

# Synthesizing Dynamic Capabilities And Growth Mindset For Logistics Entrepreneurs Using Ahp And Edfr Techniques

**Wichien Rueboon<sup>1</sup>, Parinya Ruangthip<sup>2\*</sup>, Thitima Wongintan<sup>3</sup>**

*<sup>1</sup>Ph.D. Candidate (Research and Statistics in Cognitive Science), College of Research Methodology and Cognitive Science Program, & a lecturer of Smart Logistics and Supply Chain Management Program, International College, Burapha University, Chonburi, Thailand*

*<sup>2</sup>Assistant Professor, Ph.D. and a Lecturer of department of Innovation and Educational Technology, Burapha University, Faculty of Education, Burapha University, Chonburi, Thailand*

*<sup>3</sup>Assistant Professor, Ph.D. and a Lecturer of Faculty of Logistics, Burapha University, Chon Buri, Thailand  
Corresponding Author  
Parinya Ruangthip*

*Lecturer of department of Innovation and Educational Technology, Burapha University, Faculty of Education, Burapha University, Chonburi, Thailand, Email:  
[parinyar@go.buu.ac.th](mailto:parinyar@go.buu.ac.th), [wichien.ru@go.buu.ac.th](mailto:wichien.ru@go.buu.ac.th),*

The ethnographic Delphi Futures Research and Analysis Hierarchy Process (AHP) was employed to examine the growth mindset, self-efficacy, and dynamic capabilities development differentiates of logistics entrepreneurs in this research. Growth Mindset AHP analysis reminds us Growth Mindset (Weight: 0.643) plays as the utmost critical factor since it conveys an essential area that could determine or change company behaviors, such as implementing flexibility and being able to learn anything continuously and focus in future orientation that are desperately needed by logistics companies when uncertainties come around on their business. Future Fit Score Calculation with the AHP Method Note Value Weight Contribution (Scaled) No. In this same way, Growth Mindset institutionalizes the capability for ongoing learning, flexibility, and grit required to stay competitive in the fast-moving and chaotic world of logistics. This paradigm allows business owners to see obstacles as learning points, promoting a more creative and strategic way of thinking that is necessary for sustainable success. Second on the list at a weight of 0.283, self-efficacy is an entrepreneur's belief in their power to carry out necessary tasks for goal achievement. Although dynamic capabilities (weight 0.074) are remarkably significant, it seems that sensing and learning or adapting and innovating along personal characteristics have the greater relevance for entrepreneurial success in this setting. A low resulting consistency ratio (CR = 0.056) and a derived consistency index of CI = 0.033 indicate acceptable AHP output with the desired certainty. It also introduces a development model structured in three stages (input: resources, mentorship, and

expert advice; process: on-site training; output: initial behavior change and better strategies). In a more general sense, our model provides a useful reference for logistics-related entrepreneurs to cultivate the skills and promote or sustain their responsiveness to succeed in rapidly changing environments.

## 1. Introduction

Industry 4.0 Thailand is currently amidst the 4th Industrial Revolution of Cloud, IoT, AI and Big Data where advancement in digital technology combines many areas biology, physical science and engineering etc. This transition is changing the way we do business, how we interact and conduct trade and is starting to revolutionize entire economy faster than we can keep up with logistics and supply chains behind. These industries implied content creation to fashion, law, art and more that have seen new opportunities emerge along with unique challenges of their own since the dawn of the digital age (Dimerco, 2023; UNIDO, 2020).

The 13th National Economic and Social Development Plan (2023-2027) identifies the necessity for Thailand to enhance its infrastructure and logistics systems. The topical coverage also extends to better leveraging rail systems and multi-modal transportation strategically for the nation to become more resilient and prepared for the fast-evolving global economy. Skilled logistics professionals and the use of new technologies including Big Data Analytics, Blockchain, Artificial Intelligence that can contribute to making Thailand a more enhanced regional commerce and investment hub will be an essential key outcome of this vision (International Monetary Fund & Pacific, 2022; Parinya Ruangtip, 2024).

The most fundamental changes are professional attitude toward dynamic capabilities, entrepreneurial self-efficacy and a more growth mindset in the logistics, especially Thai entrepreneurs. As Schoemaker, Heaton, and Teece (2018); Teece (2018a, 2020), define, dynamic capabilities allow the firm to adapt, integrate and reconfigure its own resources always maintain a competitive advantage. The SCCC framework helps organizations not only to identify new opportunities but also assist them in allocating resources well and innovating their way out of uncertainty to emerge victorious. **According to** Bandura (2011); Schunk and DiBenedetto (2020), self-efficacy is the ability to reach your personal goals and it provides resilience/stress management in turbulent markets. A **growth mindset**, popularized by Claro, Paunesku, and Dweck (2016); C. Dweck (2015, 2016); C. S. Dweck (2012), encourages entrepreneurs to view challenges as opportunities for growth. This mindset promotes continuous learning, innovation, and adaptability—essential for success in logistics, where **Industry 4.0** and technological advancements demand constant evolution.

Useful in this turbulent time frame, tools such as Analytic Hierarchy Process (AHP) and Ethnographic Delphi Futures Research (EDFR) which helps to assist decision-making regarding the factor that affect uncertainty (Wattana & Yamrung, 2023). **AHP, as articulated in** by International Monetary Fund and Pacific (2022), helps entrepreneurs with logistics to better prioritize which criteria and where to effectively allocate limited resources taking into account factors such as cost but innovation and market demand. EDFR combines the practical experience with expert opinions when projecting trends and estimating differential advancements and transformation in technology and industries (Gonzalez, Labaka, Hiltz, & Turoff, 2016; Uzun Ozsahin, Gökçekeuş, Uzun, & LaMoreaux, 2021). AHP scores by quantitatively ranking various options and EDFR rates by providing qualitative insights how

to approach the decision making will help logistics leaders make better decisions in complex decision environments.

Techniques including dynamic capabilities, self-efficacy, growth mindset combined with AHP and EDFR (Wattana & Yamrung, 2023), enable Thai logistics entrepreneurs to succeed in a digital world. The study will also uncover how political stability, and strong institutions support integrative processes, promoting economic growth, innovation and competitive national development. This research will provide, through AHP and EDFR, insight into the strategies logistics entrepreneurs draw on to prevail over these factors going forward in a dynamic world-wide landscape.

## **2. Literature Review**

### **2.1 Dynamic Capabilities**

Dynamic capabilities facilitate an organization to insinuate, build and reconvene the resources swiftly as it encounters shifting environments. The COVID-19 outbreak has underscored the importance of dynamic capabilities for businesses to boost resilience and innovation, particularly in an era of digital transformation (Ruiz-Ortega, Rodrigo-Alarcón, & Parra-Requena, 2024). Dynamic capabilities are “working across organizational levels”, with executives who used knowledge assets and innovations strategically (Durán, Aguado, & Perdomo-Ortiz, 2022). **Similarly**, Buccieri et al. (2021) found that dynamics in international ventures enable firms to quickly reallocate their resources and capabilities towards global disruptions, facilitating alignment with newly emerging opportunities (Teece, 2018a). A post-pandemic world also highlights the crucial role of logistics and supply chain management as companies need to adapt quickly to changes in customer demand and disruptions in their supply chains (Rashidirad & Salimian, 2020; Yang & Bentein, 2023). presented the dynamic capabilities framework based on social cognitive career model that consist of the following: 1) Sensing: recognizing new ideas or threats 2) Seizing: Deploying resources to capture and exploit these opportunities and 3) Transforming: Always change the business of the company to remain competitive.

On the other hand, Bandura (2011); Schunk and DiBenedetto (2020) defined self-efficacy as one of the moderators that influence the level of how entrepreneur use dynamic capabilities. Self-efficacy, in a nutshell, is the belief that you can adjust and cope with change. Greater entrepreneur self-efficacy leads to greater ability to anticipate, act on, and adapt in volatile markets which helps the firm in its quest to survive and thrive in a turbulent market context.

### **2.1 Self-Efficacy**

Self-Efficacy has been and will always remain crucial in the success of an entrepreneur or for a leader to get optimal respect from the organizational members. Self-efficacy is associated with resilience and adaptive leadership, particularly during pandemics. Results: Recent research demonstrates that high self-efficacy helps company leaders to cope and be able to perform at a high level when under stress (Cole & Meyer, 2020; Sanchez-Garcia, Gallego, Marquez, & Blasco, 2024). This included aspects such as goal-setting, persistence and

managing setbacks when the environment became uncertain (Denovan, Dagnall, & Drinkwater, 2023).

Self-efficacy extends beyond personal goal accomplishment and is strongly associated with the social learning theory, which is integral in encouraging team members to possess similar beliefs harnessed among various other societal benefits thereof, contributing to value add within an organization (Schunk & DiBenedetto, 2020). Self-efficacy is additionally associated with a pro-growth mindset, in which people are more likely to ask for challenges and accept failure as an advantage to learn from, rather than just measuring defeat (Heredia-Portillo & Armas-Arévalos, 2023).

## **2.2 Growth Mindset**

The idea of a growth mindset, first defined by Claro et al. (2016); C. Dweck (2015); C. S. Dweck (2012), has become more and more prevalent in business and education as an explanation for why some people excel while others only fall behind. Rather than shying away from challenges, learning from failure or trying new approaches to old problems are at the core of a growth mindset. According to recent research, i.e., Zhang, Ye, Wang, Tian, and Fu (2022) showed leadership mindsets improve organizational resilience, and enhances the understanding and application of cultural norms and supportive human resources practices, providing scientific suggestions for the sustainable development of organizations (J. L. Burnette et al., 2020). In a systematic review by Ku and Stager (2022) published in *Frontiers in Psychology*, growth mindset intervention was found to be essential for increasing student engagement, especially during the COVID-19 pandemic. Through integrating evidence from 20 empirical papers, they reviewed the impact of growth mindset on academic achievement, self-efficacy and resilience. We now see how having a multidimensional view of just growth mindset as it relates to self-control, self-efficacy, and self-regulation can be used in educational and business contexts as they seek to adapt with the volatility that is inherent with an ever-changing environment.

Heredia-Portillo and Armas-Arévalos (2023) focused on growth mindset culture in companies, with examples of logistics and supply chain management to deal with modern innovations such as AI and Blockchain. Instead, they claim organizations with a growth mindset are more flexible, identifying setbacks as paths to greater knowledge and resourcefulness. Lastly, J. Burnette et al. (2019) link growth mindset to entrepreneurship success, demonstrating how it promotes a resilient and anticipatory attitude in industries that are fast pacing as the case of transportation such as logistics. The researcher posited that this mentality allows entrepreneurs and companies to stay modern, agile.

## **2.3 Ethnographic Delphi Futures Research (EDFR)**

The use of EDFR to research logistics entrepreneurship is appropriate, as the approach combines the best features of Delphi and ethnographic research, making it ideally suited for studying mail processes (Skulmoski, Hartman, & Krahn, 2007). Delphi method can be used to get structured validated insights from the experts while ethnographic study allows you dig deeper in socio-cultural aspects of entrepreneurship. The Delphi Rounds, the process is series of questionnaires are given to finalize expert opinion in regard with the primary dynamic capabilities, and ways that a growth mindset relates to these skills. Ethnographic component

offers an understanding on how diverse cultural and social determinants impinge upon the evolution, implementation of dynamic capabilities in different regions/contexts within the logistics industry. The authors used EDFR in building a consensus among experts about the most relevant dynamic capabilities for logistics entrepreneurs anticipates an evolving view of industry trends. EDFR helps build consensus among experts on the most important dynamic capabilities for logistics entrepreneurs, providing a future-oriented perspective on industry trends (Roshan & Elhami, 2024). Ghanbaripour et al. (2023); Skulmoski et al. (2007) have pointed the increasing value of Delphi studies in a future research agenda for logistics and decision-making in dynamic environments.

## **2.4 Analytic Hierarchy Process (AHP)**

The Analytic Hierarchy Process (AHP), pioneered by Thomas Saaty in 1980 (Vargas, 2017), remains a widely utilized tool for multi-criteria decision-making (MCDM) across various fields, including logistics entrepreneurship. AHP helps decision-makers break down complex problems into a hierarchical structure of goals, criteria, and alternatives, making it particularly useful for prioritizing components like dynamic capabilities and growth mindset. Recent applications of AHP continue to validate its relevance in industries undergoing technological transformation, such as healthcare, environmental management, and logistics (Chaube, Kumar, Singh, Kotecha, & Kumar, 2024; Lehmann, 2024). The AHP generally goes through following steps:

2.4.1 Create the Hierarchy: Create a stem (Sensing, Seizing, Transforming and Growth Mindset) with sub-criteria that detail specific entrepreneurial tasks or challenges using a lens of improving self-efficacy in dynamic capabilities.

2.4.2 This process measures the relative importance of each criterion, provides a structured way to prioritize resources allocation or innovation strategies in logistics and conducted by experts.

2.4.3 Summarize the Findings: A list of capabilities by priority is generated to guide businesses on what is important to achieve their objectives.

With the advances in AHP, it has also been amalgamated with other decision-making processes, like TOPSIS and fuzzy logic for better utility across present-day operations in different sectors of industries such as logistics (Agrawal, Singh, & Murtaza, 2016) and smart health care systems. Such advances make AHP a great gun for entrepreneurs to manage the complexities of dynamic environments. Ccatamayo-Barrios et al. (2023); Chaube et al. (2024) who successfully implemented AHP to logistics decision making, explaining how this method helps companies focus on the most important ability for coping with market changes. Taking in the perspective of logistics entrepreneurs could look like opportunity capture is at the top and business process innovation follows as next priority for instance. Using AHP, logistics entrepreneurs can systematically assess and prioritize their dynamic capabilities, aligning their business strategies with growth mindset principles to ensure long-term success.

## **2.5 Integration of EDFR and AHP**

The integration of Ethnographic Delphi Futures Research (EDFR) and Analytic Hierarchy Process (AHP) for studying dynamic capabilities, self-efficacy, and growth mindset among logistics entrepreneurs (Supitcha Cheevapruk, 2021). However, research in related fields suggests that both methodologies could be effectively combined for a holistic approach (Roshan & Elhami, 2024). The Delphi method is often used for expert opinion refinement, while ethnography provides deep insights into socio-cultural contexts, and AHP assists in structuring and prioritizing decisions, especially in dynamic industries like logistics. For studying entrepreneurial traits such as dynamic capabilities and self-efficacy, the Delphi method helps gather and synthesize expert opinions, while AHP can rank these traits in terms of their importance and impact. This combination would be particularly useful in analyzing logistics entrepreneurship, where adaptability and resilience are key success factors (Supitcha Cheevapruk, 2021). The Delphi method is the tool, which collects expert opinions and refines them to offer a qualitative overview of critical capabilities based on certain entrepreneurial characteristics like dynamic capabilities and self-efficacy. Together with the Analytic Hierarchy Process (AHP) quantifying these capabilities, this provides a holistic paradigm for decision-making (Tsai, Ho, Lin, Tu, & Chang, 2021). This is especially useful in logistics entrepreneurship, which requires adaptability and an unyielding spirit.

By combining EDFR with AHP it provides a solid way to analyzed significant entrepreneurial traits. EDFR seizes prospective qualitative expert input, entailing dynamic capabilities as essential for success. AHP, in turn, does this by assigning numbers to these abilities which allows for more economic allocation of resources and strategic prioritization (Deveci, Simic, Karagoz, & Antucheviciene, 2022). The internet of supply chains can mean for example, in the EDFR phase emphasizing how logistics experts may come to think the real value is unlocking asset sharing, and increasingly sensing new tech innovations. In the AHP phase, then to rank this capability quantitatively in relation to others like seizing or creating opportunities etc. through pairwise comparisons. Such an approach ensures that the strategic business scope is a structured way of framing priorities for entrepreneurial capabilities (Meniz, Bas, Ahlatcioglu Ozkok, & Tiryaki, 2021). Further research prospective in the realm wishes to investigate such mechanisms as AHP in entrepreneurial decision-making or application of Delphi method in logistics and innovation setting.

### **3. Materials, Equipment and Methods of Research**

#### **3.1 Scope of the Research**

##### **3.1.1 Content Scope**

This research sets an impetus to synthesize principal facets of Dynamic Leadership and Growth Mindset for logistics entrepreneurs with reference to the Self-Efficacy (Bandura, 1986)(Ayoub, 2022), Dynamic Capabilities (Teece, 2018), and Growth Mindset theories (Dweck, 2015)(Ku & Stager, 2022). This study explores how digital technologies and the adaptability of entrepreneurs, as anchors that can be developed in the context of Logistics 4.0 (Miraz et al., 2020; Qurtubi et al., 2021) to improve sustainable competitiveness.

##### **3.1.2 Informants Scope**

This research is based on Ethnographic Delphi Futures Research (EDFR) and the Analytic Hierarchy Process (AHP) method to adopt key informants that categorized into two major groups of 1) logistics business executives (areawide/unlimited business size and 2) academic/scholar expert in the related field or logistics fields. To validate the data collected for EDFR, a panel of twenty experts was selected to be as knowledgeable and experienced as possible about logistics. The AHP, three experts were selected based on their domain knowledge to help in analyzing and prioritizing various components for building Dynamic Leadership skills and Growth Mindset. Margin of error is kept at 0.02 for improving the accuracy of data analysis and research results EDFR enables to collect in-depth qualitative data from the experts and AHP helps to rank the factors for leadership development in logistics business context.

#### **4. Research Methodology**

The study originated in literature review and research on synthesis of core constituents associated with Dynamic Leadership and Growth Mindset for Thai Logistics Entrepreneurs. The researcher then prepared an interview protocol and conducted 20 interviews with experts selected by way of Purposive Selection to include specialists in the field of logistics business management that were presented with the intention of justifying theoretical performance.

##### **4.1 Research Participants**

There were 20 people study with experts from logistics and supply chain.

- 4.1.1 5 academic lecturers in logistics and supply chain management with experience in curriculum design and theoretical frameworks.
- 4.1.2 15 logistics entrepreneurs experienced in operational industry, leadership and entrepreneurial activities.

The participants were selected due to their familiarity with Self-Efficacy, Growth Mindset and Dynamic Capabilities which are critical for logistics entrepreneurship innovation and adaptability. These professionals were instrumental in informing both Ethnographic Delphi Futures Research (EDFR) and the Analytic Hierarchy Process (AHP), and helped develop an agreement and mutual priority of the most important factors for entrepreneurial success (Supitcha Cheevapruk, 2021).

##### **4.2 Research Instruments**

The research tool was a structured interview with non-directive open questions divided in three parts as follows.

5. Respondent demographic and general Information.
6. Identify what the key components of Dynamic Capabilities and Growth Mindset are logistics entrepreneurs in Thailand.
7. Additional suggestions and advice from the experts

#### **5. Research Procedure**

##### **5.1 Interview Content Validation**

Five experts in the research field with work experience validated the interview content for ensuring its validity and importance. The I-CVI of the items were between 0.80 and 1.00, and the S-CVI was 1.00, showing that the instrument met the validity criteria [24]. As a result, the research instrument was proved as reliable and acceptable for data collection.

Basically, combining Ethnographic Delphi Futures Research (EDFR) and Analytic Hierarchy Process (AHP) was used in this study. Therefore, the combination of EDFR for consensus building and AHP for ranking allowed a robust framework to be established in identifying and prioritized critical entrepreneurial factors for success in logistics and supply chain management as shown in figure 1. The approach was implemented to incorporate both expert judgement (qualitative) and quantitative analysis to improve the reliability and validity of results.

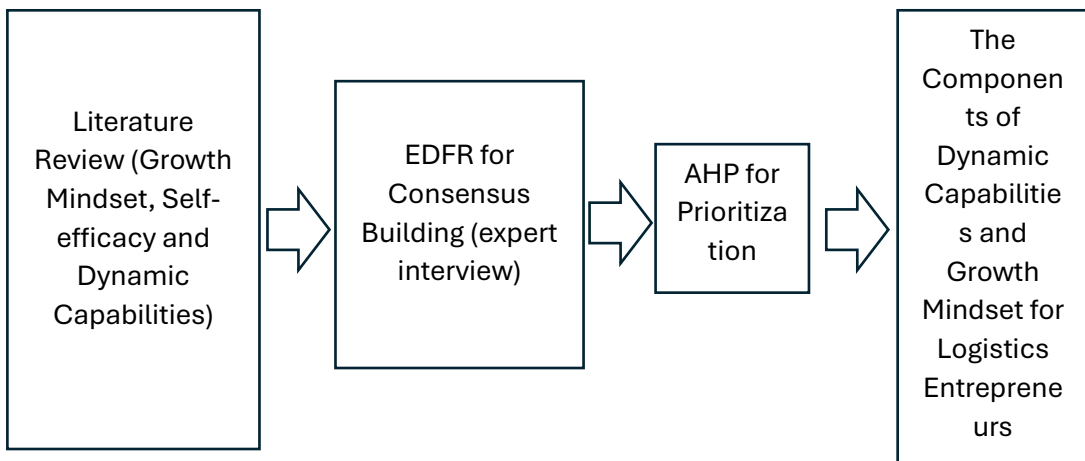


Figure 1 Research Framework: Combining Ethnographic Delphi Futures Research (EDFR) and Analytic Hierarchy Process (AHP)



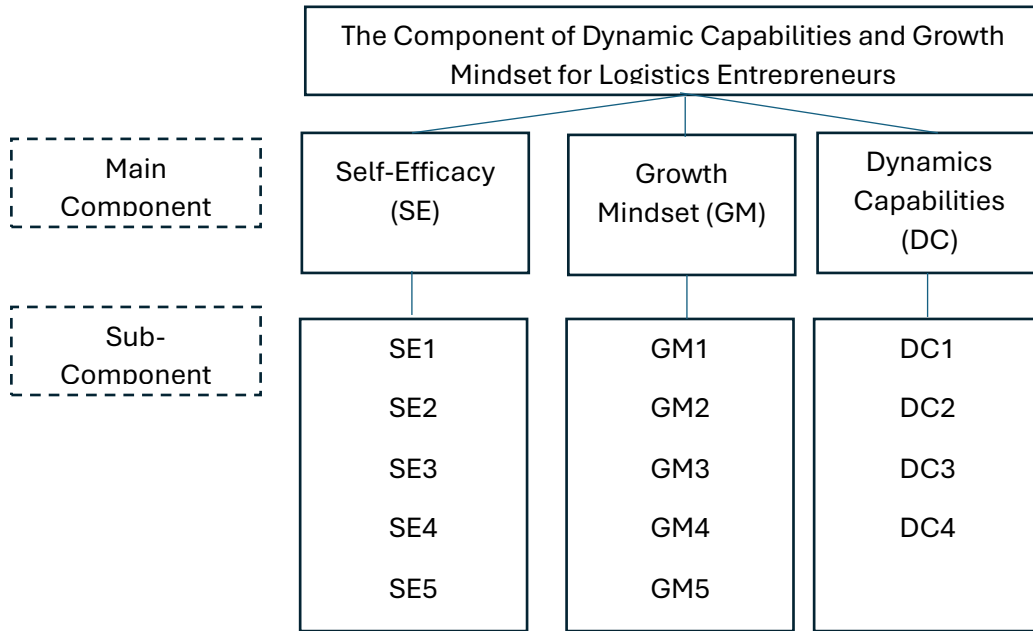


Figure 2 Analytical Hierarchy Process Diagram.

## 5.2 Interview Process

A mix of methods like the Delphi and Analytic Hierarchy Process (AHP) would bring good insight into entrepreneurial traits such as dynamic capabilities, self-efficacy and growth mindset regarding their influence in logistics entrepreneurship. This synthesis in turn facilitates the qualitative collection of expert knowledge (symbolized by Delphi) and corresponding quantitative analysis of these insights (represented by AHP) to support structured decision making.

### 5.2.1 Self-Efficacy

This is a concept as Bandura and Woo state (Schunk & DiBenedetto, 2020), which has been tested with regards to innovation, leadership, team dynamics, self-efficacy... defined as the belief of an individual in his/her specific task completion effort. Research has increasingly validated the association between higher levels of entrepreneurial self-efficacy and innovative activities, perseverance in solving problems essential for entrepreneurs facing a turbulent environment (Klongthong, Thavorn, Thanabodypath, Dhammathattariya, & Chandrachai, 2020; Wei, Chen, Zhang, & Zhang, 2020). These sub-components (innovation, commercial value/financial value, product/service development, teamwork and leadership) represent an individual's level of confidence while dealing with the most varied tasks within the logistics sector are in line with agility and adaptability arises (Sanchez-Garcia et al., 2024).

### 5.2.2 Growth Mindset:

When times are uncertain, a growth mindset enables you to be flexible and bounce back more readily. For entrepreneurs to be able to continue their work in fast-moving industries such as logistics, they need to continuously improve and growth mindset is one of the keys to make this efficient since those with a growth mindset see failure are seen as opportunities for learning (Jiatong et al., 2021).

### 5.2.3 Dynamic Capabilities:

These dynamic capabilities have to do with sensing, learning, adapting and innovating – the capability of seeing opportunities and reacting to changes inside a marketplace. New research underlines the value of these abilities in supporting long-term innovativeness of firms, especially in industries experiencing a digital transformation (Sanchez-Garcia et al., 2024). In this respect, the ability to scan the market for technological solutions perceived by customers drives real value for logistics firms in creating opportunities for survival and achievement.

In this way, the combination of Delphi and AHP provides a structured manner to analyze and rank these traits which can act as input to decision making process for entrepreneurs especially in Logistics sector where flexibility and innovation is more critical.

## 5.3 Data Analysis

Later, the Variance Analysis was conducted over the responses to analyze and synthesize the data from interviews. Comparison was done among Quartile 3 (Q3), Quartile 1 (Q1) values analyzed by EDFR. The components were identified as consistent if the variance between them was less than 1.5 in this paper for a variable that scored  $> 1.5$ , the components were internally inconsistent and grouped separately in a hierarchical arrangement at the next level of analysis.

Utilizing expert-systems such as the AHP (Analytic Hierarchy Process)

After the first data analysis, their filed through the AHP so that the problematic key elements in running are ranked according to this exercise. Finally, three questionnaires were sent to experts in logistics management to perform the CR analysis and comparison. When the CR surpassed an acceptable threshold, recall interviews were held to further develop the analysis for the results to be consistent and accurate as can be.

## 6. Results

Dynamic Capabilities and Growth Mindset for logistics entrepreneurs, the ethno-socio-economic research or the interviews, inquiries conducted using Ethnographic Delphi Futures Research (EDFR) technique was undertaken to understand the key components of Dynamic Capabilities and Growth Mindset that must be adopted by any industry Logistics Entrepreneur. Table 2 shows the breakdown of these components into 3 components and a further 14 sub-components.

Table 2 The Ethnographic Delphi Futures Research (EDFR)

Components	Sub-Components	Mean	Standard Deviation	IQR	Consensus (Yes/No)
Self-Efficacy (SE)	Innovation (SE1)	4.5	0.6	1.0	Yes
	Financial Value (SE2)	4.3	0.8	1.2	Yes
	Teamwork (SE3)	4.2	1.0	1.5	Yes
	Product/Service Development (SE4)	4.6	0.7	1.0	Yes
	Leadership (SE5)	4.4	0.6	1.0	Yes
Growth Mindset (GM)	Belief in the Ability to Develop (GM1)	4.7	0.5	0.5	Yes
	Viewing Challenges as Opportunities (GM2)	4.6	0.5	0.5	Yes
	Fearlessness of Failure (GM3)	4.4	0.5	1.0	Yes
	Open-mindedness to Feedback (GM4)	4.5	0.5	1.0	Yes
	Appreciating Diverse Opinions (GM5)	4.5	0.5	1.0	Yes
Dynamic Capabilities (DC)	Sensing (DC1)	4.2	0.7	1.0	Yes
	Learning (DC2)	4.1	0.8	1.0	Yes
	Adapting (DC3)	4.5	0.6	0.5	Yes
	Innovating (DC4)	4.4	0.7	1.0	Yes

The Delphi study aimed to unlock expert consensus about three core entrepreneurial factors: Based on the literature, if we ascertain these dimensions of Entrepreneurial Self-Efficacy, Growth Mindset, and Dynamic Capabilities. The data acquired from 20 experts was analyzed using mean scores, standard deviation, and interquartile range (IQR) to determine the degree of agreement regarding different sub-components of each factor. There seems to be strong consensus regarding several sub-components of Self-Efficacy, with Confidence Innovation (Mean = 4.5, SD = 0.6) and Confidence in Product/Service Development (Mean = 4.6, SD = 0.7) standing out from these results. The results demonstrate expert opinion of the paramount importance for entrepreneurial success in building self-efficacy in these areas. But Confidence in Teamwork (M = 4.2, SD = 1.0) had less agreement related to the importance on an entrepreneurial setting are demonstrating its specialization.

Implicitly, scores for Growth Mindset were largely in agreement across all sub-components and similarly rated with very high scores for Belief in the Ability to Develop (mean = 4.7, SD = 0.5) and Viewing Challenges as Opportunities (mean = 4.6, SD = 0.5) This means that it is a firmly agreed view by professionals, without arguing about it, that a growth mindset is the fundamental key for resilience and adaptability in addition to market entrepreneurship.

The Dynamic Capabilities, the sub-components of Adapting (Mean = 4.5, SD = 0.6) as well as Innovating (Mean = 4.4, SD = 0.7) had high consensus scores emphasizing their perceived importance navigating through dynamic environments. The power of sensing and learning struck the experts as highly agreed upon, speaking to their importance in capturing new opportunities in quickly shifting markets.

Conclusively, results from this Delphi study suggest a strong reliance of experts on Self-Efficacy, Growth Mindset and Dynamic Capabilities as key determinants to entrepreneurial success. The results inform the design of tailored interventions and development programs to develop leadership capability in dynamic business contexts. These statistical measures provided us with evidence of agreement and disagreement, which brings new perspectives on what has been the core academic debate regarding entrepreneurial capabilities.

Based on the findings, our proposed framework assumed that the 3 major components and their respective 14 sub-components are further analyzed using Analytic Hierarchy Process (AHP) to measure the relative importance and weighted significance of the key elements associated with Self-Efficacy, Dynamic Capabilities and Growth Mindset for logistics entrepreneurs. Using the AHP process to compare crucial roles and the weighted importance of each factor resulted in table 2 and table 3 as follows.

**Table 2** The normalized pairwise comparison matrix

Factors	Self-Efficacy	Growth Mindset	Dynamic Capabilities
Self-Efficacy	0.238	0.226	0.385
Growth Mindset	0.714	0.677	0.538
Dynamic Capabilities	0.048	0.097	0.077

The tabulation of relative importance of the three critical factors Self-Efficacy, Growth Mindset and Dynamic Capabilities is presented as normalized pairwise comparison matrix (Table 2). The degree of these factors was assessed by the Analytic Hierarchy Process (AHP), which orders them for their weight and resulting significance to the entrepreneurial success in the logistics sector. The pairwise comparison matrix specifically illuminates what it states about Growth Mindset, Self -Efficacy, and Dynamic Capabilities to drive successful entrepreneurs in a turbulent environment such as logistics. The analysis also indicates that Growth Mindset has the greatest normalized weights in relation to all other variables.

Growth Mindset with standardized weights of 0.714 and 0.677 against Self-Efficacy and Dynamic Capabilities respectively. In other words, having a learning, adapted mindset in a constant state of development ranks top among success strategies for an entrepreneur. This is consistent with prior work implicating that those endorsing growth orientation are better positioned to reframe challenges and make them as a vital part of living, thereby facilitating their resilience in dynamic environments (C. Dweck, 2015; Li, Benamraoui, Shah, & Mathew, 2021).

Self-efficacy will come in as second, but if it is low your willingness to learn or take Joseph's help may be limited. From matrix analysis, it is found that Self-Efficacy has a normalized weight of 0.238 w.r.t Growth Mindset and 0.385 normalized weight with Dynamic

Capabilities While self-efficacy is important for efficiency and perseverance at a task or in the face of an obstacle, it was weaker than mindsets in predicting achievement. A key psychological factor is self-efficacy, which influences whether entrepreneurs will persist and be proactive in executing strategies, a premise supported by the empirical evidence linking self-efficacy with enhanced entrepreneurial performance (Bandura, 2014; Sanchez-Garcia et al., 2024; Schunk & DiBenedetto, 2020).

Dynamic Capabilities, surprisingly perhaps given their importance to some in HR and other senior management roles, rated as having the lowest relative importance with normalized weights of 0.048 (vs Self-Efficacy) and 0.097 (vs Growth Mindset). This suggests that while the skills of sensing, seizing and transforming opportunities are mandatory for developing firm competitiveness, these skills are less foundational than internal psychological attributes like Growth Mindset and Self-Efficacy. This is also in line with recent refocus on psychological attributes underpinning the appropriability of dynamic capability for entrepreneurship (Teece, 2020; Wei et al., 2020).

Finally, the matrix analysis confirms the critical role a Growth Mindset assumes to be at the top of tiers of factors influencing success, with Self-Efficacy and Dynamic Capabilities winding its way through. This could provide guidance for entrepreneurship programs, specifically in sectors that require high adaptability and innovation to function well over the long run.

Table 3 AHP Comparison matrix

Components	Self-Efficacy	Growth Mindset	Dynamic Capability	Factor Weight
Self-Efficacy	1	1/3	5	0.283
Growth Mindset	3	1	2	0.643
Dynamic Capability	1/5	1/2	1	0.074

Normalized Pairwise Comparison Matrix Inspection of the results of the normalized pairwise comparison matrix enable to gain understanding on the significance between Growth Mindset, Self-Efficacy and Dynamic Capabilities in context of successful entrepreneur need and on dynamism factors of logistics sector shown in table 3. The AHP comparison matrix we can see that in here Growth Mindset was the first with a weight of 0.643. I suggest that creating the conditions necessary for adaptability, learning and resilience is incredibly important to the entrepreneurial process as such environments are the very definition of dynamic (logistics). Growth Mindset is coded as more important than Self-Efficacy (0.283) and the results confirm the latter to be a secondary element, reinforcing individuals' capacity to perform tasks and overcome adversities. Finally, Dynamic Capabilities (0.074) with the least foundational function but a supportive one. Though crucial for organizational adaptability, their success is contingent on the higher impact of mindset and self-efficacy

Consistency Check where Consistency Index (CI): 0.033, and Consistency Ratio (CR): 0.056 Consistency Ratio (CR) is less than 0.1, which implies a consistency among the pairwise comparisons done in AHP analysis. If CR is less than 0.1, it indicates that the comparisons of judgements are consistent and not sporadic hence confirming robustness of

the results. AHP analysis returned consistency values between 0.027 and 0.096 for all datasets that are lower than the predefined deadline of 0.1 (table in supplementary materials). The findings suggest that expert inputs correspond with a focus on advanced capabilities and growth mindsets among logistics entrepreneurs. The validation of this study by the consensus in expert judgements also encourages research in dynamic leadership and growth mindset framework for implementing robustness among logistics entrepreneurs. Thus, the result from AHP is dependable and hence can be utilized to infer practices for inculcating these competencies in the logistics industry.

## **8. Discussion**

The findings of the AHP further highlight the importance for logistics entrepreneurs to develop a Growth Mindset to help them steer through increasingly complex, fast-evolving business landscapes. This result is in line with previous research where adaptability and lifelong learning have been highlighted as crucial competencies particularly valuable when industries are undergoing massive transformations in technology (Agrawal et al., 2016; Lehmann, 2024; Meniz et al., 2021; Tu, Lv, Zhang, & Cao, 2021). In industries such as logistics in which market conditions can change rapidly and without warning, entrepreneurs face a lot of challenges and working with a growth mindset is essential for them to adapt easily even if they fail. Entrepreneurs with a Growth Mindset welcome challenges and change, which makes them more adaptable to innovation and changing consumer needs.

Self-Efficacy, showing how significant its complementary part is in the ability to carry out strategies with confidence by entrepreneurs. Self-Efficacy The belief in the capacity to succeed against all odds is crucial for risk management, good decision-making and resilience during hard times as pointed by (Bandura, 2011, 2014). This self-efficacy is particularly important in the logistics sector where decisions often must be made quickly and with limited information (Cole & Meyer, 2020; Schunk & DiBenedetto, 2020).

Dynamic Capabilities are essential in allowing organizations to reconfigure their resources and processes as demanded by external changes (Teece, 2017, 2018a, 2018b, 2020) (Teece 2020). The AHP analysis, however, proves these capabilities are most successful in combination with a Growth Mindset & Self-Efficacy. This supports prior research that identifies the prerequisites for sensing, seizing, and transforming opportunities as individual-level factors which include entrepreneur internal attributes like confidence and adaptability (Ku & Stager, 2022). Dynamic capabilities are the driving force to remain competitive and open new pathways for value creation in the face of global disruptions that are increasingly a daily reality within the logistics industry (Buccieri et al., 2021).

Dynamic Capabilities Development Models & Growth Mindset for Logistics Entrepreneurs: A systematic model applicable in practice is the Input, Process and Output (IPO) framework for logistics entrepreneurs to cultivate relevant characteristics from their nature concentrations. Input: Growth Mindset, Self -Efficacy, and Dynamic Capabilities are resourced by three ingredients of resources, mentorship and expert guidance. Training Programs, Mentoring, and Market Trends & Technologies. As for process, hands-on training and practical applications are essentials to help instill the Growth Mindset & Self-Efficacy into their day-to-day entrepreneurial activities. During this phase, entrepreneurs are very much in the learning-by-doing mode, being given license to experiment, fail and learn as well as

successfully applying new strategies and innovations. Output is the phase where we see immediate changes in behaviors and better strategies. Entrepreneurs can make faster decisions with confidence, aligning strategies to market needs and finding new or more efficient ways of responding to challenges.

The model is designed to enable logistician entrepreneurs at long last out of the weeds and be proactive in developing their must-have qualities for growth-oriented entrepreneurs in fast moving worlds. EDFR (Supitcha Cheevapruk, 2021), which is integrated with the Delphi method, and AHP as employed in this study offers a comprehensive view to understanding the main drivers of successful entrepreneurship. EDFR enabled integration that offers a holistic approach to the socio-cultural settings, while AHP analysis helped in prioritizing these factors based on their weightage influencing logistics entrepreneurship qualitatively and quantitatively (Ghanbaripour et al., 2023; Skulmoski et al., 2007; Supitcha Cheevapruk, 2021). Together, these methodologies help shed light on the way Growth Mindset meets with Self-Efficacy and Dynamic Capabilities to facilitate entrepreneurial resilience and success.

## **9. Conclusion**

The findings from the AHP analysis offer special insights into what makes a business successful in logistics, highlighting the importance of high scores for a Growth Mindset. Growth Mindset has been the highest ranked of all, driving adaptability, resilience and openness to learning crucial in industries experiencing rapid change in technology and markets (Zhang et al., 2022; Zhao, Tan, & Wong, 2020). That is why having an Entrepreneurial Growth Mindset enables them to meet challenges head-on, think on their feet and adapt as and when changing customer preferences dictate it.

The second place is then taken up by Self-Efficacy, critical to the success of a range of strategies that entrepreneurs employ (at times when uncertainty is prominent). The main reason is that entrepreneurs who have more self-efficacy and higher level in this characteristic are less likely to experience vicarious pessimism due to a negative event (Bandura, 2011, 2014; Schunk & DiBenedetto, 2020; Zhao et al., 2020), thus having better facing skills than others in situations where rapid decisions must be made such as logistics. While a Growth Mindset provided a way to adapt, self-efficacy guarantees that entrepreneurs will then act on their strategies.

And despite being ranked third, Dynamic Capabilities are still crucial for enabling organizational adaptation to changing contexts through recombining resources and processes. Our findings also add value to the idea that Dynamic Capabilities are created only by a broad Growth Mindset and high Self-Efficacy, as such psychological traits enable entrepreneurs to sense, seize opportunities, and reconfigure them efficiently (Ku & Stager, 2022; Teece, 2018b, 2020). Capabilities are necessary for an organization to be competitive, as success in developing capabilities is rooted in individual qualities of adaptability and conviction.

We strongly argue that the proposed study contributes to the current knowledge of how EDFR (qualitative factors) and AHP (quantitative factors) methodologies will be integrated to provide an assessment framework for entrepreneurial resilience. This combined with each other gives a holistic perspective of how Growth Mindset, Self-Efficacy and Dynamic Capabilities work in cohesion to deliver sustainable entrepreneurial success in the cases that are booming with lightning speed logistics. This conclusion should help shape

future training programs and support networks to stoke the development of the mindset and skills required for entrepreneurs in hot, dynamic economic environments.

## **10. Suggestions**

Considering the study's results, these recommendations are offered to logistics entrepreneurs for increasing their adaptability and long-term survival as follows.

- **Adapt a Growth Mindset:** Entrepreneurs must embrace the growth mindset where they learn to see problems as mere challenges and opportunities for improvement and solutions. It can be achieved via Lifelong learning programs, Mentorship Programs & Creating a culture of Try and Fail. Workshops and training to develop team adaptability and resilience (Dweck, 2006; Zhao et al., 2021).
- **Enhance Self-Efficacy:** These factors greatly contribute to a confidence in making decisions, and problem solving which is an essential to the success of any entrepreneur. Entrepreneurs who participated in leadership development programs, real-world project experiences and peer mentorship developed a much stronger sense of efficacy to address those challenges. This approach is a way to develop perseverance and adaptability amid uncertainty and rapid change (Cole & Meyer, 2020; Schunk & DiBenedetto, 2020).
- **Develop Dynamic Capabilities:** Entrepreneurs need to build their dynamic capabilities which enable them to sense, seize, and transform the potential emerging opportunities. Due to the fast pace of tech landscape like AI and Block chain, logistics companies must undergo training on how to respond fast to changing market trends and adapt to technology. Innovation workshops and strategic planning initiatives that bring themselves in line with industry trend could greatly increase the dynamic capabilities (Teece, 2017, 2018a, 2018b, 2019, 2020).
- **Work with EDFR and AHP in Desion-Making:** Future research and practical application will proceed to use tools such as for instance EDFR (Ethnographic Delphi Futures Research) and also AHP (Analytic Hierarchy Process) at decision making. These tools enhance the linkage of qualitative figures with quantitative ranking which results to another view on how merge and unparallel the factors are stimulating entrepreneurial achievement in logistics (Agrawal et al., 2016; Ghanbaripour et al., 2023; Lehmann, 2024; Skulmoski et al., 2007; Supitcha Cheevapruk, 2021). Integrating EDFR and AHP tools in business planning can enhance the strategic decision making and organizational agility.

By applying this framework to develop a Growth Mindset, Self-Efficacy, and Dynamic Capabilities logistics entrepreneurs will strengthen their role in adapting flourishing in turbulent hypercomplex adaptive markets, ensuring continued survival success.

## **Reference**

1. Agrawal, S., Singh, R., & Murtaza, Q. (2016). Disposition decisions in reverse logistics by using AHP-fuzzy TOPSIS approach. *Journal of Modelling in Management*, 11, 932-948. doi:10.1108/JM2-12-2014-0091



2. Ayoub, M. (2022). THE EFFECT OF ENTREPRENEURIAL SELF-EFFICACY ON THE PERFORMANCE OF SMALL BUSINESSES IN ALGERIA: A CASE STUDY IN SKIKDA. *Modern Management Review*, 27, 67-78. doi:10.7862/rz.2022.mmr.12
3. Bandura, A. (2011). *Social cognitive theory* (Vol. 2012).
4. Bandura, A. (2014). *Social cognitive theory of moral thought and action*: Psychology press.
5. Buccieri, D., Javalgi, R. G., & Jancenelle, V. E. (2021). Dynamic capabilities and performance of emerging market international new ventures: Does international entrepreneurial culture matter? *International Small Business Journal*, 39(5), 474-499.
6. Burnette, J., Pollack, J., Forsyth, R., Hoyt, C., Babij, A., Thomas, F., & Coy, A. (2019). A Growth Mindset Intervention: Enhancing Students' Entrepreneurial Self-Efficacy and Career Development. *Entrepreneurship Theory and Practice*, 44, 104225871986429. doi:10.1177/1042258719864293
7. Burnette, J. L., Pollack, J. M., Forsyth, R. B., Hoyt, C. L., Babij, A. D., Thomas, F. N., & Coy, A. E. (2020). A growth mindset intervention: Enhancing students' entrepreneurial self-efficacy and career development. *Entrepreneurship Theory and Practice*, 44(5), 878-908.
8. Ccatamayo-Barrios, J.-H., Huamán-Romani, Y.-L., Seminario Morales, M., Flores-Castillo, M.-M., Gutiérrez-Gómez, E., Carrillo - De la Cruz, L., & Cruz-Girón, K.-A. (2023). Comparative Analysis of AHP and TOPSIS Multi-Criteria Decision-Making Methods for Mining Method Selection. *Mathematical Modelling and Engineering Problems*, 10, 1665-1674. doi:10.18280/mmep.100516
9. Chaube, S., Kumar, A., Singh, M., Kotecha, K., & Kumar, A. (2024). An Overview of Multi-Criteria Decision Analysis and the Applications of AHP and TOPSIS Methods. *International Journal of Mathematical Engineering and Management Sciences*, 9, 581-615. doi:10.33889/IJMEMS.2024.9.3.030
10. Claro, S., Paunesku, D., & Dweck, C. S. (2016). Growth mindset tempers the effects of poverty on academic achievement. *Proceedings of the National Academy of Sciences*, 113(31), 8664-8668.
11. Cole, S., & Meyer, L. M. (2020). Perspective Transformation and the Jazz Mindset.
12. Denovan, A., Dagnall, N., & Drinkwater, K. (2023). Examining what Mental Toughness, Ego Resiliency, Self-efficacy, and Grit measure: An exploratory structural equation modelling bifactor approach. *Current Psychology*, 42(26), 22148-22163. doi:10.1007/s12144-022-03314-5
13. Deveci, M., Simic, V., Karagoz, S., & Antucheviciene, J. (2022). An interval type-2 fuzzy sets based Delphi approach to evaluate site selection indicators of sustainable vehicle shredding facilities. *Applied Soft Computing*, 118, 108465. doi:10.1016/j.asoc.2022.108465
14. Dimerco. (2023). Thailand 4.0 – The Next Great Investment Destination to the New Economy. Retrieved from <https://dimerco.com/thailand-4-0-the-new-economy/>
15. Durán, W., Aguado, D., & Perdomo-Ortiz, J. (2022). Relationship between CEO's strategic human capital and dynamic capabilities: a meta-analysis. *Management Review Quarterly*, 73. doi:10.1007/s11301-022-00282-9
16. Dweck, C. (2015). Carol Dweck revisits the growth mindset. *Education Week*, 35(5), 20-24.
17. Dweck, C. (2016). What having a “growth mindset” actually means. *Harvard business review*, 13(2), 2-5.
18. Dweck, C. S. (2012). Mindsets and human nature: Promoting change in the Middle East, the schoolyard, the racial divide, and willpower. *American Psychologist*, 67(8), 614.
19. Ghanbaripour, A., Langston, C., Tumpa, R., & Skulmoski, G. (2023). Validating and testing a project delivery success model in construction: a mixed-method approach in Australia. *Smart and Sustainable Built Environment*, 13. doi:10.1108/SASBE-09-2022-0200

20. Gonzalez, J. J., Labaka, L., Hiltz, S. R., & Turoff, M. (2016). Insights from a simulation model of disaster response: generalization and action points. Paper presented at the 2016 49th Hawaii International Conference on System Sciences (HICSS).
21. Heredia-Portillo, O., & Armas-Arévalos, E. (2023). Explaining the international opportunity recognition with the qualitative comparative analysis: The role of dynamic capabilities self-efficacy and global mindset. *Entrepreneurial Business and Economics Review*, 11(1), 29-56. doi:10.15678/EBER.2023.110102
22. International Monetary Fund, A., & Pacific, D. (2022). Thailand: Selected Issues. In (Vol. 2022). USA: International Monetary Fund.
23. Jiatong, W., Murad, M., Bajun, F., Tufail, M., Mirza, F., & Rafiq, M. (2021). Impact of Entrepreneurial Education, Mindset, and Creativity on Entrepreneurial Intention: Mediating Role of Entrepreneurial Self-Efficacy. *Frontiers in psychology*, 12, 724440. doi:10.3389/fpsyg.2021.724440
24. Klongthong, W., Thavorn, J., Thanabodypath, W., Dhammathattariya, P., & Chandrachai, A. (2020). The Influence of Entrepreneurial Self-Efficacy and Innovation on Firm Performance: Evidence from Thai Startup Firms. 8, 450-463. doi:10.18488/journal.73.2020.84.450.463
25. Ku, Y.-R., & Stager, C. (2022). Rethinking the Multidimensionality of Growth Mindset Amid the COVID-19 Pandemic: A Systematic Review and Framework Proposal. *Frontiers in psychology*, 13. doi:10.3389/fpsyg.2022.572220
26. Lehmann, D. (2024). Analytic Hierarchy Process (AHP) in Supply Chain Management with easy AHP-solver software.
27. Li, J. C., Benamraoui, A., Shah, N., & Mathew, S. (2021). Dynamic Capability and Strategic Corporate Social Responsibility Adoption: Evidence from China. *Sustainability*, 13(10), 5333. Retrieved from <https://www.mdpi.com/2071-1050/13/10/5333>
28. Meniz, B., Bas, S., Ahlatcioglu Ozkok, B., & Tiryaki, F. (2021). Multilevel AHP approach with interval type-2 fuzzy sets to portfolio selection problem. *Journal of Intelligent & Fuzzy Systems*, 40, 1-11. doi:10.3233/JIFS-200512
29. Parinya Ruangtip, W. R., Khanitin Jornkokgoud, Md Faysal. (2024). The Role of Trust in Mediating The Effect of Blockchain and E-Payment on Logistics 4.0 and Supply Chain Capabilities in Thailand. *Global Business and Finance Review*, 29(7), 168-182. Retrieved from 10.17549/gbfr.2024.29.7.168
30. Rashidirad, M., & Salimian, H. (2020). SMEs' dynamic capabilities and value creation: the mediating role of competitive strategy. *European Business Review*, 32(4), 591-613.
31. Roshan, A., & Elhami, A. (2024). Ethnographic Research Methods and the Role of Reflexivity in Qualitative Research. In (pp. 1-14).
32. Ruiz-Ortega, M. J., Rodrigo-Alarcón, J., & Parra-Requena, G. (2024). New directions to create dynamic capabilities: The role of pioneering orientation and interorganizational relationships. *European Management Journal*, 42(3), 371-384. doi:<https://doi.org/10.1016/j.emj.2023.01.005>
33. Sanchez-Garcia, V., Gallego, C., Marquez, J., & Blasco, E. (2024). The Green Entrepreneurial Self-Efficacy as an Innovation Factor That Enables the Creation of New Sustainable Business. *Sustainability*, 16, 7197. doi:10.3390/su16167197
34. Schoemaker, P. J., Heaton, S., & Teece, D. (2018). Innovation, dynamic capabilities, and leadership. *California Management Review*, 61(1), 15-42.
35. Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. *Contemporary Educational Psychology*, 60, 101832. doi:<https://doi.org/10.1016/j.cedpsych.2019.101832>
36. Skulmoski, G., Hartman, F., & Krahn, J. (2007). The Delphi Method for Graduate Research. *JITE*, 6, 1-21. doi:10.28945/199

37. Supitcha Cheevapruk, P. S., Thirawat Chantuk. (2021). Applying Analytical Hierarchy Process and Future Research Method to Develop a Standard Criteria of Entrepreneurial University in Thailand. *The Journal of King Mongkut's University of Technology North Bangkok*, 31(4). Retrieved from 10.14416/j.kmutnb.2021.05.035
38. Teece, D. J. (2017). Towards a capability theory of (innovating) firms: implications for management and policy. *Cambridge Journal of Economics*, 41(3), 693-720.
39. Teece, D. J. (2018a). Business models and dynamic capabilities. *Long range planning*, 51(1), 40-49.
40. Teece, D. J. (2018b). Dynamic capabilities as (workable) management systems theory. *Journal of Management & Organization*, 24(3), 359-368.
41. Teece, D. J. (2019). A capability theory of the firm: an economics and (strategic) management perspective. *New Zealand Economic Papers*, 53(1), 1-43.
42. Teece, D. J. (2020). Hand in glove: Open innovation and the dynamic capabilities framework. *Strategic Management Review*, 1(2), 233-253.
43. Tsai, C.-A., Ho, T.-H., Lin, J.-S., Tu, C.-C., & Chang, C.-W. (2021). Model for Evaluating Outsourcing Logistics Companies in the COVID-19 Pandemic. *Logistics*, 5(3). doi:10.3390/logistics5030064
44. Tu, L., Lv, Y., Zhang, Y., & Cao, X. (2021). Logistics service provider selection decision making for healthcare industry based on a novel weighted density-based hierarchical clustering. *Advanced Engineering Informatics*, 48, 101301. doi:https://doi.org/10.1016/j.aei.2021.101301
45. UNIDO. (2020). The drive towards Industry 4.0 in Thailand. United Nations Industrial Development Organization. Retrieved from <https://www.unido.org>
46. Uzun Ozsahin, D., Gökçekuş, H., Uzun, B., & LaMoreaux, J. (2021). Application of Multi-Criteria Decision Analysis in Environmental and Civil Engineering.
47. Vargas, L. (2017). The Legacy of The Analytic Hierarchy/Network Process. *International Journal of the Analytic Hierarchy Process*, 9. doi:10.13033/ijahp.v9i3.541
48. Wattana, P., & Yamrung, R. (2023). Policy Proposals Related to The Future of Mathematics Education in Thailand. Srinakharinwirot University.
49. Wei, J., Chen, Y., Zhang, Y., & Zhang, J. (2020). How Does Entrepreneurial Self-Efficacy Influence Innovation Behavior? Exploring the Mechanism of Job Satisfaction and Zhongyong Thinking. *Frontiers in psychology*, 11.
50. Yang, J., & Bentein, K. (2023). Entrepreneurial leadership and employee creativity: a multilevel mediation model of entrepreneurial self-efficacy. *Management Decision*, 61(9), 2645-2669.
51. Zhang, X., Ye, J., Wang, D., Tian, F., & Fu, S. (2022). Leadership mindsets, cultural norms and organizational resilience in China: the moderating effect of supportive human resource practices. *Asia Pacific Business Review*, 29, 1-18. doi:10.1080/13602381.2022.2139452
52. Zhao, X., Tan, G., & Wong, C. H. (2020). The Impact of Self-Efficacy, Growth Mindset, Empowerment and Training on Employees' Innovation Capability: A Conceptual Framework. *INTI JOURNAL*, 2020(40).