these resources to be translated into operational responses. This relationship provides a theoretical basis for understanding economic resilience as a result of a combination of resources, strategic orientation, and organizational adaptability.

Research on digital transformation in small and medium enterprises (SMEs) has been growing, but understanding the mechanisms explaining how this transformation generates economic resilience remains incomplete. Most studies focus on firm performance, productivity, innovation, or competitive advantage as consequences of digital transformation. Recent empirical evidence even suggests that digital orientation may have a non-linear relationship with MSME performance. This suggests that technology alone is not sufficient to explain how companies build resilience in the face of change and disruption (Gupta, 2026).

Agile Supply Chain has the potential to be a mechanism that explains the relationship between digital transformation and economic resilience, but this mediating role has not been specifically explored in the context of the creative industries. Previous research has shown that digital transformation can improve supply chain agility and resilience (Palandella, 2026). Other studies have also found that digital transformation is related to a company's ability to cope with supply chain disruptions. These studies focused more on manufacturing companies or general supply chain contexts, so similar mechanisms related to the creative industry's creativity-based characteristics, rapidly changing demand, and reliance on supplier networks and digital platforms still require empirical testing (Singha, 2025).

Entrepreneurial orientation has also not been sufficiently explained in models linking internal capabilities to economic resilience through agile supply chain mechanisms. An innovative, proactive, and risk-taking orientation can theoretically drive companies to change products, processes, markets, and partner relationships. These influences are not always immediate, as entrepreneurial decisions need to be translated into operational capabilities that can respond to market changes and supply disruptions. Agile Supply Chain's position as an internal mechanism that translates entrepreneurial orientation into adaptive capabilities therefore represents an important area of research (Pratumrat, 2025).

Another gap arises in the way digital transformation is constructed in empirical research. Measurements that rely solely on technology adoption indicators risk simplifying digital transformation as simply the activity of using digital devices. Recent research on digital orientation in MSMEs shows that transformation encompasses multiple dimensions, including infrastructure configuration, human capabilities, ecosystem coordination, and technology coverage (Kazeroonimonfared, 2024). This research extends this approach by modeling digital transformation as a higher-order construct consisting of infrastructure, talent, and data integration. This approach allows for the examination of digital transformation as a more comprehensive organizational capability, rather than simply the level of technology adoption.

The Resource-Based View and the Dynamic Capability View provide a basis for explaining this gap. The Resource-Based View positions resources as the foundation for value creation and competitive advantage, while the Dynamic Capability View emphasizes a firm's ability to integrate, build, and

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reconfigure resources in response to environmental changes. Digital transformation can be positioned as a collection of resources and capabilities, entrepreneurial orientation as a strategic orientation for exploiting opportunities, and Agile Supply Chain as a dynamic capability that enables rapid response. This model opens up opportunities to explain not only whether digital transformation and entrepreneurial orientation influence economic resilience, but also how this influence occurs (Thasni, 2025).

Differences in business scale have also not received adequate empirical attention in the relationships between these variables. Micro and small businesses have different resource capacities, organizational structures, investment capabilities, access to technology, and supplier network complexity. These differences in characteristics can cause digital transformation to have different impacts on agility and economic resilience. Multi-Group Analysis based on business scale can test whether the structural paths in the model have different strengths between micro and small business actors. This approach is important because aggregate results across all respondents can potentially mask differences in model behavior across business groups (Lehyeh, 2026).

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Another gap arises in the way digital transformation is constructed in empirical research. Measurements that use only technology adoption indicators risk simplifying digital transformation as the activity of using digital tools. Recent research on digital orientation in MSMEs shows that transformation encompasses multiple dimensions, including infrastructure configuration, human capabilities, ecosystem coordination, and technology coverage. This study extends this approach by modeling digital transformation as a higher-order construct consisting of infrastructure, talent, and

data integration. This approach allows for a more comprehensive examination of digital transformation as an organizational capability, rather than simply the level of technology use (Y. Wang, 2026).

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This research gap needs to be filled through an empirical model that positions the Agile Supply Chain as a mediating mechanism between Digital Transformation and Entrepreneurial Orientation towards the Economic Resilience of the Creative Industry. Digital Transformation is positioned as a Higher-Order Construct representing Infrastructure, Talent, and Data Integration. This model allows research to test whether technological readiness, human competency, and the ability to integrate data can shape more agile supply chain capabilities. Entrepreneurial Orientation is tested as a strategic factor that drives innovation, proactivity, and risk-taking, while Economic Resilience is positioned as a business's ability to maintain activity, adapt, and recover economic conditions when faced with change or disruption (Chowdary, 2026).

The Dynamic Capability View explains that organizations achieve resilience not only by possessing resources, but also by being able to integrate and reconfigure those resources according to environmental changes. Agile Supply Chain can function as a dynamic capability because it enables companies to accelerate decision-making, align supply with demand, strengthen coordination with suppliers, and respond to market changes. This relationship supports the hypothesis that Digital Transformation and Entrepreneurial Orientation can enhance Economic Resilience by increasing supply chain agility. Recent empirical evidence on the relationship between digital transformation, agility, and supply chain resilience strengthens the relevance of this mechanism for testing in the context of the creative industry (Rana, 2025).

This study aims to analyze the influence of Digital Transformation and Entrepreneurial Orientation on the Economic Resilience of the Creative Industry, test the role of Agile Supply Chain as a mediating variable, and compare the strength of the structural relationship between micro and small businesses through Multi-Group Analysis. These objectives result in testing several main relationships, namely

the influence of Digital Transformation on Economic Resilience, the influence of Entrepreneurial Orientation on Economic Resilience, the influence of Digital Transformation on Agile Supply Chain, the influence of Entrepreneurial Orientation on Agile Supply Chain, the influence of Agile Supply Chain on Economic Resilience, and the indirect influence of Digital Transformation and Entrepreneurial Orientation on Economic Resilience through Agile Supply Chain. This model is expected to provide an empirical explanation regarding the mechanism of forming the economic resilience of the creative industry and the differences in its behavior based on business scale.

**Theoretical basis**

Dynamic Capabilities Theory (DCT) explains an organization's ability to respond to environmental change through the processes of sensing, seizing, and reconfiguring. Sensing refers to the ability to identify changes, opportunities, and threats in the business environment. Seizing refers to the ability to make decisions and capitalize on identified opportunities. Reconfiguring refers to the ability to rearrange an organization's resources, processes, and relationships to stay relevant to environmental changes (Saad, 2026). This perspective is relevant to the creative industry because demand characteristics, technology, market trends, and supplier networks can change rapidly. Agile Supply Chain can be viewed as a dynamic capability at the operational level because it enables companies to quickly obtain information, adjust procurement and distribution processes, and coordinate resources according to changing market needs. Digital Transformation provides the technology and data support for these processes, while Agile Supply Chain translates these into faster and more adaptive operational responses.

The Entrepreneurial Orientation Framework explains an organization's strategic inclination to be innovative, proactive, and risk-taking to explore and exploit business opportunities. Entrepreneurial orientation is not only related to the character of the business owner but also reflects the organization's decision-making and action patterns in the face of uncertainty. Companies with a strong entrepreneurial orientation tend to be more open to product development, new market exploration, technology adoption, and business process changes. This perspective is related to the DCT because an entrepreneurial orientation can encourage organizations to be more proactive in recognizing opportunities, making strategic decisions, and reallocating resources. Agile Supply Chain is one form of operational capability that can translate this orientation into concrete actions through rapid response to changes in demand, supplier coordination, process flexibility, and resource flow adjustments. The relationship between these two perspectives provides a basis for explaining how digital capabilities and entrepreneurial orientation can shape economic resilience through agile supply chain capabilities (Miguel, 2024).

**Multidimensional Modeling of Higher-Order Constructs**

Digital Transformation in this study is conceptualized as a Higher-Order Construct (HOC) formed by three Lower-Order Constructs (LOC): Digital Infrastructure, Digital Talent, and Data Integration. Digital Infrastructure represents the availability of devices, systems, networks, and technologies that support digital business activities. Digital Talent demonstrates the ability of human resources to use, manage, and develop digital technologies to support organizational processes. Data Integration describes a company's ability to connect, manage, and utilize data from various business activities to support coordination and decision-making. These three dimensions have complementary functions because

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digital transformation requires not only technology, but also human competence and the ability to integrate information.

Modeling Digital Transformation as a HOC (Hoc) is used to capture the complexity of the construct more fully than measurements using only one technological dimension. Digital Infrastructure provides the technical foundation for digital activities, Digital Talent ensures the effective use of technology, while Data Integration enables information from various business activities to be used in an integrated manner. The Dynamic Capabilities Theory perspective supports this conceptualization because organizational capabilities are formed through a combination of resources and capabilities that enable companies to respond to environmental changes. The use of HOC also allows research to examine the contribution of all three LOCs jointly to Agile Supply Chain capabilities and Economic Resilience. This multidimensional approach is expected to reduce the simplification of digital transformation and produce measurements that are more in line with the characteristics of the creative industry.(Khalid, 2025).

**H1: The Impact of Digital Transformation on Agile Supply Chain**

Digital Transformation improves a company's ability to quickly acquire, process, and use information in conducting business activities. Digital Infrastructure provides connectivity and systems that support coordination between departments and supply chain partners. Digital Talent enables companies to utilize technology effectively, while Data Integration accelerates the exchange and use of information in decision-making processes. These capabilities can improve supply chain visibility and accelerate responses to changes in demand, material availability, and market conditions. The Dynamic Capabilities Theory perspective explains that the ability to integrate technology, knowledge, and information can strengthen an organization's capacity for sensing, seizing, and reconfiguring. Agile Supply Chain requires the same capabilities to generate rapid and flexible responses. Based on these arguments, this study proposes the following hypothesis: H1: Digital Transformation has a positive effect on Agile Supply Chain.

**H2: The Influence of Entrepreneurial Orientation on Agile Supply Chain**

Entrepreneurial orientation encourages companies to be proactive, innovative, and willing to take risks in facing changes in the business environment. A proactive attitude allows companies to more quickly recognize changes in customer needs and market conditions. An innovative orientation encourages the development of new products and processes, while risk-taking allows companies to try different approaches and technologies. These characteristics support flexibility in managing supply chain activities because companies have a tendency to adjust processes when conditions change. The Entrepreneurial Orientation Framework also explains that an entrepreneurial orientation can shape decision-making patterns that are more responsive to opportunities. This capability aligns with the principles of Agile Supply Chain, which emphasize speed, flexibility, and responsiveness. Based on these arguments, this study proposes the following hypothesis: H2: Entrepreneurial orientation has a positive effect on Agile Supply Chain.

**H3: The Impact of Digital Transformation on Economic Resilience**

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Digital Transformation can strengthen Economic Resilience by increasing efficiency, information access, operational flexibility, and a company's ability to adapt to change. Digital Infrastructure enables business activities to continue through various digital channels. Digital Talent enhances a company's ability to utilize technology to maintain and develop business activities. Data Integration helps companies obtain more integrated information to support decision-making when facing uncertainty. Dynamic Capabilities Theory explains that the ability to integrate and reconfigure resources is fundamental for organizations to adapt to environmental changes. Strong digital capabilities can help the creative industry maintain economic activity, discover new opportunities, and adapt business models when disruptions occur. Based on these arguments, this study proposes the following hypothesis: H3: Digital Transformation has a positive effect on Economic Resilience.

**H4: The Influence of Entrepreneurial Orientation on Economic Resilience**

An entrepreneurial orientation can enhance economic resilience by encouraging companies to respond to change through innovation, proactive action, and calculated risk-taking. Companies with a proactive orientation tend to seek opportunities before change becomes stressful to business activities. Innovative behavior enables companies to develop new products, services, marketing channels, or business models as market conditions change (Utomo, 2025). Courage to take risks provides the ability to make strategic adjustments even when the decision contains uncertainty. The Entrepreneurial Orientation Framework places these three characteristics as an important part of a company's ability to face a dynamic environment. The creative industry requires these capabilities because business continuity is greatly influenced by changes in trends, consumer preferences, technology, and competition. Based on these arguments, this study proposes the following hypothesis: H4: Entrepreneurial Orientation has a positive effect on Economic Resilience.

**H5: The Effect of Agile Supply Chain on Economic Resilience**

Agile Supply Chain enables companies to respond quickly to changes in demand, supply disruptions, and changes in the business environment. The ability to obtain timely information can improve visibility into supply chain conditions. Rapid coordination with suppliers and business partners can reduce delays in fulfilling production and distribution needs. Process flexibility allows companies to adjust volumes, supply sources, and distribution patterns according to market conditions. Dynamic Capabilities Theory views the ability to adapt and reconfigure resources as critical factors in maintaining organizational sustainability. Agile Supply Chain performs these functions at the operational level so that companies can maintain economic activity when facing disruptions. Based on these arguments, this study proposes the following hypothesis: H5: Agile Supply Chain has a positive effect on Economic Resilience.

**H6: Agile Supply Chain Mediation on the Influence of Digital Transformation on Economic Resilience**

Digital Transformation can generate economic resilience benefits by improving a company's ability to manage its supply chain quickly and flexibly. Digital infrastructure provides connectivity, digital talent supports technology utilization, and data integration increases the availability of information for decision-making. These resources can enhance the Agile Supply Chain through visibility, coordination, speed of response, and operational flexibility. The Agile Supply Chain then enables companies to translate digital capabilities into concrete actions in the face of changing demand and supply disruptions. This mechanism aligns with Dynamic Capabilities Theory, which explains that

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organizational resources generate strategic value when companies are able to integrate and reconfigure resources to respond to change. This relationship suggests that the Agile Supply Chain can be a mechanism that partially explains the effect of Digital Transformation on Economic Resilience. Based on this argument, this study proposes the following hypothesis: H6: Agile Supply Chain mediates the effect of Digital Transformation on Economic Resilience.

**H7: Agile Supply Chain Mediation on the Influence of Entrepreneurial Orientation on Economic Resilience**

Entrepreneurial orientation can promote economic resilience through a company's ability to translate proactive, innovative, and risk-taking attitudes into adaptive operational actions. Proactive companies can more quickly anticipate changing market needs, while an innovative orientation can encourage product and process adjustments. Courage to take risks can expand a company's options in finding suppliers, distribution channels, and more flexible operating methods. Agile Supply Chain is a mechanism that allows this strategic orientation to be implemented in managing the flow of information, goods, and relationships with partners. The Dynamic Capabilities Theory perspective supports this relationship because organizational resilience depends on the ability to change orientation and resources in an appropriate response to environmental changes. Based on these arguments, this study proposes the following hypothesis: H7: Agile Supply Chain mediates the effect of Entrepreneurial Orientation on Economic Resilience.

**H8: Differences in Structural Paths Based on Business Scale**

Business scale can influence the strength of the relationship between Digital Transformation, Entrepreneurial Orientation, Agile Supply Chain, and Economic Resilience because micro and small businesses have different resource characteristics and organizational capacities. Small businesses generally have a broader operational structure, human resources, investment capacity, and business networks than micro businesses. These differences can affect a company's ability to adopt technology, develop digital competencies, integrate data, and build relationships with suppliers. Dynamic Capabilities Theory explains that adaptive capacity is strongly influenced by an organization's capacity to access and combine resources. The Entrepreneurial Orientation Framework also allows for differences in decision-making patterns and opportunity exploitation based on business capacity. These differences in characteristics provide a theoretical basis for testing variations in structural pathways through Multi-Group Analysis. Based on these arguments, this study proposes the following hypothesis: H8: There are significant differences in the structural relationship pathways between Micro and Small-Scale Creative Industry groups.

**Conceptual Framework of Research Model**

Based on the theoretical foundation and hypothesis development, the research model positions Digital Transformation (HOC) and Entrepreneurial Orientation as exogenous variables, Agile Supply Chain as a mediator, and Economic Resilience as an endogenous variable. Digital Transformation is shaped by three LOCs: Digital Infrastructure, Digital Talent, and Data Integration. The model also examines direct and indirect pathways and compares models based on the scale of micro and small businesses through Multi-Group Analysis (MGA) (Singh, 2025).

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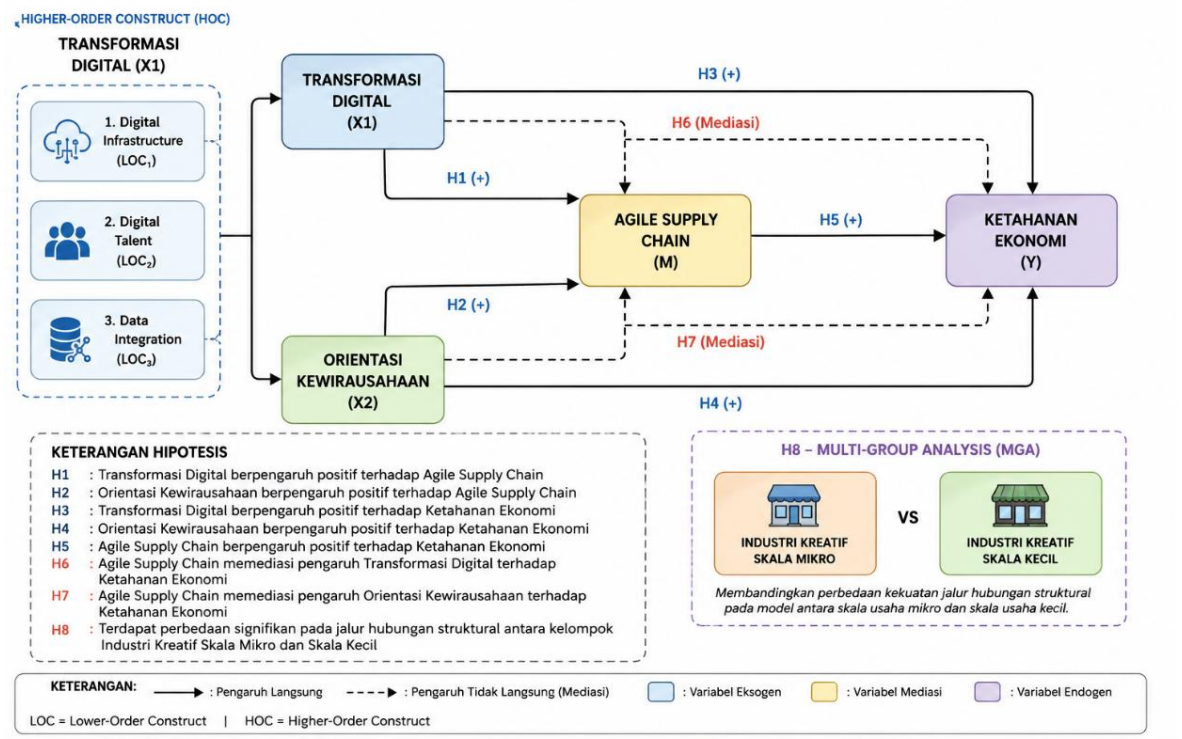


Figure 1. Conceptual Framework

## RESEARCH METHODS

This study uses a quantitative approach with an explanatory research design to examine the causal relationship between Digital Transformation, Entrepreneurial Orientation, Agile Supply Chain, and Economic Resilience in the creative industry. The study uses a cross-sectional survey because data were collected from respondents in one observation period. The research model uses Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 3 because the study involves several latent constructs, direct and indirect relationships, and Digital Transformation as a Higher-Order Construct (HOC). The exogenous variables consist of Digital Transformation (X1) and Entrepreneurial Orientation (X2). Digital Transformation is modeled as an HOC formed by three Lower-Order Constructs (LOC), namely Digital Infrastructure (LOC1), Digital Talent (LOC2), and Data Integration (LOC3). The mediating variable is Agile Supply Chain (M), while the endogenous variable is Economic Resilience (Y). The structural model tests H1 the influence of Digital Transformation on Agile Supply Chain, H2 the influence of Entrepreneurial Orientation on Agile Supply Chain, H3 the influence of Digital Transformation on Economic Resilience, H4 the influence of Entrepreneurial Orientation on Economic Resilience, H5 the influence of Agile Supply Chain on Economic Resilience, H6 the mediating effect of Agile Supply Chain on the relationship between Digital Transformation and Economic Resilience, H7 the mediating effect of Agile Supply Chain on the relationship between Entrepreneurial Orientation and Economic Resilience, and H8 the difference in structural paths between micro and small scale creative industries through Multi-Group Analysis (MGA). The analysis uses two stages of testing, namely the measurement model or outer model and the structural model or inner model. Outer model testing includes outer loading, Cronbach's alpha, Composite Reliability, Average Variance Extracted (AVE), and Heterotrait-Monotrait Ratio (HTMT). Inner model testing includes collinearity or VIF, coefficient of determination $R^2$, effect size $f^2$, predictive relevance $Q^2$, path coefficients, and

significance testing through bootstrapping. Mediation testing uses indirect effects and total effects, while H8 is tested using PLS-MGA or the MGA method available in SmartPLS 3.

The study population included all micro and small-scale creative industry entrepreneurs who produce or provide creativity-based products and services and engage in business activities related to the supply chain. The research unit of analysis was the creative industry business, while respondents were owners, managers, or key decision-makers who understand digital activities, entrepreneurship, procurement, production, distribution, and the economic conditions of the business. Respondents were selected using purposive sampling with the following criteria (Y. Wang, 2024): (1) the business is included in the creative industry category; (2) the business is on a micro or small scale; (3) the business has been operating for at least two years so that respondents have experience facing changes in the business environment; (4) the business uses at least one digital technology in business activities; (5) respondents are directly involved in business decision-making; and (6) respondents understand the activities of suppliers, material procurement, production, distribution, or fulfilling customer requests. The study set a target of 300 respondents, consisting of 150 micro businesses and 150 small businesses. This number was used to provide an adequate number of observations for PLS-SEM testing while maintaining group balance in the Multi-Group Analysis analysis. The classification of business scale follows the provisions of applicable regulations regarding micro and small businesses in Indonesia. Respondent data were then grouped based on business scale with codes 1 = micro and 2 = small for MGA purposes. A balanced group division helps reduce sample size inequality when comparing path coefficients between groups.

The research instrument used a closed questionnaire with a five-level Likert scale, namely 1 = strongly disagree, 2 = disagree, 3 = somewhat agree, 4 = agree, and 5 = strongly agree. The Digital Transformation construct (X1) is measured as a HOC with three LOCs. Digital Infrastructure (LOC1) measures the availability and utilization of devices, networks, digital systems, and technology supporting business activities. Digital Talent (LOC2) measures the ability of human resources to use technology, manage digital information, solve technology-based problems, and develop digital competencies. Data Integration (LOC3) measures the ability of a business to connect data from various activities, access information in an integrated manner, use data for decision-making, and update information in a coordinated manner. Entrepreneurial Orientation (X2) is measured through the dimensions of innovativeness, proactivity, and risk-taking courage that represent the tendency of businesses to create innovations, anticipate market opportunities, and make decisions under conditions of uncertainty. Agile Supply Chain (M) is measured through the ability to respond to changes in demand, speed of obtaining information, process flexibility, coordination with suppliers and partners, and the ability to adjust procurement, production, and distribution. Economic Resilience (Y) is measured through a business's ability to maintain economic activity, maintain revenue continuity, adapt business models or processes, retain customers, recover activities after disruptions, and exploit new opportunities when facing environmental changes. Each indicator is developed into several statements relevant to the characteristics of the creative industry. The instrument was first checked through content validity by requesting expert assessments and readability tests from business actors who have characteristics similar to the research respondents. The survey data were then analyzed using SmartPLS 3. Reflective constructs were assessed based on outer loading ≥ 0.70, Cronbach's alpha ≥ 0.70, Composite Reliability ≥ 0.70, and AVE ≥ 0.50. Discriminant validity was

assessed using HTMT, with values below the recommended limit to ensure that each construct has distinct empirical characteristics.

The research procedure began with population identification and determination of respondent criteria based on the characteristics of micro and small-scale creative industries. Researchers developed indicators based on Dynamic Capabilities Theory and the Entrepreneurial Orientation Framework, then developed the instrument into a questionnaire. The instrument was checked through content validity and readability tests before being used for primary data collection. The questionnaire was distributed directly and/or through digital media to creative industry owners or managers who met the sample criteria (Hu, 2025). The collected data was checked to ensure the completeness of the answers, consistency of responses, and suitability of respondent characteristics. The data was then coded and entered into SmartPLS 3 with the structure X1 = Digital Transformation, X2 = Entrepreneurial Orientation, M = Agile Supply Chain, and Y = Economic Resilience, while Digital Infrastructure, Digital Talent, and Data Integration were placed as LOC forming HOC Digital Transformation. The first stage used the PLS Algorithm to evaluate the outer model and inner model. Evaluation of the outer model was carried out through outer loading, Cronbach's alpha, Composite Reliability, AVE, and HTMT. Evaluation of the inner model was carried out through VIF, $R^2$, $f^2$, $Q^2$, and path coefficients. The next stage used Bootstrapping with an adequate number of subsamples to obtain the path coefficient value, standard error, t-statistic, and p-value. Hypothesis testing was carried out at a significance level of 5%, so that the relationship was declared significant if the p-value <0.05 and the direction of the coefficient was in accordance with the proposed hypothesis. H6 and H7 were tested using specific indirect effects to determine the indirect influence of Digital Transformation and Entrepreneurial Orientation on Economic Resilience through Agile Supply Chain. Mediation interpretation was conducted by comparing the direct and indirect effects to determine the mediation pattern formed. H8 was tested using Multi-Group Analysis (MGA) on two groups, namely micro-scale creative industries and small-scale creative industries. Path differences were assessed based on differences in coefficients between groups and the significance of these differences. The results of all tests were used to explain the mechanism of influence of Digital Transformation and Entrepreneurial Orientation on Economic Resilience and the role of Agile Supply Chain as a mediating mechanism in the creative industry.

## RESULTS AND DISCUSSION

**Table 1.** Demographic Characteristics of Respondents

| Characteristics | Category | Frequency (n) | Percentage (%) |
|---|---|---|---|
| **Business Scale** | Micro | 150 | 50.0 |
| | Small | 150 | 50.0 |
| **Gender** | Man | 154 | 51.3 |
| | Woman | 146 | 48.7 |
| **Age** | 21-30 years old | 99 | 33.0 |
| | 31-40 years | 109 | 36.3 |
| | 41-50 years | 92 | 30.7 |
| **Length of Business** | 2-5 years | 84 | 28.0 |
| | 6-10 years | 108 | 36.0 |
| | 11-15 years | 108 | 36.0 |
| **Total** | **Respondents** | **300** | **100.0** |

Source: Processed by authors, 2026

Respondent characteristics show a balanced composition based on business scale. Micro-entrepreneurs comprised 150 respondents, or 50.0% of the total sample. Small-entrepreneurs also comprised 150 respondents, or 50.0%. This distribution indicates that both business scale groups had

an equal number of respondents. Respondent gender consisted of 154 males, or 51.3%, and 146 females, or 48.7%. This gender composition shows a relatively small difference in the number of male and female respondents.

The age distribution shows that 99 respondents, or 33.0%, were in the 21-30 age range. The 31-40 age group comprised 109 respondents, or 36.3%, making up the largest group. The 41-50 age group comprised 92 respondents, or 30.7%. The length of business of the respondents consisted of 84 people, or 28.0%, with 2-5 years of business experience. Respondents with 6-10 years of business experience numbered 108 people, or 36.0%. Respondents with 11-15 years of business experience also numbered 108 people, or 36.0%.

**Table 2.** Outer loading results

| Construct | Indicator | Outer Loading | Information |
|---|---|---|---|
| **Digital Transformation (X1)** | TD_INF | 0.828 | Valid |
| | TD_INT | 0.824 | Valid |
| | TD_TAL | 0.816 | Valid |
| **Entrepreneurial Orientation (X2)** | INOV1 | 0.799 | Valid |
| | INOV2 | 0.798 | Valid |
| | INOV3 | 0.769 | Valid |
| | PRO1 | 0.786 | Valid |
| | PRO2 | 0.724 | Valid |
| | PRO3 | 0.756 | Valid |
| | RSK1 | 0.733 | Valid |
| | RSK2 | 0.775 | Valid |
| | RSK3 | 0.765 | Valid |
| **Agile Supply Chain (M)** | ASC1 | 0.760 | Valid |
| | ASC2 | 0.832 | Valid |
| | ASC3 | 0.792 | Valid |
| | ASC4 | 0.796 | Valid |
| | ASC5 | 0.793 | Valid |
| | ASC6 | 0.779 | Valid |
| **Economic Resilience (Y)** | KE1 | 0.807 | Valid |
| | KE2 | 0.795 | Valid |
| | THE 3RD | 0.823 | Valid |
| | KE4 | 0.758 | Valid |
| | KE5 | 0.781 | Valid |
| | KE6 | 0.790 | Valid |

Source: Processed by authors, 2026

The outer loading values of all Digital Transformation indicators range from 0.816 to 0.828. The TD_INF indicator has a loading value of 0.828, TD_INT of 0.824, and TD_TAL of 0.816. All Digital Transformation indicators have values above the 0.70 limit. The Entrepreneurial Orientation construct has nine indicators with loading values between 0.724 and 0.799. The lowest value is found in PRO2 at 0.724, while the highest value is found in INOV1 at 0.799. All Entrepreneurial Orientation indicators are declared valid based on the outer loading values obtained.

The Agile Supply Chain construct has six indicators with outer loading values between 0.760 and 0.832. The highest value is found in ASC2 at 0.832, while the lowest value is found in ASC1 at 0.760. The Economic Resilience construct also has six indicators with loading values between 0.758 and 0.823. The highest value is found in KE3 at 0.823 and the lowest value is found in KE4 at 0.758. All Agile Supply Chain and Economic Resilience indicators have outer loading values above 0.70. These results indicate that all indicators used meet the criteria for convergent validity.

**Table 3.** Realiability and Construct Validity Result

| Construct | Cronbach's Alpha | rho_A | Composite Reliability | AVE | Information |
|---|---|---|---|---|---|
| **Digital Transformation (X1)** | 0.762 | 0.763 | 0.863 | 0.677 | Reliable and valid |
| **Entrepreneurial Orientation (X2)** | 0.913 | 0.916 | 0.928 | 0.589 | Reliable and valid |

| | | | | | |
|---|---|---|---|---|---|
| **Agile Supply Chain (M)** | 0.881 | 0.882 | 0.910 | 0.628 | Reliable and valid |
| **Economic Resilience (Y)** | 0.882 | 0.882 | 0.910 | 0.628 | Reliable and valid |

Source: Processed by authors, 2026

The Cronbach's Alpha values for all constructs ranged from 0.762 to 0.913. Digital Transformation had a Cronbach's Alpha of 0.762, while Entrepreneurial Orientation had a value of 0.913. Agile Supply Chain had a Cronbach's Alpha of 0.881 and Economic Resilience was 0.882. The rho_A values for each construct ranged from 0.763 to 0.916. These values indicate adequate internal consistency across all research constructs.

The Composite Reliability values of all constructs range from 0.863 to 0.928. The highest value is found in the Entrepreneurial Orientation construct at 0.928. The AVE values of all constructs range from 0.589 to 0.677. The lowest AVE value is found in Entrepreneurial Orientation at 0.589, while the highest value is found in Digital Transformation at 0.677. All Composite Reliability values have exceeded 0.70 and all AVE values have exceeded 0.50. These results indicate that the research constructs meet the criteria for reliability and convergent validity.

**Table 4.** Discriminant Validity Results Based on HTMT

| Construct | X1 | X2 | M | Y |
|---|---|---|---|---|
| **Digital Transformation (X1)** | - | 0.399 | 0.570 | 0.577 |
| **Entrepreneurial Orientation (X2)** | 0.399 | - | 0.530 | 0.560 |
| **Agile Supply Chain (M)** | 0.570 | 0.530 | - | 0.681 |
| **Economic Resilience (Y)** | 0.577 | 0.560 | 0.681 | - |

Source: Processed by authors, 2026

The HTMT value between Digital Transformation and Entrepreneurial Orientation is 0.399. The HTMT value between Digital Transformation and Agile Supply Chain is 0.570, while the relationship between Digital Transformation and Economic Resilience is 0.577. The relationship between Entrepreneurial Orientation and Agile Supply Chain produces an HTMT value of 0.530. The HTMT value between Entrepreneurial Orientation and Economic Resilience is 0.560. All HTMT values between constructs are below the 0.90 limit.

The HTMT value between Agile Supply Chain and Economic Resilience is the highest in the model, at 0.681. This value is still below the discriminant validity evaluation limit. The lowest HTMT value is found in the relationship between Digital Transformation and Entrepreneurial Orientation at 0.399. All construct pairs show HTMT values that meet the criteria. There are no construct pairs with HTMT values that show discriminant problems. These results indicate that each construct has empirical characteristics that can be distinguished from other constructs.

**Table 5.** R-Square, f-Square, and Inner VIF Results

| Component | Relationship/Construct | Mark | Information |
|---|---|---|---|
| **$R^2$** | Agile Supply Chain (M) | 0.336 | Currently |
| **$R^2$** | Economic Resilience (Y) | 0.458 | Currently |
| **$f^2$** | X1 → M | 0.162 | Currently |
| **$f^2$** | X2 → M | 0.174 | Currently |
| **$f^2$** | M → Y | 0.181 | Currently |
| **$f^2$** | X1 → Y | 0.062 | Small |
| **$f^2$** | X2 → Y | 0.089 | Small |
| **VIF** | X1 → M | 1,126 | There is no multicollinearity |
| **VIF** | X2 → M | 1,126 | There is no multicollinearity |
| **VIF** | M → Y | 1,505 | There is no multicollinearity |
| **VIF** | X1 → Y | 1,308 | There is no multicollinearity |
| **VIF** | X2 → Y | 1,322 | There is no multicollinearity |

Source: Processed by authors, 2026

(Aisyah et al. 2026)

The $R^2$ value of Agile Supply Chain of 0.336 indicates that Digital Transformation and Entrepreneurial Orientation are able to explain 33.6% of the variation in Agile Supply Chain. The $R^2$ value of Economic Resilience of 0.458 indicates that Digital Transformation, Entrepreneurial Orientation, and Agile Supply Chain are able to explain 45.8% of the variation in Economic Resilience. The $f^2$ value of X1 against M of 0.162 is in the medium category. The $f^2$ value of X2 against M of 0.174 and M against Y of 0.181 are also in the medium category. The $f^2$ value of X1 against Y of 0.062 and X2 against Y of 0.089 are in the small category. These results indicate the contribution of different effects on each structural relationship in the model.

The Inner VIF value of X1 to M is 1.126 and X2 to M is 1.126. The VIF value of M to Y is 1.505, while X1 to Y is 1.308 and X2 to Y is 1.322. All VIF values are well below the limit of 5.00. This condition indicates that there is no indication of multicollinearity in the structural relationships tested. The lowest VIF value is in the relationship of X1 and X2 to Agile Supply Chain at 1.126. The results of the inner model test indicate that the research model does not experience multicollinearity problems.

**Table 6.** Blindfolding Results

| Endogenous Construct | SSO | SSE | $Q^2$ | Information |
|---|---|---|---|---|
| **Agile Supply Chain (M)** | 1,800,000 | 1,429,272 | 0.206 | Predictive relevance |
| **Economic Resilience (Y)** | 1,800,000 | 1,288,082 | 0.284 | Predictive relevance |

Source: Processed by authors, 2026

The blindfolding test results show a $Q^2$ value of 0.206 for Agile Supply Chain. This value is obtained from the SSO value of 1,800,000 and the SSE of 1,429.272. A $Q^2$ value greater than zero indicates the model's predictive ability for the Agile Supply Chain construct. The Economic Resilience construct produces a $Q^2$ value of 0.284. This value is obtained from the SSO of 1,800,000 and the SSE of 1,288.082. Both endogenous constructs have positive $Q^2$ values, so the model has predictive relevance.

The $Q^2$ value of Economic Resilience is 0.284, which is higher than the $Q^2$ value of Agile Supply Chain, which is 0.206. This difference indicates a greater predictive ability of the model on the Economic Resilience construct. The $Q^2$ value of Agile Supply Chain of 0.206 indicates that the model has predictive relevance to the construct. The $Q^2$ value of Economic Resilience of 0.284 also indicates the predictive relevance of the model. There are no negative $Q^2$ values for both endogenous constructs. The blindfolding results indicate that the structural model has predictive relevance to the endogenous constructs studied.

**Table 7.** Results of Hypothesis Testing H1 to H5

| Hypothesis | Path of Influence | Original Sample | T-Statistics | P-Value | Decision |
|---|---|---|---|---|---|
| **H1** | X1 → M | 0.348 | 6,838 | <0.001 | **Accepted** |
| **H2** | X2 → M | 0.361 | 7,546 | <0.001 | **Accepted** |
| **H3** | X1 → Y | 0.210 | 4,583 | <0.001 | **Accepted** |
| **H4** | X2 → Y | 0.252 | 5,386 | <0.001 | **Accepted** |
| **H5** | M → Y | 0.384 | 8,043 | <0.001 | **Accepted** |

Source: Processed by authors, 2026

The H1 test shows the effect of Digital Transformation on Agile Supply Chain with an original sample of 0.348. The T-statistics value of 6.838 and P-value <0.001 indicate that the relationship is significant. The H2 test produces an original sample of 0.361 with a T-statistics of 7.546 and P-value <0.001. These results indicate a significant effect of Entrepreneurial Orientation on Agile Supply Chain. The H3 test produces an original sample of 0.210 with a T-statistics of 4.583 and P-value <0.001. H1, H2, and H3 are declared accepted.

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The H4 test yielded an original sample of 0.252 with a T-statistic of 5.386 and a P-value <0.001. The H5 test yielded an original sample of 0.384 with a T-statistic of 8.043 and a P-value <0.001. All relationships between X1 and Y, X2 and Y, and M and Y showed a positive influence. The T-statistic values for all paths from H1 to H5 were above 1.96. The P-values for all paths were also below 0.05. The test results showed that H1, H2, H3, H4, and H5 were all accepted.

**Table 8.** Results of Hypothesis Testing H6 to H7

| Hypothesis | Mediation Path | Original Sample | T-Statistics | P-Value | Decision |
|---|---|---|---|---|---|
| **H6** | X1 → M → Y | 0.134 | 5,090 | <0.001 | **Accepted** |
| **H7** | X2 → M → Y | 0.139 | 5,633 | <0.001 | **Accepted** |

Source: Processed by authors, 2026

The H6 test shows the indirect effect of Digital Transformation on Economic Resilience through Agile Supply Chain. The original sample value on the path X1 → M → Y is 0.134. The T-statistics value is 5.090 with a P-value <0.001 indicating that the indirect effect is significant. The H7 test shows the indirect effect of Entrepreneurial Orientation on Economic Resilience through Agile Supply Chain. The original sample value on the path X2 → M → Y is 0.139. The T-statistics value is 5.633 with a P-value <0.001 indicating that the indirect effect is significant.

The indirect effect value of Digital Transformation through Agile Supply Chain is 0.134. The indirect effect value of Entrepreneurial Orientation through Agile Supply Chain is 0.139. Both mediation paths have a positive influence on Economic Resilience. The T-statistics value for both mediation paths is above 1.96. The P-value for both mediation paths is below 0.05. The test results indicate that H6 and H7 are accepted.

**Table 9.** Multi-Group Analysis Results Based on Business Scale

| Hypothesis | Structural Path | Small Group | Micro Group | Lane Difference | P-Value MGA | Decision |
|---|---|---|---|---|---|---|
| **H8** | X1 → M | 0.381 | 0.303 | 0.077 | 0.441 | No different |
| | X1 → Y | 0.268 | 0.143 | 0.125 | 0.182 | No different |
| | X2 → M | 0.347 | 0.396 | -0.049 | 0.604 | No different |
| | X2 → Y | 0.181 | 0.350 | -0.169 | 0.073 | No different |
| | M → Y | 0.406 | 0.346 | 0.059 | 0.565 | No different |

Source: Processed by authors, 2026

The MGA results show a P-value of 0.441 on the X1 → M path. This value indicates that there is no significant difference between small and micro business groups in the relationship between Digital Transformation and Agile Supply Chain. The X1 → Y path produces a P-value of 0.182. The X2 → M path produces a P-value of 0.604. The X2 → Y path produces a P-value of 0.073. All P-values are above 0.05 so that the path differences have not shown statistical significance.

The M → Y path yields an MGA P-value of 0.565. The original sample value for the small group is 0.406, while the micro group is 0.346. The coefficient difference of 0.059 does not indicate a statistically significant difference. All structural paths have an MGA P-value greater than 0.05. These results indicate that the structural relationships in the model do not differ significantly based on business scale. H8 is not supported or rejected because no significant differences in structural paths were found between small and micro businesses.

**Discussion**

The results of the study indicate that Digital Transformation has a positive and significant effect on Agile Supply Chain. The path coefficient X1 → M is 0.348 with a t-statistic value of 6.838 and a p-value <0.001. This finding indicates that increasing digital transformation in the creative industry is related

to the increasing ability of the supply chain to respond quickly to changes. The use of digital infrastructure, data integration, and digital talent are important foundations in building a more responsive supply chain. These results also show that digital transformation is not only related to the use of technology, but also contributes to changes in the operational capabilities of the organization.

Entrepreneurial Orientation has also been shown to have a positive and significant influence on Agile Supply Chain.with a coefficient of 0.361, t-statistics of 7.546, and p-value <0.001. Entrepreneurial orientation encourages innovation, proactivity, and the courage to take risks that make creative industry players more ready to adjust supply chain activities. The influence of X2 on M is even slightly greater than the influence of X1 on M. These findings indicate that technological capabilities need to go hand in hand with entrepreneurial orientation so that supply chain flexibility can develop optimally.

Economic Resilience is positively influenced by Digital Transformation, Entrepreneurial Orientation, and Agile Supply Chain. The influence of X1 → Y is 0.210, X2 → Y is 0.252, and M → Y is 0.384, all significant at p-value <0.001. Agile Supply Chain has the strongest direct influence on Economic Resilience. The $R^2$ value of Economic Resilience of 0.458 indicates that the model is able to explain 45.8% of the variation in economic resilience. The mediation results are also significant, namely X1 → M → Y is 0.134 and X2 → M → Y is 0.139, so that Agile Supply Chain acts as a mechanism that strengthens the influence of digital transformation and entrepreneurial orientation on economic resilience.

The findings regarding the influence of Digital Transformation on Agile Supply Chain are in line with the Dynamic Capability Theory developed by Damayanti, (2025). This theory explains that organizations need to build capabilities to sense change, seize opportunities, and transform resources to cope with a dynamic environment. Digital transformation provides these capabilities through the use of technology, information integration, and data-driven decision-making. The findings of this study reinforce the view that digital technology is a source of adaptive capabilities that support supply chain agility.

These results are also consistent with previous research showing that digitalization improves an organization's ability to acquire, integrate, and use information quickly. The Resource-Based View perspective Nataraj, (2025) also supports this finding because digital infrastructure, data, and digital competencies can be positioned as strategic resources. The researchers' opinion in this study emphasizes that the influence of digital transformation on Agile Supply Chain does not arise solely from the presence of technological devices. The strategic value of technology emerges when digital resources can be used to improve coordination and response to market changes.

The relationship between Entrepreneurial Orientation and Agile Supply Chain strengthens Entrepreneurial Orientation Theory, particularly the dimensions of innovativeness, proactiveness, and risk-taking. The finding of X2 → M of 0.361 indicates that entrepreneurial character plays a significant role in shaping operational agility. This result aligns with previous research linking entrepreneurial orientation with organizational adaptability and performance. The difference lies in the context of this study, which positions Agile Supply Chain as a crucial mechanism for the economic resilience of the creative industry.

The research findings indicate that the economic resilience of the creative industry is not solely determined by the ability to produce creative products. Resilience also depends on the ability of business actors to manage technological change, identify market opportunities, coordinate resources, and flexibly manage supply chains. The M → Y coefficient of 0.384 demonstrates the strategic position of Agile Supply Chain in the research model. This condition indicates that economic resilience requires operational capabilities capable of translating digital resources and entrepreneurial orientation into swift action.

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These findings can be interpreted through Contingency Theory, which explains that organizational effectiveness depends on the alignment of strategy and environmental conditions. The creative industry faces relatively rapid changes in demand, consumer trends, technology, and competition. Agile Supply Chain is an organizational response to these conditions. Researchers argue that economic resilience cannot be built solely through static strategies. Organizations need systems capable of adapting business processes based on environmental changes (Béres, 2026).

The mediation results show more specific signs. Digital Transformation and Entrepreneurial Orientation not only have a direct influence on Economic Resilience, but also work through the Agile Supply Chain. The mediation coefficients X1 → M → Y of 0.134 and X2 → M → Y of 0.139 indicate the presence of a significant indirect mechanism. This finding supports the Organizational Agility Perspective which positions agility as an organization's ability to respond to change quickly and appropriately. Researchers view the Agile Supply Chain as a bridge between strategic capacity and economic outcomes.

The first implication relates to creative industry management. Creative industry players need to view digital transformation as part of an economic resilience strategy, not simply a technology investment. Digital infrastructure needs to be accompanied by data integration and workforce competency enhancement. The research shows that digital transformation has a significant impact on Agile Supply Chain and Economic Resilience. Digital investments will be more valuable when used to accelerate coordination, improve information accuracy, and accelerate response to changes in demand.

The second implication relates to strengthening entrepreneurial orientation. The X2 → M influence value of 0.361 indicates that innovation, proactivity, and risk-taking play a role in building an agile supply chain. Entrepreneurial Orientation theory provides the basis for entrepreneurial behavior as a source of strategic advantage. Previous research also shows that entrepreneurial orientation is related to a company's ability to adapt and exploit opportunities. Researchers assess that creative industry development programs need to incorporate aspects of innovation and decision-making courage as part of strengthening business resilience.

The third implication relates to creative industry development policies. The $R^2$ value of 0.458 indicates that digital transformation, entrepreneurial orientation, and Agile Supply Chain contribute substantially to economic resilience, although other factors are also present outside the model. The government and institutions supporting the creative industry can develop programs that integrate digital literacy, entrepreneurial mentoring, and strengthening supplier networks. The researchers argue that policies that focus solely on digitalization without strengthening managerial and supply chain capabilities have the potential to have limited impact.

The impact of digital transformation on the agile supply chain is due to technology increasing the speed of information acquisition and processing. Integrated data helps businesses understand changes in demand and adjust production and distribution activities Jain, (2025) explains that an organization's ability to adapt is formed through the processes of sensing, seizing, and transforming. Digital transformation supports these three processes through information access, opportunity utilization, and business process changes. Researchers believe that these conditions explain the X1 → M coefficient of 0.348.

The influence of Entrepreneurial Orientation on Agile Supply Chain arises because innovative and proactive behavior encourages organizations to make decisions more quickly. Proactive entrepreneurs tend to seek opportunities before market changes become stressful Hanjing, (2026) explains that organizational competencies and capabilities can be a source of advantage when they possess strategic value. Entrepreneurial orientation becomes this capability when translated into product innovation, market discovery, and supply chain process adjustments. Researchers see this condition as the reason why X2 → M produces a coefficient of 0.361.

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The influence of Agile Supply Chain on Economic Resilience has the highest coefficient, at 0.384. This condition can be explained through Supply Chain Agility Theory, which emphasizes speed, flexibility, responsiveness, and adaptability in the face of change. An agile supply chain helps businesses cope with changing demand, supply constraints, and competitive pressures. Previous research on supply chain agility also shows its link to improved performance and the ability to face uncertainty. Researchers argue that Agile Supply Chain's position as the largest influence indicates that technology and entrepreneurial orientation need to be translated into operational capabilities to achieve economic resilience.

Creative industry players need to develop an integrated digital transformation strategy. This strategy includes strengthening digital infrastructure, integrating data, and enhancing digital competencies. Research shows that these three aspects are part of the Digital Transformation construct Thiyagarajan, (2026) provides the basis for transforming technology into organizational capabilities. Researchers recommend that technology investments be directed at real-world needs such as inventory monitoring, supplier communications, demand analysis, digital marketing, and decision-making.

Strengthening the Agile Supply Chain should be the next priority. Businesses need to shorten response times, improve coordination with suppliers, increase production flexibility, and accelerate distribution. The $Q^2$ values of 0.206 for Agile Supply Chain and 0.284 for Economic Resilience indicate that the model has predictive relevance. These findings provide an empirical basis for developing supply chain agility as a strategic agenda. Researchers recommend that creative industry players conduct regular supply chain evaluations based on changes in demand and market conditions.

Further policy development needs to incorporate digitalization, entrepreneurship, and supply chain resilience. The MGA results show that all structural pathways do not differ significantly between micro and small business groups. This indicates that the relationships between variables are relatively consistent across both business scale groups. Policies do not need to separate approaches based on business scale in these structural relationships, but can differentiate the forms of support according to the resource capacity of each group. The researchers recommend that future research include other variables such as open innovation, access to financing, government support, digital marketing capabilities, and environmental uncertainty to provide a more comprehensive explanation of Economic Resilience (Negi, 2025).

Overall, the research results form a consistent chain of relationships: Digital Transformation and Entrepreneurial Orientation strengthen Agile Supply Chain, then Agile Supply Chain strengthens Economic Resilience. The results of H1 to H7 are all significant, indicating that the economic resilience of the creative industry comes not only from internal resources, but also from the ability to transform these resources into agile operational responses. The insignificant result of H8 indicates that the pattern of relationships is not statistically different between micro and small businesses. The main findings of this study position Agile Supply Chain as a strategic mechanism that connects digital capabilities and entrepreneurship with economic resilience.

## CONCLUSION

This study found that Digital Transformation and Entrepreneurial Orientation have a positive and significant effect on Agile Supply Chain and Economic Resilience, while Agile Supply Chain is a strategic path that strengthens the economic resilience of the creative industry. The influence of Agile Supply Chain on Economic Resilience is the strongest direct relationship with a coefficient of 0.384, while the indirect effects of Digital Transformation and Entrepreneurial Orientation through Agile Supply Chain are 0.134 and 0.139, respectively. The added value of this study lies in its conceptual contribution in the form of integrating the perspectives of digital transformation, entrepreneurial orientation, and Agile Supply Chain in explaining the Economic Resilience of the creative industry through an

empirically tested mediation model. The use of PLS-SEM and Multi-Group Analysis provides methodological contributions by testing direct and indirect relationships, model predictive ability, and path differences based on business scale. The MGA results show no significant differences in all structural paths between micro and small businesses, so that the relationship patterns in the model are relatively consistent across both groups. The limitations of this research lie in the scope of variables and sample characteristics that do not cover all factors that have the potential to shape economic resilience, so further research needs to include variables such as open innovation, digital marketing capabilities, access to financing, government support, and environmental uncertainty as well as expanding the scope of regions and types of creative industries.

## ACKNOWLEDGMENT

Acknowledgements are primarily addressed to research funders or donors. Acknowledgement can also be dedicated to people who contribute to the study [with 11 font size].

## DECLARATION OF COMPETING INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper

## USE OF ARTIFICIAL INTELLIGENCE (AI)-ASSISTED TECHNOLOGY

The authors declare that no artificial intelligence (AI) tools were used in the preparation, analysis, or writing of this manuscript. All aspects of the research, including data collection, interpretation, and manuscript preparation, were carried out entirely by the authors without the assistance of AI-based technologies.

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