Guidelines for Strategic Adaptive Leadership Development of Administrators of Eastern Vocational Education Institutions Towards Excellence in Accordance with Thailand's Vocational Education Management Policy 4.0

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Abstract

This research aims to study the characteristics, factors and presentation of guidelines for strategic adaptive leadership development of administrators of Eastern vocational education institutions towards excellence following Thailand's vocational education management policy 4.0. The study was done through documentary analysis, empirical data from 15 successful administrators' in-depth interviews, and questionnaires concerning 3 aspects of strategic adaptive leadership; personal characteristics, developing work towards excellence, and personnel development and adaptation to the next normal. The data was then collected with a sample of executives and personnel of vocational education institutions, 622 persons in Eastern Thailand. This research uses a mixed methodology. Data were analyzed by exploratory factor analysis, tested by data triangulation methodology technique, and confirmation of guidelines drafted by the connoisseurship approach. The research results indicated that the strategic adaptive leadership of administrators of Eastern vocational education institutions towards excellence were 9 elements, including (1) charisma leadership and inspirational motivation; (2) individualized consideration and working as a team; (3) creating an innovative educational organization; (4) adaptive strategy and challenges; (5) building a positive corporate culture; (6) creating a creative corporate atmosphere and shared values; (7) innovative leadership maturity; (8) mindset modification and intellectual stimulation; and (9) digital skills development toward excellence. The findings can be used to guide the development of executive competencies to have adaptive leadership under the next

trajectory of the vocational qualification benchmarks to achieve excellence following vocational management policies 4.0 of Thailand.

Keywords: Strategic Adaptive Leadership, Administrator, Vocational Education Institution, Vocational Education 4.0

1. Introduction

The Institute of Vocational Education's mission is to provide vocational training for students with the competencies needed in the 21 Century. It provides technical and technological standards to meet the needs of the country's development following the 20-year national strategy. Administrators and teachers are key drivers of the reforms. Academic development and quality behavior change providing opportunities for collaborative discussions with learners encouraging time spent on extracurricular activities Seek knowledge for self-improvement and teaching to its full potential. Building a learning society provide appropriate and effective learning materials—creating vocational innovation institutions following Thailand's Vocational Education Management Policy 4.0. Furthermore, the institute's performance report should be continuously monitored at all stages (Office of the Vocational Education Commission, 2019). Therefore, academic administration and vocational practice are at the heart of development. Vocational education institutions are decentralized in curriculum development, teaching and learning process, student development activities, Measuring and evaluating, and creating media and learning resources. To ensure that learners' quality aligns with the standard qualification framework. Have a systematic and clear implementation plan. The Office of the Vocational Education Commission has established a focus on quality development as a guideline for driving the curriculum, and learning management, including measuring and evaluating the results to increase the quality of learners, is important. Vocational education institution administrators are considered to influence the institution's effectiveness and learners' success. A good executive or leader must have various knowledge, abilities and attributes. The leadership of a stimulating executive Promote, support and lead teachers to achieve their goals. Therefore, it can be said that educational institution administrators' leadership is related to learners' academic achievement. Therefore, executives leading the transition to the quality of education are considered modern leaders who must focus on real reform. Because leaders who do not have the knowledge or understanding of quality can lead the organization to failure and get lost (Phakamach et al., 2022).

The era of education disruption and the coronavirus pandemic (COVID-19). It has profoundly impacted educational organizations' operations, operations, and operations management. This has resulted in national and international competitions (Mukaram et al., 2021). The next normal requires a specific model or method of management to maintain the quality of education and minimize the impact on the teaching and learning of students. However, in real-world situations, vocational school administrators will have many obstacles in leading the institution to achieve its goals, resulting in the performance of learners, including graduates, remaining substandard or may not meet the skills of the 21 Century as they should. Therefore, senior leaders need to change the direction of thinking and management in a new way that keeps pace with changes. Especially in the era of digital education, where a complete strategic plan covering the organization's entire business is required (Saengkaew et al., 2021), strategic methods such as organizational

restructuring are implemented. Creating a corporate culture, applying ICT systems for education, Human resource management, educational innovation, online education management, and strategic control and evaluation are integrated into a strategic management model for vocational institutions. Senior leaders are directly responsible for the strategic management of vocational institutions at all stages, with activities that are five basic elements: 1) strategic formulation, 2) strategic analysis, 3) strategic planning, 4) implementation of strategies, and 5) strategic control and evaluation (Phakamach et al., 2022).

When the socioeconomic environment changes, organizations must adapt to survive. Phakamach et al. (2021a) argue that modern education executives need to have the potential to use leadership appropriately to build relationships that influence change to achieve the common goals of everyone in the organization. They can use the art and process of influencing individuals or groups of people and can build trust in those involved. It can build trust and support everyone to achieve that goal. Have confidence in work performance throughout the environment and encourage cooperation to create benefits in performing duties. However, the COVID-19 crisis has been a major factor in the major change in education, especially vocational education, and the next phase (Yıldırım et al., 2021). The crisis has caused vocational education institutions, both learners and instructors, to adapt to online learning and practice. Many subjects are starting to see the possibility of online instruction, which has always struggled to adapt. This could be an opportunity to reshape or further their education in the future. However, all vocational education institutions are units that recognize the importance of strategic planning in educational management. Each institution has established a policy to create an educational strategic plan starting from clearly defining the institute's vision, mission and objectives. However, in the strategic planning of the vocational education institute, the past has also encountered problems and obstacles, such as the rapidly changing internal and external environment, such as economic, political, and digital technologies, which are considered important problems. These changes will hinder the strategic planning of vocational education institutions and may also affect future education reshaping and development. Therefore, vocational education institution administrators need to review the concept and direction of educational development to plan the institute's strategy following the context of such changes. This will affect the success of vocational education institutions and the quality of future learners (Phakamach et al., 2022).

Strategic adaptive leadership of Vocational Education institute executives to strive for excellence in accordance with Thailand's Vocational Education Management Policy 4.0 is an important feature that can support executives to have the potential to manage the Institute effectively and efficiently in the next trajectory. Therefore, the research team was interested in studying the characteristics, elements, and guidelines for strategic adaptive leadership development of Eastern Vocational Education Institutions' administrators towards excellence per Thailand's Vocational Education Management Policy 4.0. The findings can be used as a guideline for developing vocational education institutions in Thailand to provide executives at all levels with strategic adaptive leadership. They may result in the achievement of vocational education management under the next trajectory scenario and quality learners with desirable characteristics. Vocational education institute executives in Thailand are likened to senior executives in business organizations who can make decisions and adapt in planning, budget allocation, human resource development, new strategy development, and collaboration. This requires

knowledge and management skills in order for the management of the institution to be consistent with the realities of society. The Office of the Vocational Education Commission has always focused on developing executives' potential following Thailand's Vocational Education Management Policy 4.0 by promoting the development of skills necessary for careers and surviving in a rapidly changing society. This is to enable vocational education institute executives and related parties to apply the research results to guide the management of institutions in the digital age to ensure quality and efficiency following the Vocational Education Standards B.E. 2562 (2019) in line with human resource development under the 20-year National Strategy 2018-2037 and the National Education Plan 2017-2036 for the further development of Thailand.

2. Research Objectives

1. To study the characteristics of strategic adaptive leadership of administrators of Eastern vocational education institutions towards excellence in accordance with Thailand's Vocational Education Management Policy 4.0.

2. To analyze the elements of strategic adaptive leadership of administrators of Eastern vocational education institutions towards excellence in accordance with Thailand's Vocational Education Management Policy 4.0.

3. To propose guidelines for the development of strategic adaptive leadership of administrators of Eastern vocational education institutions towards excellence in accordance with Thailand's Vocational Education Management Policy 4.0.

3. Research Conceptual Framework

Based on reviews of literature, documents, and related research, the research team designed a research methodology by defining a conceptual framework to find the guidelines for strategic adaptive leadership development of administrators of Eastern vocational education institutions towards excellence in accordance with Thailand's Vocational Education Management Policy 4.0, shown in Figure 1.
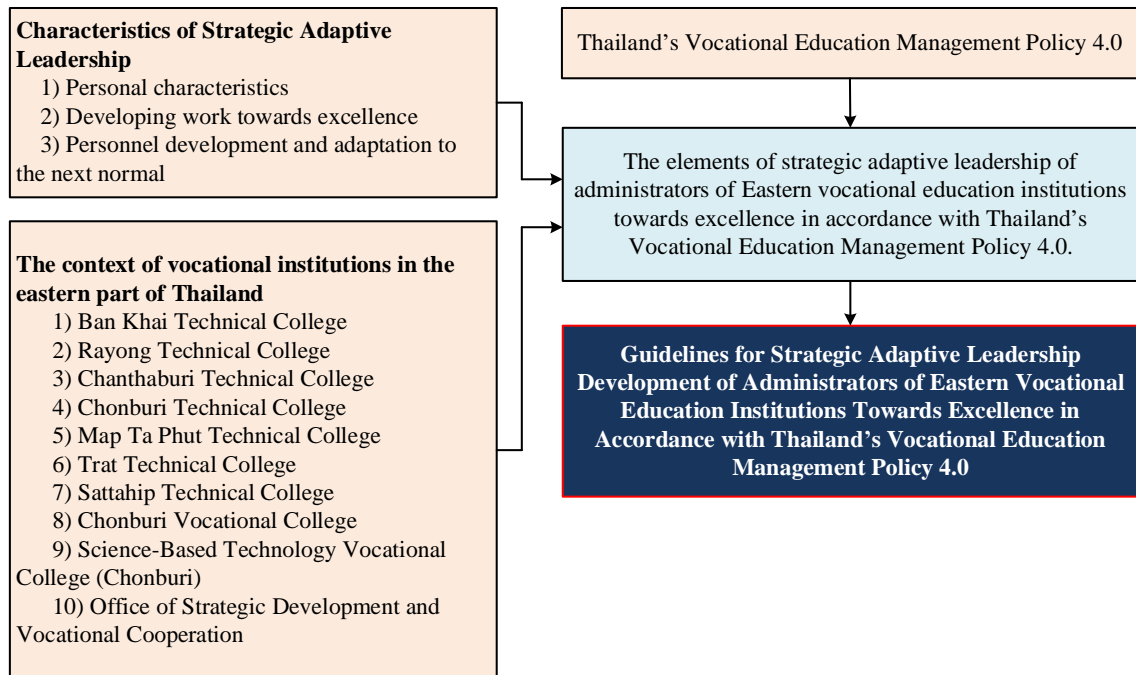
Figure 1 Research Conceptual Framework

4. Research Methodology

This research uses a mixed methodology between quantitative and qualitative research, with the relevant details as follows:

4.1 Population and Samples

1) Populations include teachers and educational personnel of vocational education institutions in the Eastern region. For the academic year 2022, 1,487 students from 9 institutions in 4 eastern provinces, including Chonburi, Rayong, Chanthaburi and Trat.

2) Sampling the quantitative sample includes teachers and educational personnel in 9 vocational education institutions. The size is determined by the formula for calculating the number of samples of Taro Yamane. Using the proportional method and using the simple random sampling method by lottery method, a sample of 622 person was obtained, while the qualitative sample consisted of (1) executives of vocational education institutions in the Eastern region; The size of the sample was determined using the snowball sample selection method; and (2) 9 experts in vocational and technical education administration from a specific selection based on convenience sampling, according to the specified qualifications as follows:

(1) Executives at the director or former director level in public and private vocational institutions.

(2) Executives with experience in managing public and private vocational institutions. At least 3 years.

(3) Successful and empirical quality executives in developing educational organizations at all levels.

4.2 Research Instruments

The tools used in this research include a five-level rating scale questionnaire based on Likert's methodology, which focuses on 3 areas: personal characteristics, work development toward excellence, and human resource development and adaptation. Set the criteria for measuring scores as follows:

Strongly Agree; the weight was scored as 5.

Agree; the weight was scored as 4.

Neutral; the weight was scored as 3.

Disagree; the weight was scored as 2.

Strongly Disagree; the weight was scored as 1.

The interview section uses the semi-structure interview guide. They are determining the quality of instruments by testing structural and content accuracy using 3 research tool experts. Consider selecting a clause with a conformity index of .5 or higher, an IOC value of .902, and experimenting with 30 non-sample vocational school executives. Then tested for confidence using Cronbach's Alpha Coefficient formula, and the item total correlation was .927.

4.3 Data Collection

Qualitative information by interviewing experts online quantitative data section by creating internet data links A total of 622 questionnaires were returned. 622 copies, or 100%, were collected between October and December 2022.

4.4 Data Analysis and Synthesis

Qualitative data uses content analysis to define topics/groups and key concepts that form the essence of research using narrative methods, while quantitative uses social science ready-made statistical programs by enumerating percentages, averages, and standard deviations. The tool is used to study the elements of strategic adaptive leadership of administrators of Eastern vocational education institutions towards excellence following Thailand's Vocational Education Management Policy 4.0. Use a 5-level estimation scale with numerical values used as criteria for consideration: Level 5 means Strongly Agree, Level 4 means Agree, Level 3 means Neutral, Level 2 means Disagree and Level 1 means Strongly Disagree.

An average score of 4.50 - 5.00 means there is practicality at the Strongly Agree level.

An average score of 3.50 - 4.49 means there is practicality at the Agree level.

An average score of 2.50 - 3.49 means there is practicality at the Neutral level.

An average score of 1.50 - 2.49 means there is practicality at the Disagree level.

An average score of 1.00 - 1.49 means there is practicality at the Strongly Disagree level.

The information obtained will then be re-checked for completeness and accuracy to lead to a conclusion and discussion.

4.5 Research Procedures

The research has 4 stages of research plan and procedure, respectively, as follows:

Step 1: Study of the characteristics of strategic adaptive leadership of administrators of Eastern vocational education institutions towards excellence in accordance with Thailand's Vocational Education Management Policy 4.0, consists of (1) Study theoretical concepts from relevant documents, textbooks, and research and use documentary methods on leadership and strategic adaptive leadership of vocational education institute executives. Moreover, (2) In-Dept Interviews of 15 vocational institute executives with empirical and successful performance managing vocational education institutions in Thailand.

Step 2: Analysis of the elements of strategic adaptive leadership of administrators of Eastern vocational education institutions towards excellence in accordance with Thailand's Vocational Education Management Policy 4.0. Using the results from step 1 of the study, create a questionnaire that is an estimation scale and then take the data to Exploratory Factor Analysis (EFA).

Step 3: Examining the elements of strategic adaptive leadership of administrators of Eastern vocational education institutions towards excellence in accordance with Thailand's Vocational Education Management Policy 4.0. Using the Data Triangulation Methodology, the empirical data in steps 1 and 2 examine the data to determine whether they are similar or different and how they are consistent to draw conclusions, characteristics and elements using the narrative method.

Step 4: Presentation of strategic adaptive leadership of administrators of Eastern vocational education institutions towards excellence in accordance with Thailand's Vocational Education Management Policy 4.0. The seminar was based on 9 experts in vocational and technical education management from the selection of convenience sampling experts by using the information in step 3 to determine the appropriate approach to the strategic adaptive leadership development of administrators of Eastern vocational education institutions towards excellence in accordance with Thailand's Vocational Education Management Policy 4.0 by Content Analysis.

5. **Results**

Based on research studies, research results can be displayed and analyzed according to the research objectives as follows:

1. Characteristics of strategic adaptive leadership of administrators of Eastern vocational education institutions towards excellence in accordance with Thailand's Vocational Education Management Policy 4.0. consists of 3 features:

1) Personal characteristics include proactive, high expectations for job achievement and commitment to completion. Flexible Adapt to the situation and have a broad vision. Non-stick and creative Act with dignity for personnel and democracy. Make decisions with cause and effect. Have good human relations, fairness and morality and ethics, and have academic and research knowledge in preparing courses that align with

the world's changing situation. Teaching and learning arrangements include the appropriate use of educational materials, technologies and innovations. Invent and experiment with new teaching techniques yourself.

2) Developing work towards excellence consists of Setting the goal of education management for excellence in accordance with the Vocational Education Management Policy 4.0, which is in line with the institute's development with an emphasis on the participation of all parties—analysis of current conditions, opportunities, and obstacles that correspond to real-world situations. Develop clear systems and structures. Assign and supervise operations accordingly.   A leader in creating participatory courses that meet the needs of learners. Community and National Strategy. Use the development work to consider merit. Promote teamwork by involving stakeholders in thinking and doing. Responsible for regularly meeting together to develop creative academic work. Creation and development of research and innovation in vocational education for national development.

3) Personnel development and adaptation to the next normal include developing personnel with knowledge and ability to organize teaching and learning and adapt through various methods such as conferences, seminars and training and inviting speakers with real experience outside to give lectures and take them to study in an excellent vocational education institution and providing training according to interests and aptitudes. Encourage faculty to improve teaching and learning. They are conducting research in the classroom, Innovating and experimenting with new teaching methods. Organize activities or exhibitions for faculty to display and disseminate academic works in various ways. They were encouraging teachers to be academic and research leaders to advise others. Promote and support the academic promotion and professional advancement.

2. The elements of strategic adaptive leadership of administrators of Eastern vocational education institutions towards excellence in accordance with Thailand's Vocational Education Management Policy 4.0. The results of the analysis of the exploratory elements from empirical data are shown in Table 1, which reveals that the strategic adaptive leadership of administrators of Eastern vocational education institutions towards excellence in accordance with Thailand's Vocational Education Management Policy 4.0 consists of 9 elements and 108 indicators, all of which describe the strategic adaptive leadership of vocational education institute administrators of Eastern vocational education institutions towards excellence in accordance with Thailand's Vocational Education Management Policy 4.0. was 84.89%, which is detailed in each component as follows:

Table 1 All elements can describe the strategic adaptive leadership of administrators of Eastern vocational education institutions towards excellence in accordance with Thailand's Vocational Education Management Policy 4.0.

Elements	Element name	Number of items	Eigen Value	Percentage of variance
1.	Charisma Leadership and Inspirational Motivation	16	16.767	22.446
2.	Individualized Consideration and Working as a Team	15	15.532	17.009
3.	Adaptive Strategy and Challenges	14	13.245	11.212
4.	Creating an Innovative Educational Organization	13	11.198	9.004
5.	Building a Positive Corporate Culture	12	9.502	7.372
6.	Creating a Creative Corporate Atmosphere and Shared Values)	11	7.014	6.415
7.	Innovative Leadership Maturity	10	5.761	5.002
8.	Mindset Modification and Intellectual Stimulation	9	4.102	3.037
9.	Digital Skills Development Toward Excellence	8	3.729	2.202
Total				**83.69**

1) Charisma Leadership and Inspirational Motivation means that the leader behaves as an example to his followers and is willing and inspired to see the work's value and challenges in the organization's best interest. There are 16 components: (1) Stable and self-control, (2) Be creative and listen to other people's opinions, (3) Be committed and dedicated to accomplishing tasks, (4) Adhere to creative ideas, (5) Be a leader of change, (6) Be flexible by adapting to situations and solve problems promptly, (7) Be respectful and do not place themself above others, (8) Behave like friends and be friendly with colleagues, (9) Be kind, helpful, and caring for the suffering of colleagues, (10) Behave as a role model, (11) Be a knowledgeable and academic leader, (12) Have positive thinking and practice skills, (13) Have good moral and ethical relations with the general public, (14) Be fair, trustworthy, and trustworthy, (15) Take into account academic and professional standards, and (16) Create positive thinking and enthusiasm for colleagues.

2) Individualized Consideration and Working as a Team refers to the leader's needs. Respect individual differences and promote teamwork. There are 15 elements: (1) building good relationships, (2) providing opportunities for people to learn new things, (3) creating an atmosphere of support and promoting academic work, (4) assigning tasks according to the potential of followers, (5) honoring others and acting with equality, (6) empowering individuals to learn new things as needed, (7) planning work with the interests of colleagues and organizations in mind, (8) building commitments within the organization, (9) promoting two-way communication, (10) constructive mentoring, (11) creating values and challenges by encouraging teamwork, (12) bringing followers to experience the beauty of the future, (13) creating and conveying what leaders aim. (14)

Expressing commitment to common goals and visions, and (15) Encouraging positive collaborators and encouraging positive imagination throughout the organization.

3) Adaptive Strategy and Challenges means that leaders can combine their knowledge, skills, experience and creative ideas with their management strategies to create quality and competitive advantage. There are 14 components in this area: (1) having a cunning ability to solve problems and make decisions, (2) using educational innovations to develop vocational education, (3) acting as a good role model, (4) having a progressive way of thinking both in-depth and broad, (5) having timely knowledge and solving specific problems, (6) having the courage to innovate new and different ideas, (7) having modern teaching and learning techniques, (8) being open to experience in the preparation of future vocational courses, (9) being well-versed in strategic management, (10) understanding the principles of change management and applying them for good, (11) adjusting management styles according to changing contexts, (12) being able to adapt when changing educational situations, (13) implementing strategies that are appropriate to the situation, and (14) being able to adapt to society and the nation.

4) Creating an Innovative Educational Organization refers to a model of innovation that allows an organization to exist under the conditions of change and development of innovators at the vocational level. There are 13 elements in this area: (1) Understand the patterns and practices that facilitate innovation, (2) Define the appropriate innovation organizational structure, (3) Create an organizational culture that supports innovation in all dimensions, (4) Define the vision and strategy that will lead to an innovative organization, (5) Define the right hardware, software, and digital platform structure, (6) Create a leadership team that strives to be a systematic innovation organization, (7) A team with educational innovation habits, (8) Create an atmosphere and innovation ecosystem with a unique identity, (9) Create effective knowledge management innovations, (10) People are creative and exchange learning freely, (11) Create new options and career development in the digital age, (12) Aim for an organization of excellence innovation, and (13) Inspire learning throughout the organization.

5) Building a Positive Corporate Culture refers to the importance of the right-thinking process in the current management and is ready to support the organization's development into a competitive future. There are 12 elements in this area: (1) establishing good performance standards, (2) establishing an organizational structure that is appropriate for the situation, (3) establishing practical regulations, (4) building collaborations in the team, (5) creating a teamwork system, (6) supporting and motivating good intentions, (7) creating positive awareness throughout the organization, (8) creating a system of mutual acceptance, (9) creating a system of commitment to the organization, (10) showing responsibility when things go wrong, (11) creating sustainable value for the organization, and (12) building loyalty to the organization.

6) Creating a Creative Corporate Atmosphere and Shared Values means that leaders create a positive corporate atmosphere and look for opportunities to be ready to adapt and be sensitive to all kinds of changes and risks. There are 11 elements in this area: (1) creating unity in the organization, (2) creating an atmosphere of exchange of learning, (3) being an academic and professional role model, (4) leading a learning organization, (5) having a constructive academic and research circle, (6) encouraging and facilitating learning at all times, (7) diligently attending academic seminars at both national and international levels, (8) allowing colleagues to choose the right approach and take action

with potential, (9) creating an atmosphere of harmony, (10) cultivating creative shared values throughout the organization, and (11) encouraging people to feel successful and achieving leadership at all levels to lead to a lifelong learning organization.

7) Innovative Leadership Maturity means that leaders always have ideas and practices for innovation in education. There are 10 components in this area: (1) having an innovative leadership personality and skills, (2) leading the development and dissemination of educational innovations, (3) being a good role model for innovation, (4) understanding the process of creating and developing educational innovations, (5) promoting the development of new educational technologies and innovations, (6) creating an atmosphere of lifelong learning, (7) creating an innovation ecosystem and aiming for an organization of educational innovation, (8) setting the direction and enabling continuous and sustainable innovation, (9) powerful leadership communication, and (10) developing the competencies of educational innovations to serve learners effectively.

8) Mindset Modification and Intellectual Stimulation refers to a leader who makes followers alert to change by being aware of problems and how to solve them with intelligence. There are 9 components: (1) knowledge management process for the benefit of developing students' skills, (2) being well-versed and aware of academic work, (3) having the ability to mentor others, (4) having the ability to use media, innovation, and modern technology, (5) being able to create systematic performance reports, (6) having knowledge and understanding of techniques and methods of teaching both offline and online, (7) understanding their potential by learning new teaching methods and experimenting in practice, (8) being up-to-date and able to solve specific problems promptly, and (9) promoting the development of new ideas to keep up with the world.

9) Digital Skills Development Toward Excellence refers to how leaders make followers aware of the development of digital skills, skills that must be learned and understood in the age of digital transformation in order to strive for excellence. There are 8 components in this area: (1) having applied thinking and adapting to all situations, (2) being able to adapt to the new media phenomenon, (3) learning and understanding a variety of sciences, (4) having the ability to negotiate to deal with problems, (5) having knowledge and understanding of rational and emotional thinking, (6) having knowledge and understanding of complex problem-solving skills, (7) having the ability to innovate, always developing digital skills, and (8) striving for excellence throughout the organization.

3. Guidelines for Strategic Adaptive Leadership Development of Administrators of Eastern Vocational Education Institutions Towards Excellence in Accordance with Thailand's Vocational Education Management Policy 4.0. The results of the composition examination using the data-based triangulation methodology and expert-based seminars found that:

1) There are five ways to develop executive strategic adaptive leadership: self-development, Exemplary practice Development activities including the exchange of learning, model-based education, and experiential learning.

2) The strategic adaptive leadership of administrators of Eastern vocational education institutions towards excellence in accordance with Thailand's Vocational Education Management Policy 4.0 appropriate using the PIER process consists of 1) Planning (P), 2) Implement (I), 3) Evaluation (E), and 4) Reflection (R). Improvement of patterns and methods and planning for the next phase of development

3) Success factors in the strategic adaptive leadership of administrators of Eastern vocational education institutions towards excellence in accordance with Thailand's Vocational Education Management Policy 4.0. includes adaptive leadership development courses. Supporting adaptive leadership development resources. Continuous and systematic monitoring and evaluation and creating national and international leadership development networks.

6. Conclusion and Discussion of the Results

Based on the research studies, objective findings can be summarized and the findings discussed, which are important in the following areas:
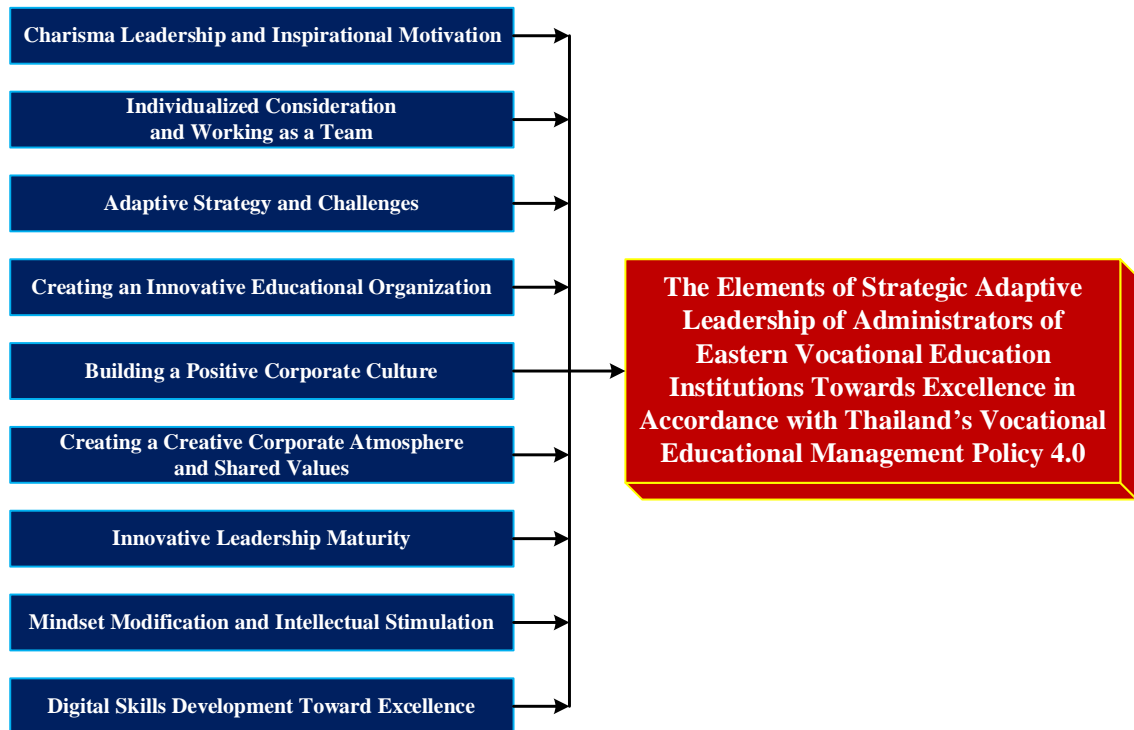
6.1 Conclusion

1) The strategic adaptive leadership of administrators of Eastern vocational education institutions towards excellence in accordance with Thailand's vocational education management policy 4.0. consist of 3 aspects: (1) Personal characteristics, (2) Developing work towards excellence, and (3) Personnel development and adaptation to the next normal.

2) The elements of strategic adaptive leadership of administrators of Eastern vocational education institutions towards excellence in accordance with Thailand's Vocational Education Management Policy 4.0. There are 9 elements and 108 indicators: (1) Charisma Leadership and Inspirational Motivation, (2) Individualized Consideration and Working as a Team, (3) Adaptive Strategy and Challenges, (4) Creating an Innovative Educational Organization, (5) Building a Positive Corporate Culture, (6) Creating a Creative Corporate Atmosphere and Shared Values, (7) Innovative Leadership Maturity, (8) Mindset Modification and Intellectual Stimulation, and (9) Digital Skills Development Toward Excellence, shown in Figure 2.

3) Guidelines for Strategic Adaptive Leadership Development of Administrators of Eastern Vocational Education Institutions Towards Excellence in Accordance with Thailand's Vocational Education Management Policy 4.0. It consists of (1) five ways to develop strategic adaptive leadership of executives. Exemplary practice Case studies, teaching and training. Meditation, Learning Exchange The use of media, technology and innovation in modern education. Model education and experiential learning. (2) The Strategic Adaptive Leadership Development of Administrators of Eastern Vocational Education Institutions Towards Excellence in Accordance with Thailand's Vocational Education Management Policy 4.0. Using the PIER process: (1) Planning (P), (2) Implement (I), (3) Evaluation (E) and (4) Reflection (R) by defining a clear annual policy and plan so that all vocational institutions can use it to develop executives with higher competencies.

To create and develop leaders at all levels who can adapt to changing situations, including establishing appropriate procedures for entering the position. In addition, other vocational institutions can use this element and approach to formulate policies and mechanisms for developing adaptive leadership by applying it to the context of that institution. This will result in that institution being able to develop education for the country's further development.

Figure 2 The elements of strategic adaptive leadership of administrators of Eastern vocational education institutions towards excellence in accordance with Thailand's Vocational Education Management Policy 4.0.

6.2 Discussion

Based on the results of this research, there are important issues that can be discussed in order to see the research issues that are consistent with past research results and past academic works as follows:

1) Elements of charisma, leadership and inspirational motivation. It is one of the elements of strategic adaptive leadership; influencing the followers is an important part. Phakamach et al. (2022) and Fernandez and Shaw (2020) found that the behavior of leaders by influencing or predatory by focusing on the achievement of their work as well as having good relationships with instructors and staff, which creates a friendly atmosphere, can create cooperation and inspiration. Willing to act with sincerity and the ability to travel to achieve their goals.

2) Elements of individualized consideration and working as a team. It is an element of strategic adaptive leadership; that is, individualization is the treatment of individuals in particular with empathy and assistance to those who lack reasonable experience, in line with Phakamach's research. Phakamach et al. (2021a) found that educational institution executives are likened to senior executives in business organizations who have decision-making power in planning, planning, and planning. Budget allocation, personnel development, and collaboration require knowledge, skills, and management strategies to align institutional management with the realities of society.

3) Elements of adaptive strategy and challenges. It is an element of strategic adaptive leadership; leaders can combine their knowledge, skills, and creative ideas with strategic management abilities to improve the quality and efficiency of work processes within the organization, in line with research by Striteska and Prokop (2020) that found

that people who live a quality and happy life must adapt to live a living. It is not. A good strategic management model for vocational education consists of 1) strategic planning, 2) strategy evaluation, 3) direction, 4) strategy formulation, 5) strategy implementation, and 6) strategy implementation.

4) Elements of creating an innovative educational organization It is one of the elements of strategic adaptive leadership; that is, the innovative model will help the organization to exist under the conditions of change, in line with Phakamach's research. Moreover, Karia and Abu Hassan Asaari (2019) academic work says that innovative leaders should do everything in the organization, such as collaborating with stakeholders. It encourages good and talented people to improve themselves significantly—rewarding or rejoicing, developing innovation and creating an effective educational innovation organization.

5) Elements of building a positive corporate culture. It is one of the elements of strategic adaptive leadership; that is, creating a positive corporate culture is the main factor that executives must have to lead the organization to achieve its goals. This aligns with research by Rehman and Iqbal (2020) that found a need for new education in a time of transformative educational change. Leaders must be able to work under pressure with others. Lay out the process of developing people to embrace a strong corporate culture, keep up with the changes, and develop a transparent and fair assessment system, including organizing personnel to suit the work to achieve the goals.

6) Elements of creating a creative corporate atmosphere and shared values. It is one of the elements of strategic adaptive leadership; successful leaders in organizations must create a positive atmosphere, create shared values, and set a good example for personnel. Phakamach et al. (2022) and Fernandez and Shaw (2020) found that leaders must focus on mobilizing organizational talent to use their potential to work towards goals. Know how to manage and invest in new technologies. Understand the art of managing their team to be the most effective, encouraging personnel to be leaders and supporting the proper use of technology on time.

7) Elements of innovative leadership maturity. It is one element of strategic adaptive leadership: vocational institution leaders should have innovative leadership maturity, a behavior that demonstrates to followers a vision and commitment to change for the organization's benefit, in line with Phakamach's research. Phakamach et al. (2022) and Karia and Abu Hassan Asaari (2019) found that innovative leadership figures find ways to combine skills. Knowledge and ideas are scattered across different parts of the organization to create innovations to create unique advantages, and continuous improvement and development to create sustainability in the future. In particular, strategies related to ICT systems and educational innovations.

8) Elements of mindset modification and intellectual stimulation It is one of the elements of strategic adaptive leadership: it encourages followers to think about solving problems or issues with new strategies and approaches, in line with Miller's (2019) work that says that intellectual stimulation is when leaders help followers to think rationally, tested by real-world situations, and encourage followers to be creative and able to achieve their goals through the use of intelligence.

9) Elements of digital skills development toward excellence, in line with Bartsch et al. (2021) and Phakamach et al. (2021b) research that says leaders can offer the knowledge and skills they need to live and apply in their careers. Digital learning enables

followers to collaborate with leaders in any situation, enabling organizations to exist and grow sustainably amidst transformative digital transformation.

Finally, it can be concluded that from the research study on "Guidelines for Strategic Adaptive Leadership Development of Administrators of Eastern Vocational Education Institutions Towards Excellence in Accordance with Thailand's Vocational Education Management Policy 4.0", based on the research methodology model presented, the elements and guidelines for the strategic adaptive leadership development of vocational education institute executives in Thailand can be obtained. This will benefit relevant educational agencies to use in developing the competencies of vocational education institute executives to be effective.

7. Suggestions

7.1 Suggestions for Applying the Research Results

The relevant departments are the Office of the Vocational Education Commission. The composition can be used as a benchmark/benchmark for vocational education institution executives. Each component of the attributes or behaviors may be classified as a training kit for self-development according to the competencies of the management. There are two categories: (1) Core: academic and research-oriented behaviors; and (2) Functional competencies: such as developing academic and research work focused on teaching and learning. This includes developing the knowledge and abilities of faculty and staff to keep pace with the transformation of education.

7.2 Suggestions for Further Research

It consists of (1) participatory action research on adaptive leadership aimed at developing executives with skills in the management of modern vocational education institutions, (2) educational innovations should be studied for the development of executives to have knowledge and skills to develop the knowledge and abilities of faculty and educational personnel, and (3) in-depth research should be conducted to develop vocational institute executives to have initiatives and academic abilities, especially in the field of curriculum and new teaching and learning arrangements following the context of Thai society and strive for international development.

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9. The Authors

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REFERENCES

Bartsch, S., Weber, E., Büttgen, M. & Huber, A. (2021). Leadership matters in crisis-induced digital transformation: How to lead service employees effectively during the COVID-19 pandemic. *Journal of Service Management, 2021, 32*(1), 71-85.

Fernandez, A.A. & Shaw, G.P. (2020). Academic leadership in a time of crisis: The coronavirus and COVID-19. *Journal of Leadership Studies, 2020, 14*(1), 39-45.

Hawley, S.R. (2021). Using adaptive leadership principles to support Public Health 3.0 in multidisciplinary undergraduate education. *Leadership in Health Services, 2021, 34*(3), 248-262.

Karia, N. & Asaari, A.H. (2019). Leadership attributes and their impact on work-related attitudes. *International Journal of Productivity and Performance Management, 2019, 68*(5), 903-919.

Miller, A.E. (2019). *Leadership Theory Analysis: Adaptive Leadership, Teaching Course.* Azusa, CA: Azusa Pacific University, 1-21.

Mukaram, A.T., Rathore, K., Khan, M.A., Danish, R.Q. & Zubair, S.S. (2021). Can adaptive–academic leadership duo make universities ready for change? Evidence from higher education institutions in Pakistan in the light of COVID-19. *Management Research Review, 2021, 44*(11), 1478-1498.

Office of the Vocational Education Commission. (2019). *Vocational Qualification Standards.* Bangkok: Office of the Vocational Education Commission.

Phakamach, P., Wachirawongpaisarn., S. & Rungsrisawat, S. (2021a). Creative academic leadership development of educational innovation of professional administrators in higher education institutions, Bangkok. *Proceedings of the 16th Professional and Organizational Development Network of Thailand Higher Education Annual Conference 2021*, 25-26 March 2021, 137-148.

Phakamach, P., Wachirawongpaisarn, S. & Charoenchue, W. (2021b). Digital leadership: definition, skills, roadmap and organization's digital transformation drives. *Proceedings of the 2nd RMUTR International Conference 2021, Nakhon Pathom, Rajamangala University of Technology Rattanakosin,* 7-9 July 2021, 267-277.

Phakamach, P., Wachirawongpaisarn, S., Phakamach, V., Ratchavieng, A., Chaisakulkiet, U. & Onsampant, S. (2022). Guidelines for adaptive leadership development of Rajamangala University of Technology administrators in Thailand under new and next normal situations. *Journal of Knowledge Exchange, Prince of Songkla University, 2022, 3*(2), 1-19.

Rehman, U.U. & Iqbal, A. (2020). Nexus of knowledge-oriented leadership, knowledge management, innovation and organizational performance in higher education. *Business Process Management Journal, 2020, 26*(6), 1731-1758.

Saengkaew, P., Soeikrathoke, P., Wachirawongpaisarn, S. & Phakamach, P. (2021). The educational innovative organization in the digital era model for vocational education management under new normal situation in Thailand. *Vocational Education Innovation and Research Journal, 2021, 5*(2), 75-89.

Striteska, M.K. & Prokop, V. (2020). Dynamic innovation strategy model in practice of innovation leaders and followers in CEE countries—A prerequisite for building innovative ecosystems. *Sustainability, 2020, 12*(3918), 1-12.

Yıldırım, S., Bostancı, S.H., Yıldırım, D.Ç. & Erdoğan, F. (2021). Rethinking mobility of international university students during COVID-19 pandemic. *Higher Education Evaluation and Development, 2021, 15*(2), 98-113.