



Modeling the Relationship between Organizational Competency, Entrepreneurship, Human Resource Management, Technology Management, and Organizational Performance

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Abstract

Background and Aims: Organizational competency development is an important factor enabling community enterprises to respond to customer needs and effectively adapt to changing environments. This article aims to study the factors, components, and relationships among organizational competency factors, entrepreneurship, human resource management, technology management, and organizational performance, and to create a model of the relationship between organizational competency, entrepreneurship, human resource management, technology management, and organizational performance.

Methodology: A literature review was conducted using the EBSCO database with the keyword “organizational competency”. This search yielded 195 articles, of which 125 were deemed non-redundant and suitable for analysis. Content analysis was employed to analyze the data. The review revealed that the key variables studied about organizational competency were entrepreneurship, human resource management, and technology management. These competencies were found to impact organizational performance significantly.

Results: The study findings suggest that community enterprises seeking to enhance operational efficiency and improve overall performance should adopt the concept of organizational competency. To foster these competencies, organizations should focus on entrepreneurship, human resource management, and technology management. The relationships between these variables are illustrated in the proposed conceptual model.

Conclusion: The study found that organizational competency is a critical determinant of organizational performance. Five key factors were identified: entrepreneurship, human resource management, technology management, organizational competency, and organizational performance. The empirical evidence suggests a positive correlation between the implementation of organizational competency and improved performance. Consequently, organizations aiming to enhance their performance should consider adopting the concept of organizational competency.

Keywords: Organizational competency; Entrepreneurship; Human resource management; Technology management; Organizational performance



Introduction

In Thailand, there are many community enterprises, especially in the Northeast, where most community enterprises are registered. Problems found in the operation of most community enterprises include external environmental factors, namely, the lack of continuity in community enterprise development policies, the problem of implementing policies, and the increasing cost of living and household debt. In addition, there are internal factors, such as the lack of entrepreneurship among community enterprise executives, lack of knowledge in business management and local wisdom, insufficient personnel, lack of ability to find markets, and lack of added value for products or services (Jintana and Puripanik, 2019). Many past studies have found that organizational competency affects organizational performance. (Chaston and Mangles, 2002; Dainty et al., 2004; Bergman, et al, 2004) Organizational competency refers to the measurable capabilities required for effective work that contribute to business success and organizational performance. Developing organizational competency is a key factor affecting organizational performance. Good competence enables organizations to meet customer needs, achieve expected financial returns, and effectively adapt to changing environments. (Subramaniam et al. 2019) The relationship between entrepreneurship and organizational performance found that social networks play an important role in entrepreneurial success. (Zhao et al., 2010) This includes proactive social skills and strategies that help develop networks and grow businesses, in line with Hsu et al.'s (2014) study that found that entrepreneurship, organizational culture, and leadership positively impact organizational performance. Mulugeta and Tsehay (2017) found that the ability to recognize opportunities, marketing, finance, business ethics, and general management affect organizational performance. Human resource management is related to organizational performance. Long and Ismail (2011) found that human resource management plays an important role in the strategic role of organizations in creating competencies and competitive advantages. De Vos et al. (2015) pointed out that human resource practices such as recruitment, selection, training, evaluation, and reward play a key role in driving organizational performance. Wu (2018) found that effective human resource management provides employees with the necessary knowledge, skills, and abilities, which affects the overall performance of the organization. In terms of technology management, it is related to organizational performance. Cragg (2008) found that technology management capability is related to using the potential of existing and emerging technologies to develop the business in the long run. Wang et al. (2012) pointed out that the ability to use information technology resources effectively plays an important role in achieving the strategic goals of the organization. Tsou (2012) found that technology management and





organizational competency are important factors in developing e-service innovation and upgrading e-service products and process innovation.

Therefore, for the organization to have good performance, it should focus on organizational performance. The researcher therefore studied the variables that affect organizational performance by reviewing the literature to find the relationship between such variables and presented it in the form of a model of the relationship between organizational competencies, entrepreneurship, human resource management, technology management, and organizational performance.

Objectives

- 1) To study the factors, factor elements, and the relationship between factors of organizational competency, entrepreneurship, human resource management, technology management, and organizational performance
- 2) To create a model of the relationship between organizational competencies, entrepreneurship, human resource management, technology management, and organizational performance

Literature Review

This article is a study and review of literature related to organizational competency management. To define characteristics, identify factors, and concepts to refer to future research of the author. This article contains a literature review of organizational performance factors. Entrepreneurship, human resource management, technology management, and organizational performance. The research method is Documentary Research, using a total of 195 articles, and 125 articles can be used, with the source of the articles from the EBSCO Emerald ProQuest database and various academic databases on the Internet. Let's analyze the data using content analysis, aiming to study the causal factors that influence organizational competencies that affect organizational performance.

Conceptual Framework

From the literature review, a conceptual framework consisting of 5 latent variables was obtained: organizational competencies; entrepreneurship; human resource management; technology management, and organizational performance. used to create a research conceptual framework which can be shown in Figure 1



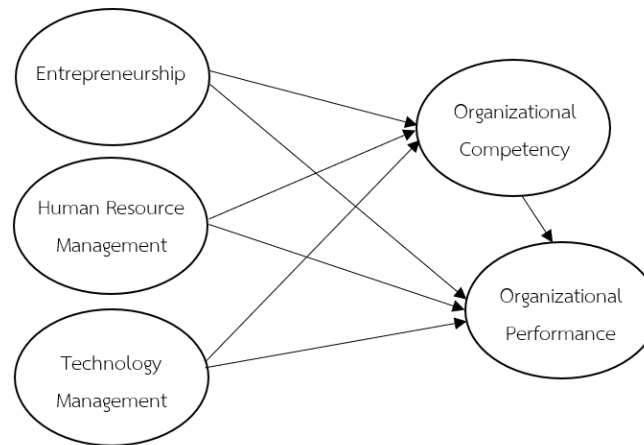


Figure 1 Conceptual Framework

Methodology

In this paper, the methodology likely involved a literature review from various databases and content analysis to explore the relationship between organizational competency, entrepreneurship, human resource management, technology management, and organizational performance. The researchers may have used established frameworks and models to guide their analysis and interpretation of the data.

Results

The results of studies related to variables, their meanings, and composition can be classified in different details as follows:

1. Organizational Competency Variable

From the review of literature related to organizational competencies, it was found that organizational competency means the organization's ability to carry out various activities and operations which will lead the organization to achieve its objectives and goals. To enable the organization to have the ability to create a competitive advantage. (McClelland, 1973; Chaston and Mangles., 2002; Bergman et al., 2004; Wren et al., 2005; Bartram, 2005; Debrah et al., 2005; Kim and Hong, 2005; Li et al., 2009; Long et al., 2011; Wickramasinghe et al., 2011; Lin et al., 2012; Redmond, 2013)

The organizational competency guidelines have 4 components as follows: 1. knowledge and skills 2. attitude 3. strategy and 4. motivation as shown in Table 1.

**Table 1** Organizational competency variables and reference sources

Reference (name of researcher/year)	knowledge and skills	attitude	strategy	motivation
Escrig-Tena and Bou-Llusar (2005)	✓		✓	
Li et al. (2009)	✓	✓	✓	✓
Zhaoo et al. (2010)	✓		✓	
Hurd and Buschbom (2010)	✓			
Long and Ismail (2011)	✓		✓	
De Vos et al. (2015)	✓	✓	✓	✓
Kim and McLean (2015)	✓	✓		✓
Parameswaran (2020)	✓	✓		✓

1.1 Knowledge and skills refer to knowing of work procedures. professional skills Knowledge and understanding of the job characteristics that the organization must have to function. Including solving problems in operations, knowledge about tools, machinery, and equipment, and technical skills necessary to perform duties effectively (Li et al., 2009).

1.2 Attitude refers to the passion, emotions, and feelings of employees towards their work and customers. Including non-verbal expressions Attitude is considered an important competence for employees because it plays an important role in creating a positive atmosphere and meeting customer expectations. (Li et al., 2009)

1.3 Strategy refers to the planning process. implementation and systematic evaluation This involves implementing standardized processes. Tools for improvement performance indicators comparison and self-assessment involve the development and utilization of internal organizational capabilities. (Escrig-Tena and Bou-Llusar , 2005)

1.4 Motivation refers to inspiration that influences behavior and action. It is an inner drive or desire that guides decision-making and goal-setting. It is an important aspect of job performance. (Kim and McLean, 2015)

2. Entrepreneurship Variables

From the review of literature related to entrepreneurship, it was found that Entrepreneurship refers to a person's ability to manage a business to make a profit. They can take advantage of business opportunities and drive growth leading to mutual success of the organization. (Zhao et al., 2010; Bagheri et al, 2011; Hsu et al., 2014; Samei and Feyzbakhsh, 2015; Rasmussen et al., 2015; Mohammed et al., 2017; Mulugeta and Tsehay, 2017)





The entrepreneurial practice has 5 components as follows: 1) knowledge and skills 2) attitude 3) strategy and 4) motivation as shown in Table 2.

Table 2 Entrepreneurship variables and reference sources

Reference (name of researcher/year)	creativity	opportunity recognition	resource management	relationship and networks	risk acceptance
Debrah and Ofori (2005)	✓	✓	✓	✓	✓
Bagheri et al (2011)	✓	✓			✓
Rasmussen et al., (2015)		✓	✓	✓	
Mohammed et al., (2017)	✓	✓	✓	✓	
Mulugeta and Tsehay (2017)		✓			
Behling, and Lenzi (2019)		✓			
Asibu-Yartey (2021)	✓	✓	✓	✓	✓
Abidin et al., (2022)	✓			✓	

2.1 Creativity refers to the ability of entrepreneurs to think creatively. and develop new and useful ideas. (Bagheri et al , 2011)

2.2 Opportunity recognition refers to an entrepreneur's ability to identify and recognize possible opportunities for business ventures. Developing the ability to effectively recognize opportunities is important for entrepreneurs in today's highly competitive business era. (Bagheri et al , 2011; Mohammed et al., 2017)

2.3 Resource management refers to the ability of entrepreneurs to acquire and use resources for their businesses effectively. Effective resource management is essential for organizational success. (Asibu-Yartey, 2021)

2.4 Relationships and networks refers to an entrepreneur's ability to build and maintain strong relationships with others in his or her business network. Networks in this context refer to the social and professional connections that entrepreneurs create and use to support their business activities. Building relationships and maintaining networks effectively can increase the growth and success of the organization. (Asibu-Yartey, 2021)

2.5 Risk acceptance refers to the entrepreneur's willingness to respond to uncertainty and take responsibility for the future. It is an important characteristic of entrepreneurs because entrepreneurs have to deal with changing environments and highly competitive markets. (Bagheri et al , 2011)

3. Human Resource Management Variables

From the review of literature related to human resource management, it was found that human resource management means processes and activities related to planning, development, and management of personnel in the organization. To have the ability and readiness to be able to work efficiently. (Escrig-Tena and Bou-Llusal , 2005; Leme Fleury et al, 2005; Wei and Lau, 2005; Clardy, 2007; Galanaki et al., 2008; Azmi et al., 2009; Akkermans et al., 2013; Lo et al., 2015)

The human resource management practice has 6 components as follows: 1) planning 2) recruitment and selection 3) training and development 4) compensation management 5) maintaining relationships and 6) evaluating performance as shown in Table 3

Table 3 Human resource management variables and references sources

Reference (name of researcher/year)	planning	recruitment and selection	training and development	compensation management	maintaining relationships	evaluating performance
Long et al., (2011)	✓	✓	✓	✓	✓	✓
Wickramasinghe and Zoyza (2011)	✓	✓	✓		✓	✓
De Vos et al., (2015)	✓	✓	✓		✓	✓
Lo et al., (2015)	✓	✓	✓	✓	✓	✓
Van Esch et al., (2018)	✓	✓	✓	✓	✓	✓
Dirani et al., (2020)	✓		✓		✓	
Parameswaran (2020)	✓	✓	✓	✓	✓	✓
Poba-Nzaou et al., (2020)	✓	✓	✓	✓	✓	✓

3.1 Planning refers to the process of preparing appropriate human resources. It also involves organizational restructuring. Measuring the impact of human resource practices, promoting, retaining, and exiting appropriate personnel. and designing performance measurement and reward systems. (Long and Ismail, 2011; Parameswaran, 2020)

3.2 Recruitment and selection refers to the process of attracting and selecting qualified applicants for positions within an organization. (Lo et al., 2015; Parameswaran, 2020)

3.3 Training and development refers to the process of enhancing employees' knowledge, skills, and abilities. To increase the capabilities of employees promote creativity. To improve operations and achieve organizational goals. (Lo et al., 2015; Parameswaran, 2020)

3.4 Compensation management refers to the process of designing and rewarding systems for employees. It involves determining the appropriate compensation, benefits, and incentives for employees based on various factors. to attract and retain talented employees. (Parameswaran, 2020; Poba-Nzaou et al., 2020)

3.5 Maintaining relationships refers to the ability to build and maintain effective interpersonal relationships with stakeholders in the human resources area. It involves leadership



skills and an understanding of the culture within the organization. (Lo et al., 2015; Parameswaran, 2020)

3.6 Performance evaluation refers to the process of evaluating the performance of employees and providing recommendations regarding strengths and areas that need improvement. Involves setting performance goals. Follow the progress and conduct formal assessments at regular intervals. (Parameswaran, 2020; Poba-Nzaou et al., 2020)

4. Technology Management Variables

From the review of literature related to technology management, it was found that technology management means using technology to carry out activities both inside and outside the organization. To lead to development improving work processes including decision support which will affect the efficiency of achieving the goals of the organization. (Henderson, 2008; Teng et al., 2009; Wang et al., 2012; Tsou , 2012; Hsu et al., 2014; Prasad and Green, 2015; Khalilzadeh Salmasi et al., 2016; Migdadia et al, 2016; Pan and Seow, 2016; Hussain et al., 2022)

The technology management practice has 4 elements as follows: 1) data management 2) data storage and retrieval and 3) development and support as shown in Table 4.

Table 4 Human resource management variables and reference sources

Reference (name of researcher/year)	data management	storing and Retrieving Information	development and Supporting
Hsu et al, (2014)	✓	✓	✓
Pan and Seow., (2016)	✓		
Khalilzadeh Salmasi et al., (2016)	✓	✓	✓
Achlison et al., (2019)	✓	✓	
Makhloufi et al., (2021)		✓	✓
Nair et al., (2022)			✓

4.1 Data management refers to activities and processes related to the organization. and maintaining information within the organization. (Hsu et al, 2014; Pan and Seow, 2016; Khalilzadeh Salmasi et al., 2016)

4.2 Data storage and retrieval refers to processes related to accessing data within an organization. Integration of information sources from all parties is considered a factor that contributes to successful information storage and retrieval. (Hsu et al, 2014; Khalilzadeh Salmasi et al., 2016)





4.3 Development and support refers to the process of creating technology improvements including the design, development, and implementation of new technology approaches. to be applied in the organization This includes predicting the potential of new practices and technologies. (Hsu et al, 2014; Pan and Seow, 2016)

5. Organizational Performance Variables

From the review of literature related to organizational performance, it was found that Organizational performance refers to results resulting from the organization's operations which can achieve the goals set. The results of operations arise from competency that affects the efficiency of the organization. (Dainty et al., 2004; Kim and Hong, 2005; Levenson et al., 2006; Yuan and Lo, 2018)

The organization's performance guidelines have 4 components as follows: 1) financial perspective 2) customer perspective 3) internal process perspective and 4) learning and growth perspective as shown in Table 5.

Table 5 Organizational Performance Variables and Reference Sources

Reference (name of researcher/year)	financial perspective	customer perspective	internal process perspective	learning and growth perspective
Niven (2002)	✓	✓	✓	✓
Long et al. (2011)	✓	✓	✓	✓
Elg et al. (2013)	✓	✓	✓	✓
Mohammed et al. (2017)	✓	✓	✓	
Van Esch et al. (2018)	✓	✓	✓	
Hwang et al. (2020)	✓	✓		

5.1 The financial perspective aspect means evaluating the efficiency and competitiveness of a company based on financial indicators and results such as revenue, profit, profitability, cash flow, and return on investment. Return on assets and research and development expenses. (Long et al. 2011; Mohammed et al. 2017; Van Esch et al. 2018)

5.2 The customer perspective side means evaluating a company's performance and competitiveness based on customer-related indicators and results, such as customer brand loyalty. customer satisfaction and market share growth It is an important component of a company's performance. (Long et al. 2011; Mohammed et al. 2017)

5.3 The internal processes perspective means analyzing and improving the efficiency and effectiveness of internal processes to achieve organizational goals. This includes the efficient





coordination of all organizational resources to maximize benefits. (Mohammed et al. 2017; Van Esch et al. 2018)

5.4 The learning and growth perspective refers to the development of human capital and the acquisition of knowledge and skills within the organization. continuous learning Employee development and creating a supportive work environment to promote innovation and improve organizational performance. (Long et al. 2011)

Discussion

The researchers reviewed the empirical literature on the relationship between variables.

Relationships between entrepreneurship, human resource management, technology management, and organizational competencies

The researchers reviewed the empirical literature on the relationship between entrepreneurship and organizational performance, finding such relationships. For example, a study by Zhao et al., (2010) found that social networks are important for success in being an entrepreneur. This includes social skills and proactive social strategy. Relational Effort It involves network development and business growth. which plays an important role in being an entrepreneur and organizational performance Consistent with the study of Hsu et al., (2014), it was found that being an entrepreneur corporate culture and leadership have a positive impact on organizational performance. It also indicates that entrepreneurship influences organizational performance. Similarly, Mulugeta and Tsehay , (2017) found that being an entrepreneur consists of the ability to recognize opportunities. Marketing ability financial ability Business ethics competence and general management ability This ability affects organizational performance.

Human resource management practices and organizational competencies were found to have such a relationship. In the study of Long and Ismail , (2011), it was found that human resource management plays an important role in the organization's strategic role in operating to create organizational competency and contribute to creating sufficiency. Competitive advantage, consistent with De Vos et al., (2015), found that human resource practices within the organization include recruitment, selection, training, and performance evaluation. and giving rewards All play an important role in driving organizational performance. In addition, research by Wu., (2018) found that effective human resource management helps ensure that employees have the necessary knowledge, skills, and abilities. To work efficiently This contributes to the overall ability of the organization, which directly affects the performance of the organization. and plays an important role in developing and increasing organizational performance Technology management practices are related to organizational competencies. For example, a study by Cragg, (2008) found that the





ability to manage technology is an important competency of an organization. It involves combining the potential of existing and emerging technologies for long-term business development. Therefore, technology management plays an important role in developing organizational competencies. To be consistent with the goals and strategies of the organization Similarly, Wang et al., (2012) found that the organization can use information technology resources efficiently and effectively. to achieve strategic goals Technology management therefore plays an important role in increasing organizational performance. Consistent with Tsou 's (2012) research, technology management plays an important role in facilitating inter-organizational collaboration and innovation practices. Technology management and enterprise capabilities are important factors in developing electronic service innovation and upgrading electronic service products and process innovation. From the discussion of organizational competencies above.

H1: Entrepreneurship has a direct influence on organizational competency.

H2: Human resource management has a direct influence on organizational competency.

H3: Technology management has a direct influence on organizational competency.

Relationships between entrepreneurship, human resource management, technology management, and organizational performance

The researchers reviewed the empirical literature on the relationship between entrepreneurship and organizational performance, finding such relationships, for example, a study by Mohammed et al. 2017 found that entrepreneurial competencies include strategic competencies, opportunities, and abilities related to directing, leading, delegating, planning, and scheduling work. It is related to management ability. and is important for both internal and external management of the organization It has a significant impact on the efficiency and performance of the organization, consistent with Van Esch et al. 2018, who found that Developing entrepreneurial abilities and a positive atmosphere for creativity Affects the operating results of the organization Moreover, in Tisha's research, 2018, it was found that entrepreneurship plays an important role in improving learning. Operation and entrepreneurial performance among women entrepreneurs. and organizational performance Similarly, The creativity, innovation, risk-taking habits proactive enthusiasm, and independence. Have a positive influence on being an entrepreneur which affects increasing the efficiency of the organization's operations.

Human resource management practices and organizational performance were found to have such a relationship. In a 2018 study by Van Esch et al., effective human resources practices were positively related to organizational performance. The employee's ability is a mediator in the relationship between human resource performance and the company's performance. This is consistent with Wei et al. 2018, which found that the implementation of effective human resource





management practices. Making various organizations can improve the work efficiency of employees and promote true leadership. This results in the overall efficiency of the organization. In addition, the effective human resource management is something that will help improve the organization's efficiency. It is necessary for solving internal and external problems that affect the operating results and efficiency of the organization as well. In terms of practice, the relationship between technology management and organizational performance, a study by Prasad and Green, 2015 found that technology management, in particular, develops the capabilities of dynamic accounting information systems. It has a positive impact on the operational efficiency of accounting processes and the overall performance of the organization. Similar to Khalilzadeh Salmasi et al. 2016 found that technology management affects organizational performance. By developing the skills of employees to ensure that their technical skills meet the needs of the organization. technology management contributes to business intelligence success. This is important for organizational efficiency.

H4: Entrepreneurship has a direct influence on organizational performance.

H5: Human resource management influences organizational performance.

H6: Technology management influences organizational performance.

Relationship between organizational competency variables and organizational performance

Prasad and Green, 2015, studied organizational competencies and accounting information system capabilities and found that organizational competencies have a positive impact on the overall performance of the company. Including returns on assets and equity. Market share and competitive advantage, by Yuan and Lo, 2018, it was stated that the ability of employees refers to the skills, knowledge, techniques, and attitudes associated with outstanding job performance. There is a positive relationship with job performance in Taiwan's pharmaceutical industry, the relationship between employee ability and employee performance, which can explain the relationship that occurs between organizational competencies and organizational performance. In addition, Subramaniam et al. 2019 stated that Organizational competencies are measurable competencies required for effective functioning, affecting business success, and organizational performance.

H7: Organizational competency influences organizational performance.

From the review of all the above-mentioned literature. The researchers were able to create a conceptual framework with 5 latent variables. Variables and observable variables 22 variables for further research, as shown in Figure 2.



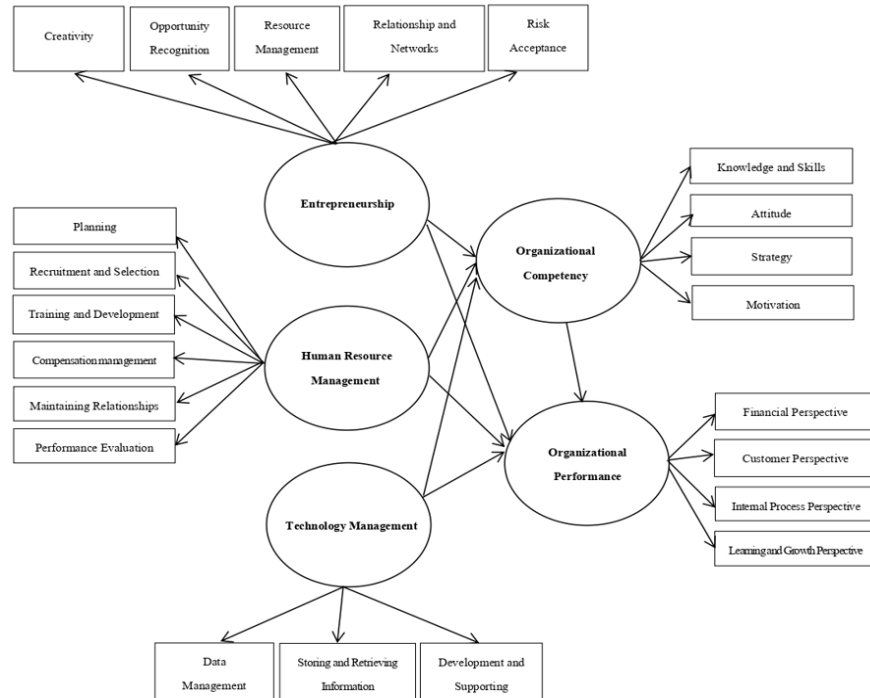


Figure 2 Conceptual framework with latent and observable variables

Conclusion

Through the above review, it can be found that competency is important to the organization, and all the important factors found are those that have been studied in a foreign context. It consists of five main factors: entrepreneurship, human resource management, technology management. This includes correlations reflected in empirical studies that indicate better performance through implementation. Therefore, any organization that wants to improve its performance should consider successfully applying the concept of competency.

Future research procedures

After the researchers have presented modeling methods in the research, the next steps in the research can be shown in figure 3, where the researchers will be able to present the results of the research in the context of the population and sample for further academic and professional benefits.

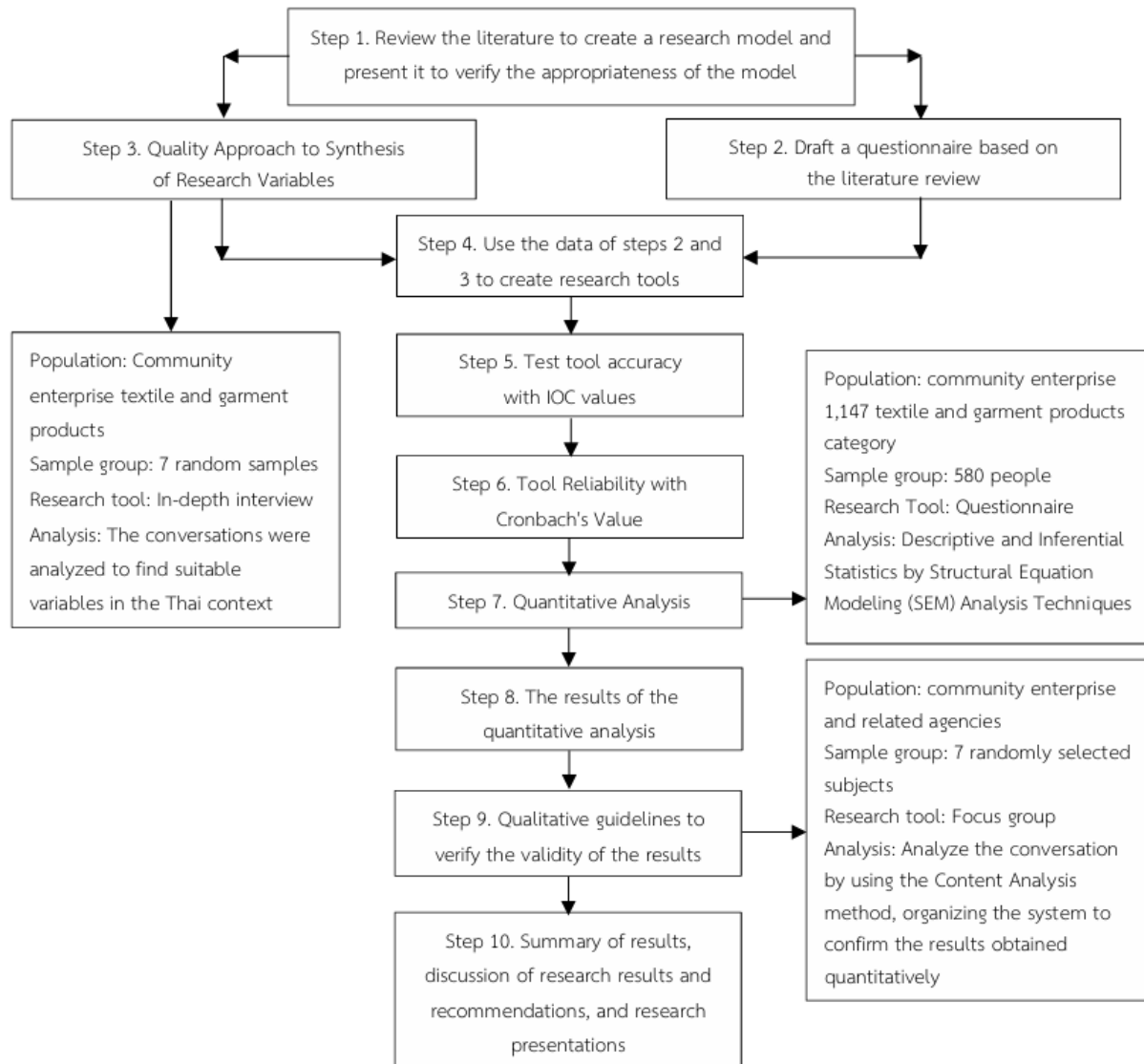


Figure 3 Future research steps

Recommendation

From the above literature review, It was found that competency is important to any organization. The important factors found are those that have been studied from all international contexts, consisting of 5 important factors: entrepreneurship, human resource management, technology management, organizational competency, and organizational performance. Therefore, any organization that wants to drive better performance should consider organizational competencies to be successful.



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