

# Strategic Management to Support the Academic Department of the College of Logistics and Supply Chain in Addressing Personnel Shortage Crises

Boonyavee Khajornkasirat<sup>1\*</sup> and Santipong Jirotkulkit<sup>2</sup>

Suan Sunandha Rajabhat University, 1-U-Thong Nok, Dusit, Bangkok, Thailand,

E-Mail: boonyavee.kh@ssru.ac.th<sup>1</sup>, santipong.ji@ssru.ac.th<sup>2</sup>

\*Corresponding author

## Abstract

This research aims to study the problems, analyze, and prioritize risks in the work processes of the academic department at the College of Logistics and Supply Chain, as well as propose strategies to improve the operational procedures in line with the current situation. The study revealed that a shortage of personnel may result in an increased workload for the academic department, leading to stress, reduced work efficiency, and risks related to the operation at each stage. If these problems are not properly addressed, it may affect the quality of work, and if the shortage continues, it will impact the remaining staff, preventing them from focusing on skill development and reducing work performance.

This research utilized SWOT analysis to assess the academic department's situation, focusing on strengths (such as academic expertise and adaptability), while also identifying weaknesses (such as the lack of an effective support system). The study also considered opportunities for development through the application of new technologies, as well as threats arising from changes within the academic department.

To address the problems and improve the work processes, this research used the TOWS Matrix as a tool to determine management strategies. These strategies focus on leveraging strengths to capitalize on opportunities (SO Strategy), developing and enhancing strengths to respond to potential threats (ST Strategy), improving weaknesses to take advantage of opportunities (WO Strategy), and addressing weaknesses to prevent potential threats that could have a negative impact (WT Strategy). The results of this study will help the academic department improve its work processes strategically and align them with the current situation.

**Keywords:** Strategic management, Process, Personnel Shortage, SWOT analysis, TOWS matrix

## 1. Introduction

Risk management within an organization is a critical task that every organization should prioritize. It is necessary to be carried out annually to ensure that the organization's work yields the most desirable outcomes. The organization's management is responsible for setting policies to guide the organization's members to achieve the objectives, ensuring progress in a clear direction with well-defined goals. Risks can arise from uncertainties in various

situations, including technical, human, social, and political factors, reflecting the occurrence of changes that may lead to losses that cannot be rectified. Therefore, risk management is an essential component of business planning, and a risk management plan is designed to reduce or eliminate risks from certain situations that could negatively impact the business (Dinu, 2012).

Risk identification is a process within the risk management plan. According to Susanne, Iris, and Magdalena (2016), fluctuations in the business environment make risk identification even more important. This step is part of the risk management plan and is the basic procedure that must be carried out initially. Potential risks must be thoroughly analyzed, and organizations should use tools and techniques for risk identification to prepare for risks that may arise. It is essential that risk factors be identified clearly, covering both internal and external factors.

Currently, the College of Logistics and Supply Chain at Suan Sunandha Rajabhat University has a division under the academic vice-dean's office, which is responsible for six tasks: 1) General administration, 2) Curriculum and teaching, 3) Registration and analysis, 4) Admission process, 5) Academic work, and 6) Doctoral degree qualifications. Within this division, the general administration staff handle tasks related to project approval and fund disbursement.

The academic department is facing a staff shortage due to several factors, such as the transfer of capable personnel and the inability of educational institutions to attract enough new employees. This shortage has affected the academic department's operations, leading to a decrease in work efficiency due to a mismatch between the workload and the number of available staff. The tasks involving analysis, calculation, and meticulous work have increased the time needed to complete tasks, resulting in delays and reduced operational efficiency. Therefore, strategic management to support the work of the academic department at the College of Logistics and Supply Chain during this crisis of staff shortages is essential for maximizing the efficiency of the available human resources.

### **1.1 Objectives**

1. To study the problems and work processes of the Academic Department, College of Logistics and Supply Chain.
2. To analyze and prioritize risks in the work processes of the Academic Department, College of Logistics and Supply Chain.
3. To propose strategic improvements in work procedures to align with the current situation.

## **2. Literature reviews**

This literature review examines the existing research and theoretical underpinnings related to strategic management, SWOT, TOWS, and ERM.

### **1. Strategic Management**

Before understanding strategic management, it is crucial to define "strategy." Scholars provide several perspectives on this concept:

Schermerhorn (2002) defines strategy as a comprehensive action plan guiding an organization's long-term direction and resource utilization to achieve goals and maintain

competitive advantage. Strategy represents the "best guess" for future success in competitive or changing environments.

Dess and Miller (1993) categorize strategy into:

1. **Intended Strategies:** Proposed by managers, comprising goals, policies, and action plans to achieve objectives.
2. **Realized Strategies:** A mix of deliberate and emergent strategies developed during implementation, often modified due to environmental changes. Unrealized strategies are parts of intended plans not implemented, while emergent strategies arise unplanned.

Pitts and Lei (2000) define strategy as the ideas, plans, and actions enabling companies to succeed or outperform competitors by executing activities more efficiently.

Wheelen and Hunger (2000) define strategic management as "a set of decisions and actions related to management that determine the long-term direction of a company." This process includes environmental scanning (internal and external analysis), strategy formulation, implementation, and evaluation. They emphasize the importance of assessing opportunities and threats while accounting for the company's strengths and weaknesses.

Pearce and Robinson (2000) describe strategic management as "the set of decisions and actions that result in the formulation and implementation of plans to achieve a company's objectives." They outline the key steps involved:

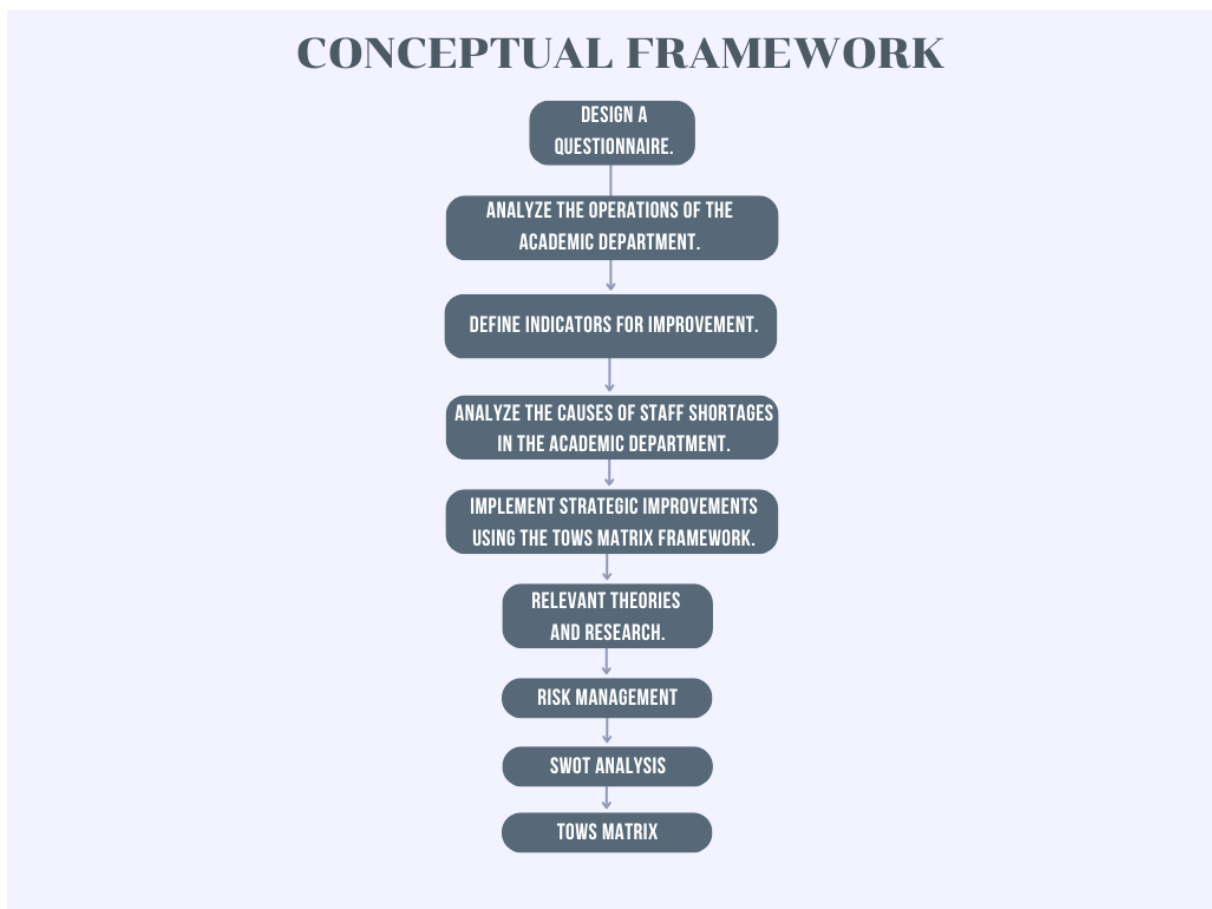
- **Mission definition:** Establishing the organization's purpose, philosophy, and goals.
- **Goal setting:** Analyzing internal strengths and weaknesses.
- **External environment evaluation:** Identifying opportunities, threats, and competitive advantages.
- **Alternative analysis:** Allocating resources to align with external conditions.
- **Best alternative selection:** Ensuring alignment with the company's mission.
- **Long-term objectives:** Setting overarching goals and strategies.
- **Annual objectives:** Establishing short-term strategies supporting long-term goals.
- **Short-term strategies:** Allocating resources effectively for implementation.
- **Performance evaluation:** Assessing strategy success to inform future decisions.

Thompson and Strickland (1999) define strategic management as a five-step process integrating strategy creation and implementation:

1. **Strategic vision formation:** Establishing the organization's long-term direction.
2. **Objective setting:** Translating the vision into specific goals.
3. **Strategy crafting:** Developing actionable plans to achieve objectives.
4. **Strategy implementation:** Executing the chosen strategies with optimal efficiency.
5. **Performance evaluation and adjustment:** Reviewing outcomes and refining strategies based on real-world experiences and changing conditions.

## 2. Methods

This research is both quantitative and qualitative. The data collection for this research includes primary data, such as field surveys, observations, and interviews, as well as secondary data, which consists of information or facts not collected by the researcher directly from the source but obtained from other sources. The focus of the study is on strategic management to support the work of the academic division at the College of Logistics and Supply Chain during a crisis caused by a shortage of personnel. In this research, the researcher has followed the steps according to the conceptual framework as outlined below.



### Population and Sample

The study employed purposive sampling to select employees responsible for specific positions in the finance department, focusing on individuals directly involved in fund disbursement. The sample includes 8 key personnel: project managers, financial staff in the academic department, and finance officers from the College of Logistics and Supply Chain, Suan Sunandha Rajabhat University, Nakhon Pathom campus.

### Research Instruments and Development

To ensure research instrument quality, content validity was applied using input from academic staff and department heads.

## Interview

Structured interviews were conducted to examine the budget allocation process, identifying allowable disbursements and budget-writing methods.

## Focus Group Discussion

A focus group discussion was held with project managers and financial officers to address fund disbursement issues. Insights were gathered to identify problems and propose solutions.

## Data Collection

The data collection occurred from February to July 2024, using primary and secondary sources.

- **Primary Data**
  - *Observation and Field Study*: Observations were conducted at the College of Logistics and Supply Chain, focusing on academic department processes.
  - *In-depth Interviews*: Interviews were conducted with key personnel from the academic department.
- **Secondary Data**

Secondary data included operational information from research documents, theses, academic papers, regulations, government resolutions, press releases, internet sources, and articles.

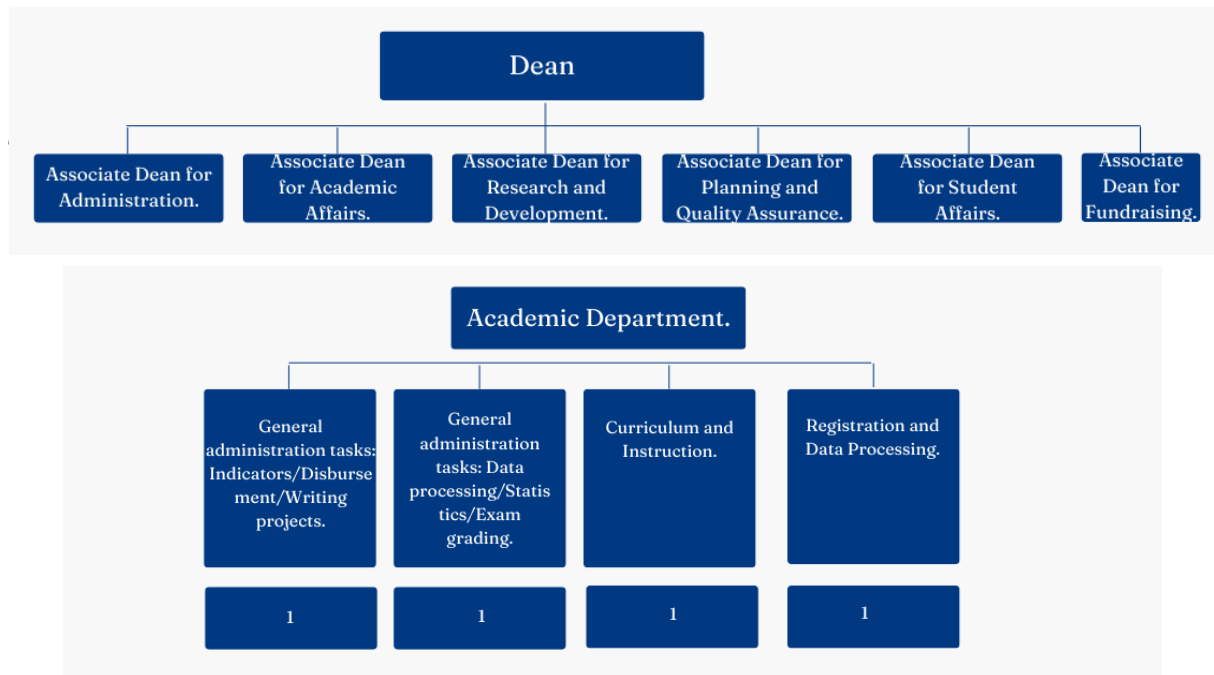
## Data Analysis

A mixed-method approach combined qualitative and quantitative methods. Descriptive analysis examined academic department operations and supply chain characteristics to identify causes of personnel shortages. Descriptive statistics, including sums, averages, percentages, frequency, mean, and standard deviation, were used to analyze data. Content analysis was applied to interpret interview and focus group data.

## 3. Results

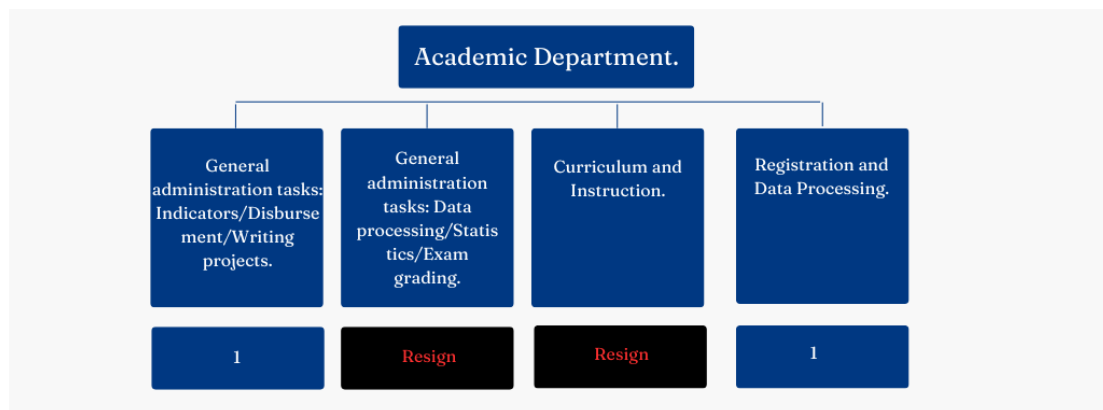
The study was conducted in the strategic management framework to enhance the operational efficiency of the academic department at the College of Logistics and Supply Chain, Suan Sunandha Rajabhat University, Nakhon Pathom campus. Using the collected data, the organizational structure was analyzed to better understand the workflow. Figure 3.1 presents the sequence of work steps, while Figure 3.2 provides a detailed breakdown of the workflow process, highlighting task assignments by the responsible personnel.

Figure 3.1 Organizational Structure Diagram



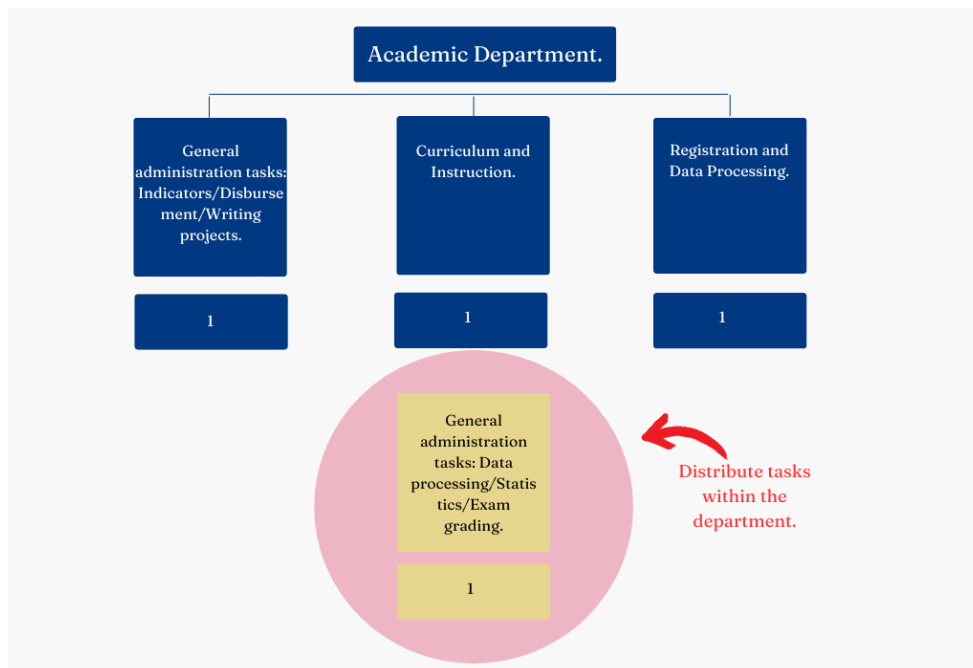
SOURCE: BASED ON OBSERVATION AND FIELD STUDY AT THE ACTUAL LOCATION.

Figure 3.3 DIAGRAM SHOWING THE ISSUE OF PERSONNEL SHORTAGE IN THE WORK PROCESS WITH RESPONSIBILITY ALLOCATION



SOURCE: BASED ON OBSERVATION AND FIELD STUDY AT THE ACTUAL LOCATION.

Figure 3.4 DIAGRAM SHOWING THE CURRENT WORK PROCESS WITH RESPONSIBILITY ALLOCATION



SOURCE: BASED ON OBSERVATION AND FIELD STUDY AT THE ACTUAL LOCATION.

From Figures 3.1 and 3.2, the diagrams show the sequence of work processes in the academic department, illustrating the number of personnel versus the workload each individual is responsible for. The tasks within each work area differ in terms of complexity, expertise, and understanding of the content. It is essential to have skilled and knowledgeable personnel performing these tasks. Furthermore, building a deep understanding of each work process requires time, which directly impacts the future efficiency of the tasks.

However, as shown in Figure 3.3, the issue of personnel shortages is evident due to staff resignations and job transfers. This has become a significant variable in managing work, making it difficult to control. From Figure 3.4, it can be seen that replacement personnel are filling roles in course management and teaching. In the curriculum work area, staff must have a high level of knowledge, understanding, and attention to detail to effectively perform their duties. The intensity of the work, with its numerous details, requires proper management to ensure the work is completed on time and in an orderly manner. Consequently, each task takes a long time to complete due to the various steps and approval processes involved, all of which require thorough checks and validations.

From Figure 3.5, it can be analyzed that the diagram highlights the personnel shortage in the current work process, with responsibilities in general administration (such as processing data, statistics, and exam checks) being redistributed to the academic department. To ensure a clear and connected workflow, a flowchart of the work process from start to finish is necessary. This would allow for a more effective analysis of the interlinked steps and identification of any weaknesses in the process.

### Problem Analysis

This section will analyze the issue of personnel shortages using the SWOT Analysis theory to demonstrate the Strengths, Weaknesses, Opportunities, and Threats that impact the project fund disbursement process as follows:

Table 3.1: SWOT Analysis of Strengths, Weaknesses, Opportunities, and Threats

S: Strength	W: Weakness
<p>1. Expertise and Experience: The remaining staff in the academic department possess knowledge and experience that can help in training and developing new employees or enhancing the skills of existing personnel.</p> <p>2. Strong Teamwork: Having a team that works well together and understands the workflow process can help alleviate the workload when there is a shortage of personnel.</p>	<p>1. Increased Workload: When there is a shortage of personnel, the academic department may face a heavier workload, leading to stress and a decrease in work efficiency.</p> <p>2. Lack of Continuous Development: A shortage of personnel may prevent the department from prioritizing the development or new research, which is crucial for academic progress.</p>
O: Opportunity	T: Threats
<p>1. Process Improvement: This situation may present an opportunity to review and improve work processes to increase efficiency and reduce redundancy.</p> <p>2. Adoption of Technology: The shortage of personnel could drive the academic department to adopt technology or automation systems to help manage tasks with a heavy workload.</p>	<p>1. Further Loss of Personnel: Increased workload and rising stress levels may lead remaining staff to consider resigning, which would worsen the situation.</p>

This SWOT analysis can help the academic department better prepare to handle the shortage of personnel by maximizing strengths and opportunities while simultaneously seeking ways to reduce weaknesses and avoid potential threats in the future.

Creating a TOWS Matrix from the SWOT analysis will help identify various strategies that can be used to address the personnel shortage in the academic department. The TOWS Matrix links internal factors (Strengths and Weaknesses) with external factors (Opportunities and Threats) to develop strategies as follows:

inside \ Outside	S: Strength	W: Weakness
O: Opportunity	<p><u>SO(Strengths-Opportunities)</u></p> <p>Using Strengths to Seize Opportunities:</p> <ul style="list-style-type: none"> <li>- Developing Work Processes with Technology: Leverage the expertise and experience of existing personnel to train the team on using new technologies to improve work processes. This approach is particularly beneficial in times of personnel shortages, as technology can help optimize tasks and increase overall efficiency.</li> </ul>	<p><u>WO(Weaknesses-Opportunities)</u></p> <p>Reducing Weaknesses by Seizing Opportunities:</p> <ul style="list-style-type: none"> <li>- Using Technology to Reduce Workload: Address the issue of increased workload by implementing new technologies to assist with repetitive or time-consuming tasks, thereby streamlining operations and reducing the burden on existing staff.</li> <li>- Developing Continuous Learning Processes: Take advantage of the</li> </ul>



	<p>- Strengthening Teamwork: Utilize the strong collaboration within the team to jointly develop new processes that incorporate technology, especially in situations where there is a need to enhance work efficiency. This teamwork will help to implement solutions that address the challenge of a reduced workforce.</p>	<p>opportunity to improve work processes for greater efficiency, enabling ongoing staff development despite the limitations of a reduced workforce. This ensures continuous skill enhancement and adaptation to changing needs.</p>
<b>T: Threats</b>	<p><u>ST(Strengths-Threats)</u></p> <p>Using Strengths to Defend Against Threats:</p> <p>- Maintaining Quality Through Effective Teamwork: Leverage the strength of a well-coordinated and capable team to maintain the quality of education and research, even with a shortage of staff. Team collaboration ensures continuity and high standards in output despite limited resources.</p> <p>- Retaining Staff by Distributing Workload: Utilize the expertise and experience of existing staff to systematically share workloads, reducing stress and preventing further loss of personnel. This approach helps retain valuable team members while ensuring a balanced workload.</p>	<p><u>WT(Weaknesses-Threats)</u></p> <p>Reducing Weaknesses and Avoiding Threats:</p> <p>- Managing Workload and Maintaining Quality: Develop flexible approaches to workload management to ensure that the quality of education and research is maintained despite the shortage of personnel. This allows for efficient task allocation while preserving the standards of the institution.</p> <p>- Using Temporary Employment Strategies: If the shortage of staff significantly impacts operations, consider hiring temporary workers to help alleviate the workload and maintain work quality during the crisis. This temporary solution can provide immediate support while ensuring continuity in operations.</p>

## 4. Conclusion

Key Findings from the Research on "Strategic Management to Support the Academic Department of the College of Logistics and Supply Chain in Crisis Situations Due to Personnel Shortages" are as follows:

### 1. Strategic Planning and Management

Addressing personnel shortages requires prioritizing tasks, optimizing resource allocation, and streamlining work processes to eliminate redundancies and improve efficiency.

### 2. Internal Personnel Development

Training and skill enhancement programs empower existing staff to manage increased workloads and adopt more flexible roles, mitigating the impact of the crisis.

### 3. Technology Utilization

Leveraging technology improves task accuracy and reduces repetitive work, enabling the academic department to maintain operations during periods of limited staffing.

#### 4. Coordination and Collaboration

Strengthened collaboration and coordination between departments enhance work efficiency and minimize disruptions caused by personnel shortages. Teamwork and mutual support are critical for smooth operations.

#### 5. Temporary Hiring and External Support

Short-term solutions, such as temporary hiring or utilizing external labor, can effectively reduce workloads and lessen the negative effects of staffing shortages.

To summarize, effective strategic management equips the academic department to maintain operational efficiency during personnel shortages. This is achieved through clear planning, staff development, technology adoption, enhanced collaboration, and the strategic use of additional resources when necessary.

However, improving work processes to enhance work efficiency through the use of appropriate strategies, including managing operational accuracy, is consistent with the study "The Role of Sustainable HRM in Supply Chain, Profitability, and Resource Utilization." Uncertain Supply Chain Management (Waiyawuththanapoom, P., & Jernsittiparsert, K. 2022) found that sustainable human resource management practices have a positive effect on the supply chain. Furthermore, sustainable HRM also plays a positive role in operational accuracy, and operational accuracy shows a positive role in improving the supply chain.

## References

- Miller, A., & Dess, G. G. (1993). Assessing Porter's (1980) model in terms of its generalizability, accuracy and simplicity. *Journal of management studies*, 30(4), 553-585.
- Dinu, A.-M. (2012). Modern Methods of Risk Identification in Risk Management. *International Journal of Academic Research in Economics and Management Sciences*, 1(6), 67-71.
- Khecharanant, N. (2009). Strategic management. Bangkok: C.A.D. Education.
- Priyakorn, P. (2001). Strategic planning: Concepts and applied approaches. Bangkok: Samatharm Publishing.
- Wattanasin, P., & Decharin, P. (1999). Strategic management and business policy. Bangkok: Chulalongkorn University Press.
- Uon, V. (2005). Strategic management: Steps and methods for analyzing strategic case studies and business plans (2nd ed.). Bangkok: Central Express Company.
- Tiyaw, S. (2007). Strategic management (2nd ed.). Bangkok: Thammasat University Press.
- Kaewjamnong, A. (2008). Strategic management. Songkhla: Nasin Advertising Company.
- Alkhafaji, A. F. (2003). Strategic management formulation, implementation, and control in a dynamic environment. New York: Haworth Press.
- Perce, A. J., & Robinson, R. B., Jr. (2009). Formulation, implementation, and control of competitive strategy (11th ed.). New York: McGraw-Hill.
- Pitts, R. A., & Lei, D. (2000). Strategic management: Building and sustaining competitive advantage (2nd ed.). USA: South-Western Publishing.

Robins, S. P., & Coulter, M. (2002). Management. New Jersey: Prentice Hall.

Scherhorn, J. R. (2002). Management (7th ed.). USA: John Wiley & Sons.

Wheelen, T. L., & Hunger, J. D. (2006). Strategic management and business policy. New Jersey: Prentice Hall.

Waiyawuththanapoom, P., & Jernsittiparsert, K. (2022). The role of sustainable HRM in supply chain, profitability and resource utilization. *Uncertain Supply Chain Management*, 10(2), 365-374.