



## RESEARCH ARTICLE

## Multi-Level Success Factors Empowering Intrapreneurship in New S-Curve Industries: Qualitative Evidence in Thailand

Nichapa Surasithi<sup>1</sup>, MethineeWongwanichRumpagaporn<sup>2</sup>, Chintana Kanjanavisut<sup>3</sup>

<sup>1,2,3</sup>Doctor of Philosophy Program in Entrepreneurship Education, Faculty of Education, Kasetsart University, Chatuchak, Bangkok, 10900, Thailand

### ARTICLE INFO

Received: Jan 2, 2025

Accepted: Feb 14, 2025

#### Keywords

Intrapreneurship  
 Intrapreneurial  
 Empowerment  
 Multi-Level Success  
 Factors  
 New S-Curve Industries  
 Intrapreneurial Roadmap  
 Intrapreneurial  
 Development Program

#### \*Corresponding Author:

Nichapa.sur@ku.th

### ABSTRACT

Under Thailand 4.0 Policy enhancement, Thailand has been intensified to bring itself out of Middle-income trap through the surge of innovations from New S-Curve Industries. The study aimed to gain insights on the multi-level success factors, which examined both organizational and individual dimensions and developed an integrated framework for Intrapreneurship Implementation in New S-Curve Industries. Through a qualitative inquiry of in-depth interviews from Top Management and focus groups from selective employees of 5 New S-Curve Industries in Thailand, the results suggested that the multi-level success factors emphasized the synergy of Organizational Enablers which are Leadership and Management Approaches (Leaders, Environment and Culture, Organization Visions and Strategy) and Organization Systems and Structures (Innovative-led Processes, Critical Organizational Programs, Resources Allocation) and Individual Enablers which are Perceptions towards Self (Attitude, Motivation, Capabilities) and Perception towards Organization (Engagement, Organizational Culture, Management Support). Both enablers, from the perspectives of management and employees, contributed to the successful Intrapreneurial Empowerment. The Strategic Intrapreneurial Roadmap was developed along with Training Curriculum with purpose on transforming an employee into an intrapreneur. Balancing both environmental and psychological empowerment was pivotal where psychological safety was deemed as groundwork for Intrapreneurial actions. This study enriched in theoretical and practical dimensions in Intrapreneurship in Thailand. It offered a proposition for policymakers, practitioners, business owners, entrepreneurs and organizational leaders to see Intrapreneurship as an intervention in pursuant to competitive advantage which stemmed from innovation, and value creation.

## INTRODUCTION

With the impacts of Globalization and digital technology disruption, to endure and adapt to the radical changes, it is essential to develop Thailand into achieving multi-dimensional national competitiveness to ensure consistent economic growth and empower human capital at each and every stage of life to manifest competent and moral citizenry (Office of the National Economic and Social Development Council, 2023). Thailand's National Strategy (2018-2037) incorporated The Thirteenth National Economic and Social Development Plan (2023-2027) contributing to the shift from manufacturing-based economy to valued-based economy (Office of the Permanent Secretary of the Ministry of Commerce, 2023) in conjunction with Thailand 4.0 Policy (Banmairuroy et al., 2022). With awareness of increasing distinctively the extent of innovation and digital technology to produce innovative-led products and services, there is an intense need to develop New Growth Engines resulting in the emerging New S-Curve Industries (Rungroje Songsraboorn, 2018). It is vital that New S-Curve Industries shapes their strategies into pursuing innovation and technology, portraying by the embodiment of innovative-led knowledge, roadmaps, initiatives, which performed by their

employees (Donlao et al., 2021). Hence, Thai employees in New S-Curve Industries are to be equipped with knowledge, attributes, and skills to contribute innovative-led deliverables in this challenging phenomenon. Prior evidence exhibited that Thai employees do not have the essential skills to compete in the market labor especially in New S-Curve Industries (Nawakitphaitoon and Sooraksa, 2023; Bangkok Post, 2020; The Nation, 2024). There is a strong call for both public and private sectors to involve in the development of Educational curriculum incorporating innovation and digital technology in both business and education, to invest in human capital and quality education by structural educational reformation, create new venture and other supportive infrastructure such as Organization Structure and Business Model which accommodate the changes in the face of Industry 4.0 (Employers' Confederation of Thai Trade and Industry, 2020; Suwannaphong and Pruetipibultham, 2020; Bangkok Post, 2023; Permpoonwiwat and Chantith, 2023) and to create the online platform to be able to reach Digital workforce in the young generation (Cotrino et al., 2021).

Intrapreneurship or Corporate Entrepreneurship is critical to directly drive innovation performance through the intrapreneurial culture and commitment where it motivates innovation, resilience on changes, the development of existing business and new venture, the competitiveness with innovative-led products and services, and most importantly the survival of the organizations (Eischen and Teague, 2017; Ahmed and Mahmood, 2020; Asiaei et al., 2020; Isaksen and Treffinger, 2021; Olsson and Alvarsson, 2021; Zaki et al., 2022; Kareem and Smith, 2023). Organizations employ innovation and digital technology to strengthen their products and services, therefore, it is critical that their employees have the Intrapreneurial Orientation in reference to Knowledge, Attributes and Skills to actively innovate on products and services that eventually organizations can sustain their competitive advantage (Hayton and Kelley, 2006; Neessen et al., 2019; Paitoon and Limsiritong, 2022). By this mean, the problem of lacking skilled labors can be intervened and mitigated. Simultaneously, this research serves as a measure to respond to the 20-year National Strategy (2018-2037) on the promotion of New S-Curve Industries on two major bases; the one is as a driving mechanism to innovation and technology in the Value-based Economy in Industry 4.0 and the other is as a measure to promote human capital development to sustain the competitiveness in New S-Curve Industries.

## LITERATURE REVIEW

### Intrapreneurship and Intrapreneurial Orientation

Intrapreneurship has its roots in entrepreneurship where the concept emerged from "intra-corporate entrepreneur" (Pinchot, 1985). It mentioned about employees adopting entrepreneurial behaviors to foster innovation and deliver positive impacts towards organizations, either individually or as a teamwork. There were some dimensions from which entrepreneurs and intrapreneurs differ; which were sources of fund, risks, boundaries, activities while both were similar in terms of creativity and innovation realization, value-added orientation, risk-taking, proactiveness (Cadaru and Badulescu, 2015). Based on Antoncic and Hisric (2003), proactiveness, risk-taking, and innovativeness were characterized by intrapreneurs to deliberately deliver new ventures, product or service innovation, process innovation, self-renewal, and competitive advantage. These characteristics were either innate or developed from organizational mechanism. Intrapreneurship obliged as an agitator for value creation, innovation in new projects or initiatives (Antoncic and Hisrich, 2001; Covin and Slevin, 2017; Drucker, 2018).

Intrapreneurial orientation consisted of attitudes, characteristics, competencies, and behaviors. These elements worked in collaboration to drive Intrapreneurial activities for organizations. It commenced with Intrapreneurial attitudes where growth mindset, continuous improvement, positivity towards failure, risk-taking, adaptability and tolerance of uncertainty played integral role in an intrapreneur (Beechler and Javidan, 2007; Sidek and Zainol, 2011; Altinay et al., 2012) with attitude of commitment (Neessen et al., 2019). The model Knowledge-Attitude-Practice (KAP) accentuated the application of Intrapreneurial attitudes to bring about Innovation in practice (Rogers and Williams, 1983; Pithayanukul, 2023). Sornsermsombut (2018) mentioned in her research about seven core attitudes which were need for achievement, risk-taking, tolerance for ambiguity, business aspiration, positivity toward failure, innovativeness, and internal locus of control. Several researched highlighted Intrapreneurial characteristics as problem-solving, autonomy, authority, flexibility, innovativeness, and proactiveness (Lessem, 1986; Lumpkin and Dess, 1996; Sayeed and Gazdar,

2003). The renowned research of Lumpkin and Dess (1996) indicated the Intrapreneurial Characteristics as in Autonomy, Innovativeness, Risk Taking, Proactiveness and Competitive Aggressiveness. These characteristics could be cultivated through organizational mechanism and empowered to employees to perform Intrapreneurial activities (Peterman and Kennedy, 2003; Neessen et al., 2019). Intrapreneurial abilities, as elaborated by Rathna and Vijaya (2009), contained functional and behavioral compartments. These competencies rendered attitudes into behaviors which led to actions such as producing ideas and crafting them into creativity and innovation; networking and collaborating abilities (Neessen et al., 2019). One research findings from Thailand acknowledged Competency Modeling and Intrapreneurial attitudes of Innovativeness, Initiatives exploration, Decision making, Accountability, and Intrapreneurial Determination (Anuwet, 2023). Intrapreneurial behaviors came from four sources (Neessen et al., 2019) which were Individual Personality; Organizational Support; Specific Incidents or circumstances; and Achievement outcomes from Individual Determination (Neneh, 2019). Motivators like the need for achievement significantly drive these behaviors (Saif and Ghania, 2020). There were similarities of attitudes, characteristics and competencies components of which all contributed to the desired outcomes from Intrapreneurial Behaviors. In another way, those attitudes, characteristics and competencies components are reflected by the behaviors of individuals or groups in organization.

### **Intrapreneurial Success Factors**

Several researches highlighted the positive impacts of intrapreneurship to enhance organizational survival and competitive advantage in digital era especially in fostering innovation, catalyzing through organizational changes, and developing people potentials and growth (Augusto Felício et al., 2012; Falola et al., 2018; Kulkalyuenyong, 2018; Paitoon and Limsiritong, 2022; Boonsuwan and Zhu, 2023). With the worthwhile benefits from pursuing Intrapreneurship, it is essential for organizations to foster and empower Intrapreneurship in, especially, innovation-led, value-added organizations. Empowerment could be postured as Environment Empowerment which were building working environment empowering employees to decision-making, adaptivity, teamwork, and building collaborative organizational culture, exchanging information intra and inter functions, departments and teams. In addition, Empowerment were exhibited through Psychological Empowerment which were inspiring employees to meaningful work and objectives, confidence in own skills and abilities to obtain achievement, work ownership and sense of belonging to the organizations (Conger and Kanungo, 1988; Thomas and Velthouse, 1990; Al-Madadha and Koufopoulos, 2014; Kerdnok, 2016; Dhiratanuttdilok and Jadesadalug, 2021). Researches suggested that Environment Empowerment could be prioritized and followed by Psychological empowerment (Conger and Kanungo, 1988; Thomas and Velthouse, 1990; Al-Madadha and Koufopoulos, 2014; Dhiratanuttdilok and Jadesadalug, 2021) where both worked in collaboration to enhance self-efficacy to employees. (Dess and Lumpkin, 2005; Engelen et al., 2015; Kerdnok, 2016; Gawke et al., 2017).

By fostering both types of empowerments, it was vital to further explore critical success factors towards Intrapreneurship Empowerment. Kuratko et al., (2014) addressed Organizational-level success factors which were 1) Top Management Support – Encouraging intrapreneurial behaviors, supporting new ideas and experimentation, providing monetary and non-monetary resources, creating rapport with employees and fostering a culture of innovation and value creation as in Innovation Competition. 2) Work Discretion and Autonomy – Extending roles and responsibilities in decision-making to create innovation 3) Rewards and Reinforcement – Recognizing and rewarding intrapreneurial behaviors and outcomes as Intrapreneurs. 4) Time Availability – Allocating time for short-term and long-term innovative activities and experimentation. 5) Organizational Boundaries – Providing flexibility to problem solve swiftly, curtailing barriers. Intrapreneurship enhanced the stability and sustainability in innovation amidst the organization changes. Other *Organizational Level* success factors include Developmental Support and Work Design to support on learning, mentoring and coaching (Aramburu and Sáenz, 2011; Kuratko, 2017); Resource Availability such as time, monetary support and rewards (Kuratko, 2017; Neessen et al., 2019); Managerial Style especially Transformational Leadership as change agent; Innovative Culture reflecting Work Autonomy, Acceptance of failure and Resilience.

At the Individual-level success factors of Intrapreneurship Empowerment, individuals' attitudes, capabilities, characteristics, motivations had the utmost influences towards Intrapreneurial

behaviors (Vargas-Halabí et al., 2017; Di Fabio et al., 2017; Mahmoud et al., 2020). Motivations or attitudes to aspire aspected from Inner Traits (Work Autonomy, Employee Engagement, Perceptions towards Innovativeness), External Rewards (Career Progression, Promotion, Rewards), Experiences and Intention towards becoming an Intrapreneur and Individual Motivation ignited by organizational mechanism such as circumstances facilitating employees to perform Intrapreneurial actions, projects and assignments from Top Management, Organizational Strategy (Carrier, 1996). While individual factors are critical, organizational factors were necessary for the sustainability. Both Top management and intrapreneurs could work in alignment to pursue successful Intrapreneurial empowerment (Hornsby et al., 2009; Sung et al., 2011; L.-Y. Huang et al., 2021).

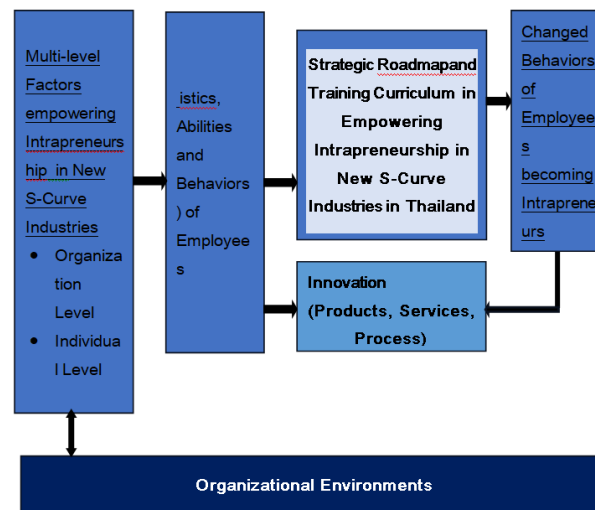
These researches underpinned from distinct theories such as Self-Efficacy (Bandura and Adams, 1977), the Theory of Planned Behavior (Ajzen, 2002), and Human Resources Development especially Organization Development. Organization development practices such as Performance management, Rewards and compensation, Recruitment and Selection, Work Design, Learning and Development, and Knowledge Management reinforced intrapreneurial attitudes, characteristics, competencies, and behaviors (Hayton and Kelley, 2006; Canet-Giner et al., 2022).

### **New S-Curve Industries**

Trapping in the middle-income countries for decades, Thailand's National Strategy reiterated a value-based economy empowered by Innovation. The First S-Curve Industries might have some limitations to deliver value-added innovations, the New S-Curve Industries came into actions in promoting innovations and value-based economy. These industries include robotics, aviation and logistics, digital, biofuels and biochemicals, and the medical hub. In Thailand, several New S-Curve organizations have been registered as corporate entities and remain active, as evidenced by data from the Department of Business Development, Ministry of Commerce (DBD) (2024a; 2024b). Referring to Department of Business Development, Ministry of Commerce, New S-Curve Industries were identified on 5 industries which were Robotics, Aviation and Logistics, Digital, Biofuels and Biochemicals, and Medical hub. New S-Curve Industries probed their ways towards fostering value-based economy, in alignment with Thailand Industry 4.0 where it aligned in conjunction with promoting an inclusive society, enhancing human capital, and creating a livable society (Ministry of Industry, 2015; National Economic and Social Development Council, 2023). Fostering Intrapreneurship in New S-Curve Industries could uphold the directives of Thailand Industry 4.0 (Thai Employers' Confederation, 2020; Anuwet, 2023). Certain success factors which emblemized Intrapreneurship in New S-Curve Industries constituted Leadership, Learning Organization, Organization Culture and Core Values, and strong positive perceptions of employees towards organizations in pursuant to organizational goals.

### **Conceptual Framework**

This study proposed the identification of Intrapreneurial orientation and the investigation of Organizational and Individual level success factors empowering Intrapreneurship in New S-Curve Industries in Thailand. After identifying the Orientation and Success Factors, this study encapsulated the relevant findings to initiate the development of Strategic Roadmap and Training Curriculum to support fostering Intrapreneurship in response to Thailand's Industry 4.0, contributing to a value-based economy. Both Organizational and Individual level enablers engaged Intrapreneurial Orientation encompassing attitudes, attributes, abilities, and behaviors which were necessary for driving innovation. The Strategic Roadmap shaped the Organization's deployment towards successful Intrapreneurial Establishment while Training Curriculum constructed essential foundations for employees to become intrapreneurs by changed behaviors of employees in order to pursue innovation in products, services and process. Training curriculum additionally served as an intervention to promote paradigm shifts in becoming an Intrapreneur. The input-output and outcome framework were invigorated by Organizational Environments to ensure the innovation deliverables and support organizational goals.



**Figure 1: Conceptual Framework**

Source: Author

## METHODOLOGY

This study comprised two phrases. The first phrase was to examine Intrapreneurial Orientation and multi-level success factors fostering Intrapreneurship in New S-Curve Industries in Thailand. The second phrase was to develop a strategic roadmap to shape Intrapreneurial empowerment in organizations and a training curriculum to heighten Intrapreneurial Orientation to employees. This study employed a qualitative methodology to gain deep insights to the phenomenon with an Appreciative Inquiry (AI) method where researchers accredited this method to be suitable for Higher Education (Cho and Ardichvili, 2024). It enhanced the positive converse centering on exploring the best imagination fit for organizational changes and development among groups, organizations and communities (Bushe, 2011). In-depth interviews were conducted with 15 key informants, including entrepreneurs, business owners and top management from five New S-Curve Industries to probe Organizational level success factors while focus group interviews were conducted with 25 key informants who were employees in those organizations selected by their management. This resulted in a total of 40 key informants. 4D model (Discovery, Dream, Design, and Destiny) was reflected in the inquiry to those 40 key informants excavating them to think about the positive changes where Intrapreneurship came into action. To ensure ethical inquiry, all questions were reviewed and confirmed by Institutional Review Board (IRB) protocols. A pilot test was conducted before doing the actual research. The recordings were transcribed and descriptive coding was applied through both deductive and inductive approaches. Thematic Analysis (Braun and Clarke, 2006) was conducted along with Content Analysis (Cresswell, 2016) to translate underlying insights and perceptions from key informants' narratives. Data Triangulation which consisted of reliability, validity and trustworthiness was executed through member checking for confirmation of narratives while feedback from experts was to refine the analysis across interviews and focus groups. After the findings were analyzed, the researcher developed a strategic roadmap and training curriculum for Intrapreneurship empowerment in New S-Curve Industries. The ADDIE Model (Analyze, Design, Develop, Implement, Evaluate) was employed to produce a training curriculum for adult learning (Hess and Greer, 2016; Sahaat et al., 2020). These outcomes from the research objectives are expected to support New S-Curve Industries to foster Intrapreneurship in New S-Curve Industries in Thailand.

## RESULTS

The research findings responded to all research questions. The first findings portrayed the Intrapreneurial Orientation as shown in Table 1.

**Table 1: Intrapreneurial Orientation in New S-Curve Industries (Integration of Organizational Level and Individual Level)**

Intrapreneurial Orientation in New S-Curve Industries in Thailand			
Attitude and Characteristics	Abilities (Knowledge and Skills)	Behaviors (Practice)	Relative Practices
<b>Learning and Growth Orientation</b> They demonstrate: <ol style="list-style-type: none"> <li>1. Continuous learning and knowledge acquisition</li> <li>2. Active participation in learning opportunities</li> <li>3. Willingness to adapt and change</li> <li>4. Active pursuit of new skills and information</li> <li>5. Resilience in the face of setbacks</li> </ol>	<b>Business and Industry Acumen</b> They demonstrate: <ol style="list-style-type: none"> <li>1. Deep understanding of organizational objectives</li> <li>2. Knowledge of industry context and regulations</li> <li>3. Ability to analyze market trends and customer needs</li> <li>4. Understanding of both technical and commercial aspects</li> <li>5. Capacity to bridge engineering and business requirements</li> </ol>	<b>Risk Management</b> They demonstrate: <ol style="list-style-type: none"> <li>1. Established risk taking approach</li> <li>2. Strategic alignment: commercial and practical implications</li> <li>3. Ability to assess risk-benefit ratios</li> <li>4. Understanding of worst case scenarios</li> <li>5. Proactive risk mitigation strategies</li> </ol>	
<b>Leadership and Autonomy</b> They demonstrate: <ol style="list-style-type: none"> <li>1. Self-directed work approach</li> <li>2. Ability to work independently</li> <li>3. Strong decision-making capabilities</li> <li>4. Initiative in problem-solving</li> <li>5. Influence on work quality</li> </ol>	<b>Critical Thinking and Analysis</b> They demonstrate: <ol style="list-style-type: none"> <li>1. Data-driven decision making</li> <li>2. Analytical approach to problems</li> <li>3. Strategic thinking capabilities</li> <li>4. Systematic evaluation of options</li> </ol>	<b>Customer-Centric Focus</b> They demonstrate: <ol style="list-style-type: none"> <li>1. Strong emphasis on customer satisfaction</li> <li>2. Ability to exceed customer expectations</li> <li>3. Innovation focused on customer needs</li> <li>4. Adaptability to customer feedback</li> </ol>	
<b>Growth Mindset</b> They demonstrate: <ol style="list-style-type: none"> <li>1. Strong sense of responsibility</li> <li>2. Personal development objectives</li> <li>3. Proactiveness</li> <li>4. Team Ownership of Success and Failure</li> <li>5. Commitment to organizational success</li> </ol>	<b>Communication and Team Dynamics</b> They demonstrate: <ol style="list-style-type: none"> <li>1. Proactive goal concepts to stakeholders</li> <li>2. Effective stakeholder interaction</li> <li>3. Building consensus around new initiatives</li> <li>4. Strong knowledge across organizational boundaries</li> <li>5. Contributing to team/department processes</li> </ol>	<b>Team Collaboration</b> They demonstrate: <ol style="list-style-type: none"> <li>1. Crossly research colleagues</li> <li>2. Ability to work across functions</li> <li>3. Network building capabilities</li> </ol>	
<b>Internal Locus of Control</b> They demonstrate: <ol style="list-style-type: none"> <li>1. Self-efficacy</li> </ol>		<b>Innovation Approach</b> They demonstrate: <ol style="list-style-type: none"> <li>1. Balance between creativity and practicality</li> <li>2. Understanding of implementation constraints</li> <li>3. Innovation in new technology ecosystem</li> </ol>	
<b>Continuous Improvement</b> They demonstrate: <ol style="list-style-type: none"> <li>1. Openness to new experiences and challenges</li> <li>2. Commitment to personal and professional development</li> <li>3. Adaptability to changing circumstances</li> </ol>			
<b>Ethical Orientation</b>			
Intrapreneurs demonstrate a strong ethical foundation that guides their innovation efforts. They demonstrate: <ol style="list-style-type: none"> <li>a. Commitment to legal, regulatory and ethical considerations</li> <li>b. Focus on creating positive social impact</li> <li>c. Awareness of potential societal implications</li> <li>d. Responsibility in technology development</li> </ol>			

Source : Author

From the findings, there were emerging themes regarding Intrapreneurial Orientation in terms of Attitudes, Characteristics, Abilities and Behaviors in New S-Curve Industries in Thailand from multi-level viewpoints of Top Management and Employees. From the priori theory-based constructs, there were consensus in both Organization Level and Individual Level that certain characteristics were exhibited which were Proactiveness, Innovativeness and Work Autonomy with calculated risks, and followed by Competitiveness and Risk-taking. These characteristics were embedded in the Emerging themes of the Combination of multi-level Characteristics focusing on participant’s narratives on their experiences and perceptions shown in Table 1. Key categorizations were made into three dimensions which were Attitudes and Characteristics; Abilities (Knowledge and Skills) and Behaviors (Practice) with the perception that Innovation were delivered by Intrapreneurial Orientation. Organization Level impressed in the similar way to Individual level in that everything started from attitudes, characteristics and abilities where certain behaviors were demonstrated against the organizational objectives. Regarding Attitudes and Characteristics, Growth Mindset and Learning Orientation were mentioned at the foremost to that an Intrapreneur should have to grow, learn and pursue excellence through acquired skills with resilience when challenges towards innovation were presented. Leadership and Autonomy were discussed for an Intrapreneur to decide, problem-solve, self-directed in an independent way. Ownership Mindset was presented to portray an “owner” viewpoint of their work with proactiveness and commitment while Internal Locus of Control supported an Intrapreneur to acknowledge their self-efficacy. Lastly, Continuous Improvement was expressed to show personal and professional development and be adaptive to changes. Regarding to Abilities in terms of Knowledge and Skills, three major elements appeared which were Business and Industry Acumen; Critical Thinking and Analysis; and Communication and Team Dynamics. These abilities showcased an Intrapreneur to have insights in Industry’s promotional policy, Government regulations and knowledge in business and industry utilizing critical and analytical skills to encapsulate those knowledges into innovative actions responding to Organizational objectives. These were enhanced by the ability to present thoroughly across teams and functions to contributions of novel ideas and innovation. Regarding to Behaviors into practice, Risk Management, Customer-Centric focus, Team Collaboration and Innovation Approach were identified to address Intrapreneurial behaviors in consolidating attitudes, characteristics, abilities to produce to Behaviors. There was an interesting viewpoint on Operational Excellence, Industry Knowledge, and Innovativeness in alignment with Organization innovation strategy to pursue Organizational goals. Several participants mentioned that these three constructs should be synergized seamlessly to ensure the customer-centric behaviors and competitively respond to market at the right pace, not too fast and not too slow. If the innovation was portrayed in the higher degree of advancement in the perception of customers, it could lead to innovation failure though the particular product could perform high standard of operational excellence. This could be called “Tolerance to too new Innovation” Industry Insight. After all, most participants see that innovation has both sides of the coins. The important thing to ensure is the Intrapreneurs have the Ethical Orientation to be accountable for the positive impacts or consequences that the innovation brings in.

**Table 2: Multi-level Success Factors for Intrapreneurship Empowerment in New S-Curve Industries (Integration of Organizational Level and Individual Level)**

Multi-level Factors in Intrapreneurship Empowerment in New S-Curve Industries in Thailand	
Organizational Level Success Factors	Individual Level Success Factors
<p><b>Leadership and Management Approaches</b></p> <ul style="list-style-type: none"> <li>Ability to create a vision and strategy for the organization</li> <li>Effective communication and listening skills</li> <li>Ability to inspire and motivate employees</li> <li>Effective decision-making and problem-solving skills</li> <li>Ability to manage change and uncertainty</li> </ul>	<p><b>Attitude, Motivation and Abilities</b></p> <ul style="list-style-type: none"> <li>Self-efficacy and confidence</li> <li>Internal locus of control</li> <li>High achievement orientation</li> <li>Resilience and stress management</li> <li>Openness to change and innovation</li> </ul>
<p><b>Organizational Systems and Structures</b></p> <ul style="list-style-type: none"> <li>Clear organizational vision and mission</li> <li>Supportive organizational culture</li> <li>Effective organizational structure and processes</li> <li>Resource allocation and management</li> <li>Learning and development programs</li> </ul>	<p><b>Perceptions towards Organization</b></p> <ul style="list-style-type: none"> <li>Perceived organizational support</li> <li>Perceived organizational justice</li> <li>Perceived organizational commitment</li> <li>Perceived organizational citizenship</li> </ul>
<p><b>Resources Allocation</b></p> <ul style="list-style-type: none"> <li>Availability of financial resources</li> <li>Availability of human resources</li> <li>Availability of physical resources</li> <li>Availability of information resources</li> </ul>	<p><b>Perceptions towards Self</b></p> <ul style="list-style-type: none"> <li>Self-efficacy and confidence</li> <li>Internal locus of control</li> <li>High achievement orientation</li> <li>Resilience and stress management</li> </ul>
<p><b>Integrated Multi-level Success Factors in Intrapreneurship Empowerment</b></p> <p>Integration of organizational and individual factors to create a supportive environment for intrapreneurship empowerment.</p>	

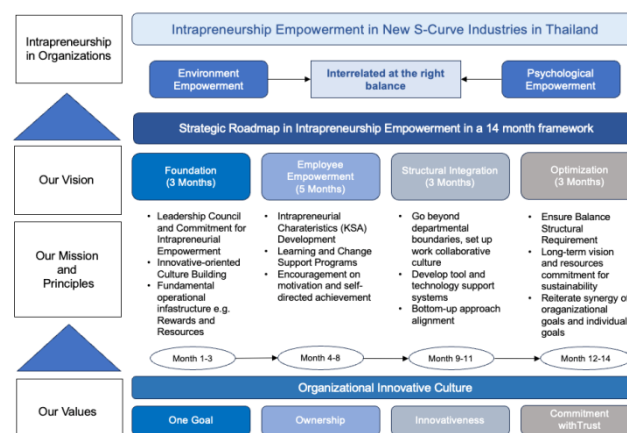
Source: Author

The findings represented the multi-level success factors empowering Intrapreneurship in New S-Curve Industries both organizational level and individual level including the holistic integration of multi-level factors, emblemized by specific industries context and probable obstacles. In new S-Curve Industries, it called an attention that among five New S-Curve industries, Intrapreneurial organizations emphasized on innovative-centric approach in delivering innovativeness in products, services, and processes. In Thai context, these five industries were governed by Government policies which influenced and determined organizational objectives. Regarding to Organizational enablers or Organizational level success factors, Leadership and Management Approaches exposed *Leaders' characteristics* as main actors on Intrapreneurship Empowerment in the dimension that leaders were role models, idolized figures, transformative leaders who enabled *Working environment and people-centric culture* to create innovation. Leaders exhibited the abilities to embrace the opportunities for innovation creation, psychological safety where employees felt safe when they presented their novel ideas and worked across teams, functions and departments to pursue innovation. Leaders were expected to cascade *organization visions and goals* to employees with the integration between organizational objectives and corporate culture. Regarding to Organizational Systems and Structures established *organizational-oriented systems and structures* as main actors to generate *Innovative-led Processes* shaping ways of organizational alignment beyond boundaries including the development of infrastructure to innovate under matrix management. *Critical Organizational Programs* to enable employees to learning exposure, education, knowledge management, training requirements to pursue Intrapreneurial attitudes and behaviors, delivering innovative outcomes including Organizational programs which motivated the intrinsic and extrinsic angles of employees' motivation and aspiration. *Resources allocation* reciprocated the actions of organizations to allocate resources not limited to cost, time, people, and playground or sandbox for innovation and experimentation. Both Leaders and Resources Allocation were extremely important enablers to foster or to fail the Intrapreneurship Empowerment.

At Individual enablers, Perceptions towards Self included *Attitude, Motivation and Abilities*, interplayed as Self-oriented Individual factors were identified that they were foundations of Intrapreneurial Orientation and predominant factors towards decisions to become an Intrapreneur. They represented Growth mindset, Ownership mindset, Acceptance of failure, and Continuous learning. Motivation was displayed in forms of monetary and non-monetary not limited to meaningful work, self-esteem confidence, career progression and rewards earnings. Principally, individuals were aware of their own abilities to work towards organizational objectives. Other individual level determinants was Perception towards Organization. Individuals had different aspects on certain depth and breadth of perceptions towards organizations. *Organization Engagement* represented loyalty, commitment and stake in organizational success as part of organizations. This was augmented to the higher degree of commitment by *Organization Culture* where it contributed to reformation of thoughts, behaviors and outcomes of value creation, innovation, collaboration and bottom-up speaks up. Last but not least, Management Support undertook being the first kickstarter. Key support involved shared visions, enhancing autonomy and tackle the right balance of authority while supporting on intrapreneurial thinking breaking organizational barricades. Both Management Support and Attitude could be either determinants or probable obstacles in Intrapreneurship empowerment in organizations. Management was not ascertained if they could retain employees for

being intrapreneurs and influenced them to not becoming the entrepreneurs when they opened their own businesses or ventures.

This study presented a fresh perspective on how individual and organizational factors come together to drive intrapreneurship, particularly in New S-Curve industries in Thailand. It highlighted key elements such as leadership support, a shared vision, alignment between personal and business goals, a sense of ownership, rewards, organizational culture, and opportunities for growth. The framework took a balanced approach, considering both perspectives—on the individual side, it focuses on attitudes, skills, and abilities including active participation, while on the organizational dimension, it emphasized leadership, structural support, and resource allocation. Beyond recognizing potential challenges in implementation, the framework also outlined essential success factors that connected these two dimensions. It suggested that thriving intrapreneurship depending on a strong alignment between an individual's qualities and the systems an organization put in place to support them. This synergy was further reinforced by effective management strategies and a culture that fostered innovation. While acknowledging potential obstacles, the framework's greatest contribution was its ability to map out the intricate relationships between people and organizational systems in enabling intrapreneurial success. Ultimately, this model provides a foundation for developing strategic roadmaps, assessing organizational readiness, identifying gaps, designing new initiatives, setting performance metrics, and evaluating the impact of intrapreneurial efforts.



**Figure2: Strategic Roadmap for Intrapreneurship Empowerment in New S-Curve Industries (Integration of Organizational Level and Individual Level)**

Source: Author

Based on the findings presented in Table 1 and 2, this study synthesized key themes into a Strategic Roadmap for Intrapreneurship Empowerment within New S-Curve Industries in Thailand. This consolidated framework provided a structured approach that organizations can adapt based on their specific contexts, aligning with their unique timing, vision, goals, readiness, and strategic directives. Aiming at the right balance between Environment Empowerment and Psychological Empowerment, a roadmap was designed to a 12-month implementation with directives on building abilities on AI or digital technology, encouraging feedback loop for continuous improvement, embed by a supportive and innovation culture of One Goal, Ownership, Innovativeness and Commitment and Trust. The supportive culture could be exhibited by organizational activities, campaigns, roadshows, contests, competitions, projects to share inspiration and innovation. In awareness of organizational visions and missions, there were four principles envisioning key implementations in each phase. First of all, Foundation Phase (Month 1-3) focused on Leadership engagement and commitment on Intrapreneurial Empowerment to create a foundation to enhance all incoming action plans, initiatives and programs for Innovative-oriented culture building where organizational objectives and organizational culture should go in the same direction to support each other. At this point, the emphasis was building foundations on relevant operational infrastructure including Rewards and Resources. After building foundations, Employee Empowerment Phase (Month 4-6) was introduced. Contemplating on enhancing Intrapreneurial Orientation which include Attitudes, Characteristics, and abilities. At this stage, motivation in being intrapreneur was essential to ensure individual or employees were engaged and able to demonstrate the



intrapreneurial outcomes. The distinguished characteristics among five New S-Curve Industries to be built were proactiveness and innovativeness. Organizations should do a pilot group of those who had potential to be intrapreneurs based on their motivation and strengthened by intrapreneurial skills, Business Acumen, Managerial or Leadership skills, and most importantly building awareness on Organization engagement, creating a sentiment of ownership and belonging in organizations. Meaningful work and self-efficacy could potentially be seen as important elements to drive intrapreneurship. Structural Integration Phrase (Month 7-9) was to fully immerse in collaboration across departments with bottom-up approach. Required tool and system supported were established and planned for employees to use on “Intrapreneurial Action Plans” Lastly, Optimization (Month 10-12) was to ensure that there were aligned organizational objectives and individual objectives for long-term growth and sustainability. To ensure that employees were aware and fully understood on organization visions and goals, there should be organizational updates along the year of implementation to keep updated on progress, roadblocks, and supportive measures required to ensure Intrapreneurship Empowerment success. From the findings, five New S-Curve Industries were categorized as Intrapreneurial organization where the focus of strategies was on innovation on products, services or processes, it was likely to shape the way of people to work in innovative style, supported by synergized and aligned organization and individual goals.

**Table 3: Development of Intrapreneurial Training Curriculum for employees in New S-Curve Industries (Integration of Organizational Level and Individual Level)**

Intrapreneurial Development Program for New S-Curve Industries in Thailand (12 Months)						
Module 0: Intrapreneurial Orientation Preparation						
Module 1: Project Execution and Innovation Case Presentation						
Objectives of New S-Curve Industries	Learning Outcomes	Key Components	Duration	Delivery Methods	Trainer	Assessment
Objectives of New S-Curve Industries: To pursue the objective of Value-based Economy driven by innovation, 5 New S-Curve Industries are to lead the extension of innovation and technological advancement in a variety of businesses, this initiative are empowered by Transformative Leadership embracing change and transformation, Organizational Learning and Development and Organizational Culture and Support Systems.	<b>Module 0: Pre-Training Assessment</b> To assess readiness for understanding and engage in this training program.	Individual development plan (IDP) of participants Organizational Learning and Development Organizational Culture and Support Systems	1 Week	Classroom Self-learning	Government Officers Industry Professionals Academy of Business Management	Group Work and Presentation on Business Cases (20%) Individual Pre-Training Assessment (20%)
	<b>Module 1: Industry Specific Knowledge</b> To apply relevant content to develop practical knowledge for organizational competitiveness.	Industry Knowledge Business Model and Roadmap for New S-Curve Industries Intrapreneurial Action Plan (IAP) Factors Drivers of Business Success Impact from New S-Curve Industries	3 Weeks	Classroom Self-learning	Government Officers Industry Professionals Academy of Business Management	Group Work and Presentation on Business Cases (20%) Individual Pre-Training Assessment (20%)
	<b>Module 2: Organizational Vision and Mission</b> To show clear understanding in Organization's vision, mission, and objectives aligns the organization's strategy.	Organizational Vision through Strategic Organizational strategy and business strategy both short and long term Organizational Learning and Development Organizational Culture and Support Systems	3 Weeks	Classroom Self-learning	Top Management Functional Managers	Individual Work and Presentation on Business Cases (20%) Individual Pre-Training Assessment (20%)
	<b>Module 3: Intrapreneurial Attributes</b> To demonstrate change behaviors towards work and organization.	Growth Mindset, Can-do attitude, and Motivation Intrapreneurial Characteristics Factors Affecting and Reducing Intrapreneurial Characteristics Intrapreneurial Action Plan (IAP) Competitive analysis Management Risk management	1 Month	Classroom Self-learning	Industry Professionals Academy of Business Management Self-reflection	Risk Assessment (20%) Individual Pre-Training Assessment (20%)
	<b>Module 4: Business Model and Innovation</b> To understand business model related concepts and skills.	Business Model Canvas (BMC) Value Proposition Design Thinking process Organizational Learning and Development Organizational Culture and Support Systems Innovation and Entrepreneurship Risk management	1 Month	Classroom Self-learning	University Professors Business Professionals	Risk Assessment (20%) Individual Pre-Training Assessment (20%)
	<b>Module 5: Leadership and Managerial Skills</b> To understand the understanding of Leadership and managerial skills.	Leadership and Managerial Skills Organizational Learning and Development Organizational Culture and Support Systems Innovation and Entrepreneurship Risk management	1 Month	Classroom Self-learning	University Professors Successful Business leaders	Risk Assessment (20%) Individual Pre-Training Assessment (20%)
	<b>Module 6: Change Management in Digital Era</b> To integrate learning experience and use in work.	Organizational Learning and Development Organizational Culture and Support Systems Innovation and Entrepreneurship Risk management	1 Month	Classroom Self-learning	Business leaders with transformation Self-reflection	Risk Assessment (20%) Individual Pre-Training Assessment (20%)
	<b>Module 7: Reflection and Application</b> To demonstrate an understanding of the application of the training.	Project planning and execution Organizational Learning and Development Organizational Culture and Support Systems Innovation and Entrepreneurship Risk management	7 Months	Classroom Self-learning	Functional Managers Self-reflection	Individual Pre-Training Assessment (20%) Individual Pre-Training Assessment (20%)

Source: Author

Based on the roadmap and qualitative insights congregated from key informants at both organizational and individual levels, a training curriculum was developed using the ADDIE model to serve as an internal Intrapreneurial Development Program for New S-Curve Industries. Aligned with the Strategic Roadmap for New S-Curve Industries, the Employee Empowerment Phase detailed in the strategic roadmap was designed to equip employees with the essential Intrapreneurial Orientation (Attitudes, Characteristics, Abilities and Behaviors) needed to become successful intrapreneurs. This phase spanned five months, focusing on upskilling and reskilling employees through a structured adult learning framework. Intrapreneurial Development Program offered eight modules and Pre-Training Assessment was to be executed before Module 1-8 began to ensure the aligned expectation for positive changes since this training curriculum was aimed for specific groups of employees which Top Management were aware of their potential and readiness to engage in this training. Module 1-7 were designed to embed employees with Intrapreneurial Orientation while Module 8 was modelled to actual applications of learned lessons in Module 1-7 dedicated to Innovation and Value creation with positive impacts tied to Organizational Objectives.

The core components of each module delegated Learning outcomes, key content, duration, delivery methods, trainers and assessment criteria. After the initiation was executed in Module 0: Pre-Assessment to evaluate readiness, Module 1-7 reinforced employees with Industry-Specific Knowledge, Organizational Vision and Mission Alignment, Intrapreneurial Attributes, Business Acumen for Intrapreneurs, Leadership and Managerial Skills, Change Management in the Digital Era,

outcomed by Reflection and Application in Module 7. As outlined in the program, employees were expected to project reflection and experience-based learning as crucial process to translate knowledge into practice with the support of structured learner-centric approach. Since the ultimate purpose of the training was to transform an employee into an intrapreneur, it was inevitable to abrosb all learnings including attitudes, characteristics, abilities and tranform them into behaviors. It was in accordance with the ability of organizations to produce innovation with employees as the central driver to innovation creation. Module 8, as final phrase, designed to serve as **the**culmination of the learning journey and showcase evidently innovation-led projects in the form of Buisness Case Competition to master tangible organizational positive impacts. By means of projects and case competition, employees were motivated to demonstrate their intrapreneurial capabilities, fostering an innovative-driven mindset across the organizations, positioning intrapreneurs as key drivers of organizational competitiveness and profitability. Recognition and rewards could be tendered to the employees or groups of employees who outperformed and achieved notably the realization of organizational objectives with solid evidence and high degree of positive impacts towards organizations' success. The so-called Intrapreneurs be perceived as organizational ambassadors and could be role models along with Top Management in cultivating Intrapreneurial Orientation in New S-Curve Industries.

Regarding Assessment and Evaluation Metrics, there were Project Implementation Evaluation including Strategic Alignment, Innovation Level, Implementation Quality, Business Impact and Results and Individual Professional Development Evaluation measuring Leadership Growth, Business Acumen, Innovation Capabilities and Professional Skills and Endorsement from Top Management. Recognizing the challenging nature of intrapreneurial growth, both organizational and individual stakeholders require ongoing support to sustain long-term success. As previously outlined in the Strategic Roadmap, these success factors play a pivotal role in empowering intrapreneurs and fostering an environment conducive to sustained innovation. To ascertain the rigid quality of the Intrapreneurial Development Program over time, the Evaluation to Sustainability intervals were designed in a comprehensive approach encapsulating the possible changes and circumstance variations. The Evaluation components comprised of Mid-Program Review, End-of-Program Assessment and Annual Post-Program Review where it prioritized participants feedback, managerial insights, industry trend analyses, and updates to internal organizational policies and external government and industry policies. This iterative review process allowed for ongoing refinement of learning content, delivery methods, trainers and program effectiveness.

At the post-program stage, organizations are encouraged to establish continuous development pathways, enabling the annual Training Launch in successive cohorts. In alignment with the Strategic Roadmap, during Months 12–14, management should assess employee progression, ensuring that successful participants, where applicable, entitled to recognition, rewards, career development opportunities, and continued organizational support despite being Organizational Ambassadors as mentioned after program ended. Given the substantial investment of time, effort, and resources required for successful execution, it is imperative to align organizational objectives with individual aspirations and the broader competitive landscape. This strategic consolidation will ensure that the Intrapreneurial Development Program remains a sustainable, high-impact initiative that drives innovation, professional growth, and long-term organizational success.

The Intrapreneurial Development Program was grounded in the principles of active learning (Piaget, 1954; Bonwell & Eison, 1991), experiential learning (Kolb, 1984), and adult learning (Knowles, 1980). These methodologies affirmed real-life and practical applications and experienced-based understanding ensuring that learning extended beyond theoretical knowledge to real-world execution. By adopting a learner-centric approach, the program encouraged employees to engage actively, participate in hands-on experiences, and apply their learning in meaningful and purposive work stretch. This shift from passive knowledge absorption to experience-based understanding fostered deeper engagement and long-term skill retention, organization engagement and long-term commitment towards Innovation. Innovation and value creation were paramount to Organizations' success. As such, this curriculum underlined contextual learning, prior knowledge, and reflective practice, which were exceptionally effective for adult learners who brought their own experiences and motivations to the learning process and actual implementation. By integrating these approaches,

the program encouraged employees developing lasting skills that aligned with the long-term goals and sustainability priorities outlined in the Strategic Roadmap.

## DISCUSSION

The consolidated findings are in alignment with prior theories on Intrapreneurship Orientation and Empowerment in organizations. They discovered the relevance of Intrapreneurship Orientation across regions and cultural contexts (Burgelman, 1983; Kuratko et al., 2015). The findings accorded with previous researches (Beechler & Javidan, 2007; Sidek & Zainol, 2011; Altinay et al., 2012) where it iterates the significance of having a growth mindset, innovativeness, autonomy and resilience in the time of failure as critical components of Intrapreneurial Orientation. Fostering Intrapreneurial behaviors are intricately by these attributes to perform Intrapreneurial activities in innovation-sought organization (Pinchot, 1985; Lumpkin & Dess, 1996; Sayeed & Gazdar, 2003; Morris et al., 2011; Neessen et al., 2019). The study accentuates that an employee-intrapreneur, with self-efficacy actualization, demonstrates Intrapreneurial actions and commitment to innovation which are aligned with organizations' objectives (Zahra et al., 1999). This research is supportive to the notion that organizational culture and individual behaviors are synergized to foster Intrapreneurial activities and innovation (Van de Ven, 1986). In Thailand, the findings are highlighted to complement the existing prior researches (Conger & Kanungo, 1988; Thomas & Velthouse, 1990; Al-Madadha & Koufopoulos, 2014; Kerdnok, 2016; Dhiratanutdilok & Jadesadalug, 2021) in terms of Intrapreneurial Characteristics especially ownership and leadership. Ownership or the attitude which reflected the commitment and work as if they were part of own entrepreneurial ventures, depicts the proactiveness, innovativeness, value creation, the ability to analyze and make decisions into calculated risk-taking behaviors. Leadership or the ability to either self-lead or leading the team, elaborates the self-directed approach and strong will towards achievements to deliver Intrapreneurial outcomes through obstacles and challenges which is necessary for intrapreneurial success (Chen et al., 2018). This discovery aligns with the concept that Leaders interplay with encouraging intrapreneurial behaviors of the employees along with the cultivation of innovative culture and positive working environment to span across organizations (Dyer et al., 2009).

The research illustrated the key drivers on Intrapreneurship Empowerment, showcasing the multi-level success factors in New S-Curve Industries in Thailand. At the organizational level, determinants to ignite Intrapreneurial actions are Leaders and Management Support, Environment Culture and Supportive Systems including giving autonomy, resources allocation, time availability, and Rewards systems (Hornsby et al., 2002). At the individual level, major drivers pivoting In Intrapreneurial actions are Self-oriented perceptions including attitude, motivation, and capabilities and Organization-oriented perceptions including organizational engagement, a bottom-up approach to decision-making, and shared vision between organizations and employees (Baker & Nelson, 2005). The Resource-Based View theory (Barney, 1991) posits that resources allocation with internal capabilities echo the drivers of sustained innovation. The discovery further envisions the importance of continuous learning, resilience, and creativity coupled with leaders' being role models are deemed as integral part in offering a team-oriented culture. Essentially in Thai context, leaders are expected to demonstrate Intrapreneurial actions in order to lead and influence employees to also learn and engage in Intrapreneurial actions to meet organizational objectives (Rosenbusch et al., 2013). In a dominant way apart from role modelling of leaders, they are expected to create and build "Psychological safety" environment which plays a key role to support intrapreneurs to have courage to speak up, call out and make innovative ideas even the ideas may seem immature or "green" without fears for failure and eliminate criticism, rather welcome constructive feedbacks. In aspect to drive innovation, willingness to take risks and demonstrate autonomy in time-sensitive environment is vital (Edmondson, 1999). However, noticeably induced from the research that in Thai context, a need for a balance between risk-taking and risk-aversion into a decision which holds a calculated risk-taking behaviors portrayal. When dealing with uncertainty and changes, it is critical to environ employees with psychological safety empowerment which reflected the notion in the work of Kolvereid and Isaksen (2006), who emphasized the importance of balancing risk and innovation to optimize intrapreneurial outcomes.

Regarding obstacles in Intrapreneurial Empowerment, key challenges were identified and it is important to add insights into Thai context. At certain level, the dilemma could possibly happen

between cultivating an employees to be an intrapreneur while the need to assure the competent intrapreneur's retention within organizations is executed including knowledge management being transferred and retained within organizations. To alleviate these obstacles including the perceptions of individuals towards self or organization, leaders in organizations must be aware on both sides of the coins and sustain the supportive environment to ensure intrapreneurs that their growth and progression are in alignment with organizations' pace and vibes, or in other words, Individual growing while organization is growing, in pursuit of individual objectives and organizational objectives (Hornsby et al., 2009). The study echoes rigidly that Intrapreneurship serves as Intervention for New S-Curve Industries to pursue innovation and sustain innovative and value creation outcomes. This Intrapreneurial intervention addresses the needs to leverage innovation in accordance with Government policies, regulations and industries insights to remain competitive advantage including emerging global market changes (Chesbrough, 2003). The revelation in this study collaboratively posits the need to maintain good external collaborations and knowledge synergy to innovation acceleration (Chesbrough, 2006). The study also contributes the notion that strategic synergy between organizational and individual success factors, top management and employees' aspects potentially embrace the intrapreneurial behaviors.

With all three research questions answered, the research proposes a strategic roadmap and a training curriculum which facilitate the intrapreneurship empowerment within New S-Curve industries in Thailand. The strategic roadmap encapsulates and enables Leaders in organization to utilize the training curriculum where adult learning and experiential learning theories are grounded (Kolb, 1984) centering on active learning facilitation which upholds Intrapreneurial orientation, actions and outcomes. Top management and employees in organizations are opt to optimize the strategic roadmap and training curriculum to possess Intrapreneurial orientation in terms of attitudes, characteristics, abilities, and behaviors, to innovate and achieve organizational goals. A shared vision and continuous feedback are assured from the synergy between top-down and bottom-up approach, balancing between environment empowerment and psychological empowerment. Transformative leadership is augmented in cultivating innovative culture, one team collaboration, commitment and trust, and innovativeness (Bass, 1985). Conclusively, this research contributes to a deeper understanding of intrapreneurship empowerment within New S-Curve industries in Thai context. Considering the innovative approach on promoting Intrapreneurship as an intervention on organization development and human capital development in pursuing Innovation and value creation to ensure organizations will continue their activities, survival and competitive advantage to support value-based economy in Thailand through dynamic and competitive environments (Shane, 2003).

The study suggests a multi-level perspective on Intrapreneurship Empowerment with theoretical framework of multi-level integration, addressing gaps in an exiting literature where most of them discussed about either organizational level factor or individual factor in seperation. Offering the holistic exhibition of intrapreneurship empowerment in New S-Curve Industries in Thailand where innovation and value creation are ultimate goals, both Environmental Empowerment, driven by management and supporting systems within organizations, and Psychological Empowerment, driven by individual attitudes, motivation, and capabilities are suggested to be equally stressed though conventionally Environmental Empowerment mostly happen first step. Some parts of the findings provoked the call for Psychological Empowerment especially psychological safety to be first and foremost prioritized as resource building as well as leveraging the existing resources of time, cost, and workforce, adding the construct that psychological safety can be built to serve Intrapreneurial Empowerment.

This study furnishes practicable insights for Intrapreneurial Orientation Identification and Intrapreneurial Empowerment and its guidelines and Development Program for employees in New S-Curve Industries in Thailand. The strategic roadmap gives guidance to organizations and therefore, bridges the gap between theory-based understanding and the practical implementation of Intrapreneurial Empowerment. The Intrapreneurial Development Program, in supportive to the Strategic Roadmap proposes translated actionable agenda to elevate human capital through organizational development and learning and development, ensuring employees have the KAP (Knowledge, Attributes and Practices) to act Intrapreneurial behaviors to achieve the organizations' objectives. The proposed frameworks tend to be potentially generalized in Thai context

organizations beyond New S-Curve Industries which pursue innovation and technology, essentially in responding to a value-based economy. However, it is advisable that both strategic roadmap and training curriculum should be specifically considered into each organization's contexts and readiness including leadership's determination to Intrapreneurial Empowerment.

The study recommends certain policy-oriented guidelines to support innovation and value creation in New S-Curve Industries in Thailand. At the organizational level, Intrapreneurial Empowerment is considered to be incorporated as part of interventions for organizations to redefine their goals, objectives and strategies in the reiteration of innovation and value creation intention. Leaders can optimize and design the organizational policies in order to achieve innovative deliverables and innovative-led culture to gain innovation and sustained competitive advantage. The mentioned policies are geared towards giving autonomy, proactiveness, innovativeness, risk-taking, enhancing psychological safety, and collaborative behaviors through organizational systems of rewards, progression and flexibility beyond boundaries. It is expected that at the right implementation, employees are to have self-efficacy and commitment and trust to contribute to organizations in long-term vision. At the governmental level, the study suggests the the pro-policies in the direction that supports organizations including SMEs and entrapreneurs to have appropriate resources to drive for innovation in terms of products, process and services. The mentioned resources refer to promotion of government directives, education provision and collaboration among Government, organizations and relevant parties e.g. universities, research and development units, and educational centers to support organizations in terms of knowledge, practice and projects to support innovation and value creation including promotions and incentivization. Furthermore, policies should encourage collaboration between New S-Curve Industries and First S-Curve Industries to exchange knowledge and practices. At the educational level, higher education and life-long learning units can contribute to both organizational and individual levels in fostering innovation by knowledge sharing, projects and programs creation, guideline distribution to business owners, entrepreneurs, and organizations to align with a value-based economy and especially the focus on skilled workforce and development.

### **Limitations and Recommendations for Future Research**

This study has several limitations. The one is though aligned with previous research findings, there are prone to be challenging to apply outside Thailand context in that the perspectives and prioritization may be different. The other is the sole deployment of qualitative methodology may be subject to certain degree of interpretive biases based on selected Top management and groups of employees. The study mainly provides a strategic roadmap and training curriculum as a guideline, however, it has yet to be implemented in real-life situations. Therefore, the post-mortem of the implementation is not probed and discovered and in a variety of different factors such as organizational directives, organizational scale and people's readiness both top management and employees. Future research suggests that the study could be extended into the area of actual implementation and post-program evaluation to ensure the effectiveness and insights extracted from implementation so as to take action on continuous improvement. It should also examine the role of digital transformation and emerging technologies in shaping intrapreneurial empowerment. In addition, it could expand on the qualitative findings by incorporating quantitative methods to obtain a larger sample of key informants. At the same time, it could investigate how leadership interplay and influence intrapreneurial outcomes. Lastly, it should focus on appropriate metrics for measuring intrapreneurial success and its impact on organizational performance, including standardized tools to assess intrapreneurial capabilities at both organizational and individual levels.

### **AUTHORS CONTRIBUTIONS**

The research article's original drafting and writing were done by Nichapa Surasithi. Methinee Wongwanich Rumpagaporn and Chintana Kanjanavisutt contributed to the final draft by offering advice, constructive feedback, and revisions along the writing process of this manuscript.

### **ACKNOWLEDGMENTS**

Our sincere appreciation goes out to Kasetsart University and the empowering Entrepreneurship Education faculty members for their strong encouragement and support during our research. Our research journey has been greatly influenced by their commitment to academic quality and creating

a supportive learning atmosphere. We are really appreciative of the materials, advice, and academic insights offered, all of which have greatly aided in this project's success.

## FUNDING

### Not applicable

### Competing interests

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.

### Informed consent

Obtained.

### Ethics approval

Ethics approval for this study was obtained from the Research Ethics Committee Panyapiwat Institute of Management (PIM-REC 044/2567, Approval Date: 29 August 2024) .

## REFERENCES

- Al-Madadha, A., & Koufopoulos, D. N. (2014). Linking an integrated approach of empowerment to employee creativity. *European Scientific Journal*, 10(35), 1–15.
- Almelhi, A. (2021). Effectiveness of the ADDIE model within an e-learning environment in developing creative writing in EFL students. *English Language Teaching*, 14, 20. <https://doi.org/10.5539/elt.v14n7p20>
- Altinay, L., Madanoglu, M., Daniele, R., & Lashley, C. (2012). The influence of family tradition and psychological traits on entrepreneurial intention. *International Journal of Hospitality Management*, 31(2), 489–499.
- Antonic, B., & Hisrich, R. D. (2001). Intrapreneurship: Construct refinement and cross-cultural validation. *Journal of Business Venturing*, 16(5), 495–527.
- Antonic, B., & Hisrich, R. D. (2003). Clarifying the intrapreneurship concept. *Journal of Small Business and Enterprise Development*, 10(1), 7–24.
- Aramburu, N., & Sáenz, J. (2011). Structural capital, innovation capability, and size effect: An empirical study. *Journal of Management & Organization*, 17(3), 307–325. <https://doi.org/10.5172/jmo.2011.17.3.307>
- Asiaei, K., Barani, O., Bontis, N., & Arabahmadi, M. (2020). Unpacking the black box. *Journal of Intellectual Capital*, 21(6), 809–834. <https://doi.org/10.1108/JIC-06-2019-0147>
- Athiwat Anuwet. (2023). The model for developing the competencies of entrepreneurs in the automotive parts manufacturing industry. *Journal of Digital Business and Social Sciences*, 9(1), 1–17.
- Baker, T., & Nelson, R. E. (2005). Creating something from nothing: Resource construction through entrepreneurial bricolage. *Administrative Science Quarterly*, 50(3), 329–366.
- Bandura, A., & Adams, N. E. (1977). Analysis of self-efficacy theory of behavioral change. *Cognitive Therapy and Research*, 1(4), 287–310.
- Bangkok Post. (2020). NXPO: Big need for S-Curve workers. *Bangkok Post*. Retrieved January 26, 2025, from <https://www.bangkokpost.com/business/general/1977255/nxpo-big-need-for-s-curve-workers>
- Bangkok Post. (2023). Investing in human capital. *Bangkok Post*. Retrieved January 26, 2025, from <https://www.bangkokpost.com/business/general/2712484/investing-in-human-capital>
- Banmairuroy, W., Kritjaroen, T., & Homsombat, W. (2022). The effect of knowledge-oriented leadership and human resource development on sustainable competitive advantage through organizational innovation's component factors: Evidence from Thailand's new S-curve industries. *Asia Pacific Management Review*, 27(3), 200–209. <https://doi.org/10.1016/j.apmrv.2021.09.001>
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. Free Press.
- Beechler, S., & Javidan, M. (2007). Leading with a global mindset. In *The global mindset* (Vol. 19, pp. 131–169). Emerald Group Publishing Limited.

- Boonsuwan, P., & Zhu, B. (2023). The role of intrapreneurship and environmental collaboration in fostering green innovation adoption in the hotel industry in Bangkok. *Journal of Thai Hospitality and Tourism*, 18(1), 98–110.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Burgelman, R. A. (1983). A process model of internal corporate venturing in the diversified major firm. *Administrative Science Quarterly*, 39-61.
- Bushe, G.R. (2011). Appreciative inquiry: Theory and critique. In Boje, D., Burnes, B. and Hassard, J. (eds.) *The Routledge Companion To Organizational Change* (pp. 87103). Oxford, UK: Routledge.
- Cadar, O., & Badulescu, D. (2015). Entrepreneur, entrepreneurship and intrapreneurship: A literature review. *The Annals of the University of Oradea. Economic Sciences*, XXIV, 658–664.
- Canet-Giner, M. T., Redondo-Cano, A., Balbastre-Benavent, F., Escriba-Carda, N., Revuelto-Taboada, L., & Saorin-Iborra, M. d. C. (2022). The influence of clustering on HR practices and intrapreneurial behavior. *Competitiveness Review: An International Journal*.
- Carrier, C. (1996). Intrapreneurship in small businesses: An exploratory study. *Entrepreneurship Theory and Practice*, 21(1), 5–20.
- Chen, M.-H., et al. (2018). Intrapreneurship as a key enabler of innovation. *Journal of Business Research*, 94, 245-251.
- Chesbrough, H. (2003). The era of open innovation. *MIT Sloan Management Review*, 44(3), 35-41.
- Chesbrough, H. (2006) Open Innovation: A New Paradigm for Understanding Industrial Innovation. 10th Anniversary Summer Conference on Dynamics of Industry and Innovation: Organizations, Networks and Systems, Copenhagen, 27-29 June 2005, 1-12.
- Cho, H., & Ardichvili, A. (2024). Appreciative Inquiry: An Integrative Review of Studies in Three Disciplines. *Human Resource Development Review*, 23(3), 376-401. <https://doi.org/10.1177/15344843241256156>
- Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. *Academy of Management Review*, 13(3), 471–482.
- Cotrino, A., Sebastián, M. A., & González-Gaya, C. (2021). Industry 4.0 HUB: A collaborative knowledge transfer platform for small and medium-sized enterprises. *Applied Sciences*.
- Covin, J., & Slevin, D. (2017). The entrepreneurial imperatives of strategic leadership. In *Strategic Leadership* (pp. 307–327). <https://doi.org/10.1002/9781405164085.ch14>
- Department of Business Development, Ministry of Commerce. (2024). *Dataset*. <https://opendata.dbd.go.th/>
- Department of Business Development, Ministry of Commerce. (2024). *Assistant for searching juristic person information and creating business opportunities*. <https://datawarehouse.dbd.go.th/juristic/index>
- Dess, G. G., & Lumpkin, G. T. (2005). The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship. *Academy of Management Perspectives*, 19(1), 147–156.
- Dhiratanuttdilok, T., & Jadesadalug, V. (2021). The influence of empowerment on innovative work behavior through creativity of employees in the automotive industry. *Journal of Humanities and Social Sciences*, 13(26), 30–45. <https://so04.tci-thaijo.org/index.php/swurd/article/view/258845>
- Di Fabio, A., Palazzeschi, L., & Bucci, O. (2017). In an unpredictable and changing environment: Intrapreneurial self-capital as a key resource for life satisfaction and flourishing. *Frontiers in Psychology*, 8. <https://doi.org/10.3389/fpsyg.2017.01819>
- Donlao, T., Fuangchan, S., Chirinang, P., & Kromadit, V. (2021). The future of Thai workers in a changing economy. *Journal of Administrative and Management Innovation*, 9(1), 35-44.
- Drucker, P. (2018). *The effective executive*. Routledge.
- Edmondson, A. C. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350-383.
- Engelen, A., Gupta, V., Strenger, L., & Brettel, M. (2015). Entrepreneurial orientation, firm performance, and the moderating role of transformational leadership behaviors. *Journal of Management*, 41(4), 1069–1097.
- Falola, H. O., Salau, O. P., Olokundun, M., Oyafunke-Omoniy, C. O., Ibidunni, A. S., & Osibanjo, O. A. (2018). Employees' intrapreneurial engagement initiatives and its influence on

- organisational survival. *Business Journal*, 32(1), 35–58. <https://doi.org/10.1108/CR-10-2019-0102>
- Gawke, J. C., Gorgievski, M. J., & Bakker, A. B. (2017). Employee intrapreneurship and work engagement: A latent change score approach. *Journal of Vocational Behavior*, 100, 88–100.
- Hadullo, K. O. (2021). Online competency-based education framework using Moodle LMS: A case of HEIs in Kenya. *International Journal of Education and Development using Information and Communication Technology*, 17.
- Hayton, J., & Kelley, D. (2006). A competency-based framework for promoting corporate entrepreneurship. *Human Resources Management*, 45(3), 407–427. <https://doi.org/10.1002/hrm.20118>
- Hess, A. K. N., & Greer, K. (2016). Designing for engagement: Using the ADDIE model to integrate high-impact practices into an online information literacy course. *CommInfoLit*, 10, 264–282. <https://doi.org/10.15760/comminfoLit.2016.10.2.27>
- Hornsby, J. S., et al. (2002). The importance of organizational support for intrapreneurial behavior. *Journal of Business Venturing*, 17(3), 49–67.
- Hornsby, J., Kuratko, D. F., Shepherd, D. A., & Bott, J. P. (2009). Managers' corporate entrepreneurial actions: Examining perception and position. *Journal of Business Venturing*, 24, 236–247.
- Huang, L. Y., Yang Lin, S. M., & Hsieh, Y. J. (2021). Cultivation of intrapreneurship: A framework and challenges. *Frontiers in Psychology*, 12, 731990. <https://doi.org/10.3389/fpsyg.2021.731990>
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.
- Kolvereid, L., & Isaksen, E. J. (2006). New venture behavior and firm survival: The role of risk-taking. *Journal of Business Venturing*, 21(3), 325–346.
- Kulkalyuenyong, P. (2018). Strategies in building corporate entrepreneurship. *Journal of Humanities and Social Sciences Rajapruk University*, 4(1), 1–11.
- Kuratko, D. F. (2017). Corporate entrepreneurship 2.0: Research development and future directions. *Foundations and Trends® in Entrepreneurship*, 13(6), 441–490. <https://doi.org/10.1561/03000000082>
- Kuratko, D. F., et al. (2015). *Corporate entrepreneurship and innovation: Entrepreneurial development within organizations*. Cengage Learning.
- Kuratko, D. F., Hornsby, J. S., & Covin, J. G. (2014). Diagnosing a firm's internal environment for corporate entrepreneurship. *Business Horizons*, 57(1), 37–47. <https://doi.org/10.1016/j.bushor.2013.08.009>
- Lessem, R. (1986). *Intrapreneurship: How to be an enterprising individual in a successful business*.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE. [https://doi.org/10.1016/0147-1767\(85\)90062-8](https://doi.org/10.1016/0147-1767(85)90062-8)
- Mahmoud, M. A., Ahmad, S., & Poespowidjojo, D. A. L. (2020). Intrapreneurial behavior, big five personality and individual performance. *Management Research Review*, 43(12). <https://doi.org/10.1108/MRR-09-2019-0419>
- Ministry of Industry. (2015). *10 target industries: Mechanisms for driving the economy for the future (New Engine of Growth)*. <https://thaipublica.org/2015/11/kanis-boi/>
- Morris, M. H., et al. (2011). Corporate entrepreneurship and innovation. *Strategic Entrepreneurship Journal*, 5(1), 57–75.
- National Economic and Social Development Council. (2023). *National Strategy 2018-2030*. [http://nscr.nesdc.go.th/wp-content/uploads/2023/06/NS\\_PlanOct2018.pdf](http://nscr.nesdc.go.th/wp-content/uploads/2023/06/NS_PlanOct2018.pdf)
- Nawakitphaitoon, K., & Sooraksa, N. (2023). Employer image and job pursuit intention in the new S-curve industries in Thailand: The mediating role of organizational attractiveness. *Asian Journal of Business Research*, 13(1). <https://doi.org/10.14707/ajbr.230139>
- Neessen, P. C. M., Caniëls, M. C. J., Vos, B., & de Jong, J. P. (2019). The intrapreneurial employee: Toward an integrated model of intrapreneurship and research agenda. *International Entrepreneurship and Management Journal*, 15(2), 545–571. <https://doi.org/10.1007/s11365-018-0552-1>
- Neneh, B. N. (2019). From entrepreneurial intentions to behavior: The role of anticipated regret and proactive personality. *Journal of Vocational Behavior*, 112, 311–324. <https://doi.org/10.1016/j.jvb.2019.04.005>



- Office of Industrial Economics. (2022). *The OIE presents its performance for the fiscal year 2022 and promotes the industrial development plan to restructure the manufacturing sector towards an innovation-driven economy*.  
<https://www.oie.go.th/assets/portals/1/fileups/53/files/oienews.pdf>
- Paitoon, K., & Limsiritong, K. (2022). Confirmatory factor analysis of intrapreneurship in automatic identification technology for technology disruption in Thailand. *Rajabhat Chiang Mai Research Journal*, 23(3), 109–125.
- Permpoonwiwat, C. K., & Chantith, C. (2023). *Adaptation of Thai TVET Learning in the Time of the Pandemic for S-Curve and New S-Curve Industries*. In M. Pilz & Y. Li (Eds.), *Experiences from the Corona Pandemic in Asian and European Skill Ecosystems* (pp. 143–158). Innsbruck University Press. <https://doi.org/10.15203/99106-116-8-07>
- Peterman, N. E., & Kennedy, J. (2003). Enterprise education: Influencing students' perceptions of entrepreneurship. *Entrepreneurship Theory and Practice*, 28(2), 129–144.
- Pinchot, G. (1985). *Intrapreneuring: Why you don't have to leave the corporation to become an entrepreneur*. University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.  
<https://doi.org/10.2139/ssrn.1496196>
- Pithayanukul, S. (2023). Entrepreneurial knowledge, attitude, and practice of marketing and brand building concepts: ความรู้ทัศนคติและแนวโน้มพฤติกรรมของกลุ่มผู้ประกอบการที่มีต่อแนวคิดการตลาดและการสร้างแบรนด์. *Srinakharinwirot Business Journal*, 14(1), 113–130. Retrieved from <https://ejournals.swu.ac.th/index.php/MBASBI/article/view/15528>
- Rathna, K. G., & Vijaya, T. (2009). Competencies of entrepreneurs and intrapreneurs: A comparative study. *South Asian Journal of Management*, 16(2), 28.
- Rogers, E. M., & Williams, D. (1983). *Diffusion of innovations* (Glencoe, IL: The Free Press, 1962).
- Rosenbusch, N., et al. (2013). The role of leadership in fostering organizational innovation. *European Journal of Innovation Management* 16(2) 145-168
- Rungroje Songsraboon (2018). S-curve อุตสาหกรรมอนาคตพลวัต. สืบค้นจาก <https://ba.siam.edu/wp-content/uploads/2017/05/S-curve.pdf>
- Sahaat, Z., Nasri, N., & Abu Bakar, A. Y. (2020). ADDIE model in teaching module design process using modular method: Applied topics in design and technology subjects. <https://doi.org/10.2991/assehr.k.200824.161>
- Saif, H. A., & Ghania, U. (2020). Need for achievement as a predictor of entrepreneurial behavior: The mediating role of entrepreneurial passion for founding and entrepreneurial interest. *International Review of Management and Marketing*, 10(1), 40.
- Sayed, O. B., & Gazdar, M. K. (2003). Intrapreneurship: Assessing and defining attributes of intrapreneurs. *The Journal of Entrepreneurship*, 12(1), 75–89.  
<https://doi.org/10.1177/097135570301200104>
- Shamim, S., Cang, S., Yu, H., & Li, Y. (2017). Examining the feasibilities of Industry 4.0 for the hospitality sector with the lens of management practice. *Energies*, 10(4), 499.  
<https://doi.org/10.3390/en10040499>
- Shane, S. (2003). *A General Theory of Entrepreneurship: The Individual-Opportunity Nexus*. Edward Elgar Publishing.
- Sidek, S., & Zainol, F. A. (2011). Psychological traits and business performance of entrepreneurs in small construction industry in Malaysia. *International Business and Management*, 2(1), 170–185.
- Sornsermsombut, P. (2018). Influence of characteristics on entrepreneurial intention of Chiang Mai Rajabhat University students]. *Chiang Mai Rajabhat University*.  
<http://backoffice.thaiedresearch.org/uploads/paper/254cb67ee503a81836891c0511239832.pdf>
- Stam, E., Bosma, N., Van Witteloostuijn, A., De Jong, J., Bogaert, S., Edwards, N., & Jaspers, F. (2012). Ambitious entrepreneurship: A review of the academic literature and new directions for public policy. Report for the Advisory Council for Science and Technology Policy (AWT) and the Flemish Council for Science and Innovation (VRWI).
- Strategy and Planning Division, Office of the Permanent Secretary, Ministry of Commerce. (2023). *National Economic and Social Development Plan, the 13th edition (2023-2027)*. moc.go.th

- Sukumarn Kerdnok. (2016). *The influence of multilevel factors of human resource practices on innovative behavior* [Doctoral dissertation, Graduate School, Suranaree University of Technology]. Bangkok.
- Sung, S. Y., Cho, D.-S., & Choi, J. N. (2011). Who initiates and who implements? A multi-stage, multi-agent model of organizational innovation. *Journal of Management & Organization*, 17(3), 344–363. <https://doi.org/10.5172/jmo.2011.17.3.344>
- Suwannaphong, P., & Pruetipibultham, O.(2020). *The Skill Gap of Industrial Workers with High Vocational Level for Automotive Industry in Thailand*. *KKBS Journal of Business Administration and Accountancy*, 4(1), 1–14. <https://so04.tci-thaijo.org/index.php/kkbsjournal/article/view/245935>
- Thai Employers' Confederation. (2020). *New ways of working require adaptation! Employers signal that bachelor's degrees are outdated and may increase job loss risk*. <https://mgronline.com/business/detail/9630000054551>
- The Nation Thailand. (2024). Salary survey reveals jobs in high demand in Thailand. *The Nation Thailand*. Retrieved January 26, 2025, from <https://www.nationthailand.com/news/general/40043983>
- Thomas, K. W., & Velthouse, B. A. (1990). Cognitive elements of empowerment: An "interpretive" model of intrinsic task motivation. *Academy of Management Review*, 15(4), 666–681.
- Van de Ven, A. H. (1986). Central problems in the management of innovation. *Management Science*, 32(5), 590-607.
- Woo, H. R. (2018). Personality traits and intrapreneurship: The mediating effect of career adaptability. *Career Development International*, 23(2), 145–162. <https://doi.org/10.1108/CDI-02-2017-0046>
- Zahra, S. A., et al. (1999). Corporate entrepreneurship in family firms. *Entrepreneurship Theory and Practice*, 23(2), 5-22