

# Chapter 11


## Sustainability Education Management Scenarios Under Changes in the BANI Era

**Pornchai Jedaman**

 <http://orcid.org/0000-0002-8559-6880>


*Rajabhat Mahasarakham University, Thailand*

**Minthiva Pitchaya-Auckarakhun**

 <https://orcid.org/0009-0003-1581-7603>


*Rajabhat Mahasarakham University, Thailand*

**Kasama Kasorn**

 <https://orcid.org/0009-0003-1910-2082>

*Chiang Rai Rajabhat University, Thailand*

**Sanya Kenaphoom**

 <https://orcid.org/0000-0002-9833-4759>

*Rajabhat Mahasarakham University, Thailand*

### ABSTRACT

*The BANI era represents the rapid changes that affect organizations and employees. Scenario-based planning is a strategic approach that leaders use to manage risks and uncertainty, resulting in effective decision-making and goal achievement. This framework sheds light on how to manage sustainability education during transitional periods. A mixed-method study, which includes qualitative interviews and a quantitative survey, investigates critical scenarios such as leadership competencies in disruptive times, human resource management, strategic change management, decentralization, and participation. These scenarios have a direct and indirect impact on sustainable corporate culture. Competent leadership and adaptable human resource management are critical for fostering organizational sustainability in the face of BANI-era uncertainty. Effective management of these challenges ensures that organizations remain resilient and capable of achieving long-term objectives despite the changing landscape.*

**Keywords:** *Sustainability, education management scenarios, under changes, the BANI era.*

DOI: 10.4018/979-8-3693-7989-9.ch011

Copyright ©2025, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

## INTRODUCTION

Sustainable educational management from human-centered education, such as education for all, inclusive education, and all for education. Also, sustainable development goals, include local issues, e.g., quality of life for people of all ages, changes in population structure, income inequality, and environmental crises. (Office of the Permanent Secretary, Ministry of Higher Education, 2023) Quality education management in setting educational standards, organizing systems, and planning structures, and developing education for sustainability must be carried out continuously, emphasizing participation, and responsibility from all sectors involved in organizing systems and planning structures, for improving the quality of education to achieve the goals. Successful management of educational organizations, with systematic procedures and planning aimed at achieving goals, is an important factor for leaders who have leadership skills and must operate systematically. (Ademola et al, 2014) Especially planning, organization management, human resource management, coordination, directing, and commanding, including, effective performance evaluation. (Chanphet, 2018) However, strategic management in leading educational organizations is both a science and an art of leaders who have leadership that affects the success of achieving the important objectives and goals that are of maximum benefit to the educational organization successfully.

While, the strategic management is a continuous process of defining the mission and objectives of an organization within the context of its external environment, determining appropriate strategies, implementing the strategies, and exercising control over the strategies. (Jedaman et al, 2023) Strategic educational management is thus a set of long-term choices about operational objectives, policies, and plans of action, in which organizational leaders formulate their strategies, taking into account important factors such as the stated objectives of the program and the environment that influences its implementation. (Ke & Yu, 2023) Therefore, the challenges for competency leadership to be involved in the strategic management process of educational organizations include environmental analysis, establishing organizational direction, strategy formulation, strategy implementation, and strategic control that ensures strategies implemented can lead to the achievement of the set goals through communication for coordination, and how to control the behavior of stakeholders in implementing the work while evaluating the strategies. (Pramjeeth & Mutambara, 2022) Meanwhile, the factors that influence the management of educational organizations in the adjustment of organizational strategy are very important for educational organizations that have to operate under intense competition. If educational organizations cannot set a clear direction, the organizational strategy will not be able to drive competitiveness and keep up with the changes effectively toward the success of the future.

The current situation of rapid change in the world is caused by many overlapping factors such as technological advancement, changes in human behavior, the unpredictability of sudden situations, uncertainty and difficulty in explaining, and difficulty in predicting the outcome that results in disruption in the operation to achieve the organization's goals. (Duangchuen, 2018) As the pace of change increases, it affects organizational management and decision-making, as well as the mentality of personnel who have to work in a world of chaos. Therefore, developing organizations to have clarity in dealing with the impact of change is a key issue in managing an effective educational organization. BANI era is a new definition of change by Brittle (B) of factors of operations that are always changing and can collapse quickly, Anxious (A) that makes people in the organization feel anxious and stressed. Nonlinear (N) that makes old ways of thinking, reasoning, and experiences no longer able to predict, and guarantee success. Incomprehensible in information and news, as well as, more abundant factors and complex. (Ratanapitakdhada & Trirat, 2023) The situation of sudden change in the BANI era is a challenging issue for leaders to successfully manage sustainable organizations and is one of the important factors that help drive the management to achieve the goal of the new paradigm of managing change in educational organizations effectively.

A paradigm is a model and framework of ideas, knowledge, and educational approaches that use scientific methods as a tool to search for knowledge and truth in creating solutions to the problems that are continuously being faced to be resolved and eventually changed in a better direction. The paradigm means scenarios of thought, a mind map, a mental picture and worldview of thought, concrete knowledge, and values, including a realistic and reflectable model, a body of knowledge used as a tool

to find the truth under the current circumstances leading to future success. (Jedaman et al, 2023) Strategic educational organization management and strategic planning are essential to driving the increasingly complex and volatile changes in the BANI era promptly to the changing circumstances. (Victoria Kimball, 2019) Strategic management planning from the use of future scenario-based planning is a creative planning concept that will increase the confidence and connection with the strategic organizational planning, which is essential for educational leaders to be alert, intelligent, clear communication, and have the competence to manage the sustainable educational organization change successfully. However, stems from the rapidly changing global context that defines today's business and educational environments. BANI, which stands for Brittle, Anxious, Nonlinear, and Incomprehensible, refers to the complex and unpredictable challenges that societies, organizations, and individuals face today.

Traditional educational management approaches may no longer be adequate to provide future leaders with the skills required to thrive in this uncertain era. This paper investigates sustainability education management strategies that can assist educational institutions in remaining adaptable and resilient, as well as developing a generation of students prepared to face the environmental, social, and economic challenges of the BANI world. Climate change, global crises, and technological disruptions are reshaping societies, making sustainability education more important. The paper aims to demonstrate how educational leaders can create curricula and management practices that incorporate sustainability, adaptability, and innovation. By addressing these needs, the paper offers educators a framework for preparing students not only with technical knowledge but also with the critical thinking and emotional intelligence needed to navigate the volatility of the BANI era. It emphasizes the importance of proactive education management in ensuring a sustainable future through case studies and forward-looking scenarios. Thus, this provides clarity on sustainability education management scenarios and analyzes the causal relationships between sustainability education management scenarios under changes in the BANI era to impacts on management scenarios to be successful and drive the expansion of results leading to operations to achieve the goals and maximum benefits of effective management of educational organizations under changes in the BANI era.

## LITERATURE REVIEWS

Sustainable development goals (SDGs) seek to shift the world into a sustainable and resilient path, ensuring that no one is left behind. The fourth goal of the SDGs aims to ensure inclusive and equitable quality education, promote lifelong learning opportunities for all, and emphasize that global education efforts must give central importance to quality and learning for all. (Ademola et al, 2014) This focuses on access, outcome, and quality to provide equal access to affordable vocational training, eliminate gender and wealth disparities, achieve universal access to quality higher education, and promote lifelong learning opportunities for all. (Chanphet, 2018) Education is a mechanism for developing competencies and the ability to instill ideas in citizens and students such an important determinant to competitiveness, which the trend of change was the transition to the “Arab Spring” revolution through using social media to make the 21st century an important issue in determining educational management. (Dararuang, 2021) One example is the awakening of the private sector in the United States, where there is a wide-ranging discussion on next-generation skills, through the 21st-century skills partnership network. The BANI era is a rapid change in the world that describes more than just the nature of the situation the world is facing, but also its impact on both the organizational dimensions and the feelings of the people in the organization. Brittle of Factors of operations, in addition to always changing, can also collapse quickly, whether it is the operating model that can be easily disrupted, the original strategy and operating plan, or even the working method. Anxious makes the personnel in the organization feel anxious and stressed because the nature of work has changed from the original to responding to the speed and uncertainty of the dynamic situation. Nonlinear means that the way of thinking and reasoning, including the original experience, is no longer able to predict and guarantee success, resulting in errors, delays, and decisions. Incomprehensible information and news, as well as, the large amount and complexity of factors, both real and false, make analysis, and conclusion more difficult. (Samkoset, 2022) The situation in the BANI era is that changes occur rapidly, and forecasting for planning is more

difficult. In contrast, the change management strategy of educational organizations must be a strategy that makes educational operations achieve the set goals.

Therefore, it is necessary to have a common understanding of the changes that occur, the capabilities of leaders, and cooperation from personnel in the organization to enable educational organizations to manage changes effectively. The key person who will lead the organization to cope with the challenges in the era of BANI World is the leader who has leadership in communicating and coordinating between the organization and its personnel, by passing on the organization's goals and supporting the team's work to reach the set goals. A major challenge is that leaders must adapt because today's world is more complex and difficult to manage than they once experienced. Traditional strategies, methods, and successes may no longer be applicable. The fragility of everything can cause concerns about the direction of an organization, management methods that are used to produce results, and the complexity of situations, contexts, and factors that can make things harder to predict, leading to confusion, hesitation, or even indecision. (Chullasutthi et al, 2023) When leaders are the link between the organization and its personnel cannot overcome the challenges in this BANI era, the organization's intentions will not be transmitted to its personnel, and team management may not be effective, which will not achieve the organization's desired goals. Dealing with change is a challenge for leaders of educational organizations. The BANI era is fast, intense, and volatile, making organizational change difficult, especially for leaders who are in a role that must manage and direct the organization due to managing in a world full of fragility, anxiety, and when combined with a lack of knowledge, and unpredictability, organizational leaders need to balance important issues. (Grabmeier, 2020) The balance of organizational direction between growth, and stability to enable the organization to grow sustainably in the long term, and the balance of people between productivity and engagement to be able to manage human resources are the key forces that will help the organization achieve the desired goals, even if it is in the BANI era or a new world that will change in the future.

The significance of future scenario creation includes identifying and searching for key strategic issues and plan-level decisions, identifying key drivers, a clear and predictable set of key drivers, uncertainties that are likely to be critical points in the future, processing and generating information for feedback, communicating for understanding, and accepting changes to plans. While, education management scenarios under changes in the BANI era is an important issue and create valuable benefits from planning based on future scenarios can help reduce the loss of opportunities to open minds to receive new information in creating practices, doing activities in the plan that support multiple possible scenarios from managing risks in the implementation of strategic action plans. (Jedaman et al, 2023) However, some operations face serious uncertainties that cannot be easily resolved. Always being prepared by reskilling, upskilling, and being eager to learn new knowledge are the keys to solving the problems that arise, and quickly finding new solutions without sticking to the old problem-solving methods by having both short-term and long-term backup plans. The organization's leaders must always change themselves to have leadership that is up to date with rapid changes, have the ability, and be aware of the various changes that occur. (Janlasee et al, 2024) Especially in digital technology, which requires constant learning, clear communication, open-mindedness to accept the opinions of the personnel, and planning to manage in the BANI era with maximum efficiency. In this matter, the leadership competencies in the disruption era of the ability to lead an organization through rapid and uncertain change will be the most important thing for a high-performance leader to make effective decisions. So, human resource management for changes in management and development that can adapt and respond to rapid changes is essential to create sustainability for an organization. (Guzmána et al., 2020) Strategic management for changes in strategic planning and management are essential to set direction and adapt to changes in the market and environment, having a clear and flexible strategy. (Makmee, 2018) Decentralization and participation in the changes in all parts of an organization enhance resilience and the ability to respond quickly to change, and a sustainable corporate culture is essential to maintain the stability and continuity of an organization. (Sakdadach et al, 2023) Preparing to cope in advance is very important, as being alert and developing into an organization with competitive potential, reducing future risks, due to high readiness to cope, developing a framework that is consistent with possible directions, and developing strategies to the level of practical activities to be consistent with changes, including participation in the decision-making process of personnel and stakeholders in creating a sustainability organizational culture. In particular, competent organizational leaders and human resource management are most important in creating organizational sustainability.

Which, change management is the concept of management of educational organizations to change educational management towards the achievement of results such as changing policies and roles of organizational leaders, strategic management, and focusing on organizations, and personnel ineffective educational management quality. To achieve the expected results, a set of measures must be implemented including a strategic planning of educational management toward success by setting clear management directions. Also, the sustainability education management scenarios under changes in the BANI era has key points of this study, which are a conceptual framework leading to research questions to achieve the goals and guide the research implementation as follows: (1) How are the sustainability education management scenarios under changes in the BANI era of elements on leadership competencies in the disruption era, human resource management for changes, strategic management for changes, decentralization, and participation for changes, including sustainable corporate culture to indicators? (2) How to the causal relationships between sustainability education management scenarios under changes in the BANI era to consistent with empirical data?

## **MATERIALS AND METHODS**

This study used a mixed method research design that included both qualitative and quantitative data to combine participatory action learning with multi-contextual and cultural perspectives to complete the research and provide explanations and conclusions based on the study's findings on sustainability education management scenarios under changes in the BANI era. The spatial studies were conducted in an education service office near the Basic Education Commission (OBEC) in Thailand. Concerning the research participants and tools, the study included 20 key informants from the cluster chairman who were chosen through purposive sampling and focus groups. In addition, the multi-stage cluster sampling technique included 400 samples of directors from the area education office and school directors.

The research instruments used for data collection were: 1) A structured interview on sustainability education management scenarios to address leading the organization on leadership competencies in the disruption era, human resource management for changes, strategic management for changes, decentralization, and participation for changes, including sustainable corporate culture, it consisted of 5 interview topics all concerned, and it contained questions such as - How are the sustainability education management scenarios under change? 2) A semi-structured questionnaire addressed to leading the organization on the causal relationships between sustainability education management scenarios under changes in the BANI era. It consisted of 5 rating scales divided into 5 parts, and each part addresses questions on specific causal relationships as follows: part 1; leading the organization with leadership competencies in the disruption era, part 2; human resource management for changes, part 3; strategic management The entire questionnaire contained open-ended suggestions, with a reliability value of 0.89.

The data collection and equerry methods included document analysis, which consisted of synthesizing information from relevant documents and related research for the integration and development of a conceptual framework about participatory action learning, and individual in-depth interviews to multi-contextual and cultural perspectives among 20 key informants from the cluster chairman to take the results for analysis of sustainability education management scenarios. Regarding data analysis, qualitative data on sustainability education management scenarios under changes in the BANI era in the elements and indicators were analyzed by using three main stages, i.e., data reduction to be able of coding to classify qualitative variables for enumerate the frequency, data organization is a classification of variables and grouping of variables into dimensions of conceptual then the elements are grouped into ideas, call this method of the indicator-concept model, data interpretation for identifying directions and trends of relationships between concepts, by explaining and interpreting the logical relationship to a conclusion. The causal relationships between sustainability education management scenarios under changes in the BANI era as quantitative data were analyzed by descriptive statistics including frequency, percentage, mean, standard deviation, skewness, kurtosis, Chi-square, and correlation coefficient using covariance statistics, and structural equation model (SEM) by LISREL programmed.

## MAJOURS FINDINGS

Research results as the findings as follows:

### a) Sustainability Education Management Scenarios under Changes in the BANI Era.

The sustainability education management scenarios under changes in the BANI era of 5 elements include 1) leadership competencies in the disruption era to 5 sub- elements of (1.1) flexibility, adaptability, and risk management, (1.2) learning ability and self-confidence, (1.3) teamwork and use of technology to support work, (1.4) communication and creative thinking, (1.5) positive attitude and mindset, 2) human resource management for changes to 4 sub- elements of (2.1) development of high-performance human resources, (2.2) focus on performance creation and driving personnel potential as the main factor, (2.3) human resource management strategy, (2.4) the role of human resource executives, 3) strategic management for changes to 4 sub- elements of (3.1) strategic objectives, (3.2) strategic planning, (3.3) strategic formulation process, (3.4) implementation of the plan, 4) decentralization, and participation in changes to 3 sub-elements of (4.1) delegation of responsibility, (4.2) co-knowledge, co-thinking, co-practicing and developing, co-evaluation, (4.3) building a network of partnerships, and 5) sustainable corporate culture to 3 sub- elements of (5.1) personnel-oriented culture, (5.2) innovation-oriented culture, (5.3) detail-oriented and results-oriented culture into 19 indicators shown in Table 1.

**Table 1.** The elements, sub-elements, and indicators of sustainability education management scenarios under changes in the BANI era.

<b>The elements</b>	<b>Sub- elements</b>	<b>Indicators</b>
<b>1. Leadership Competencies in the Disruption Era.</b>	<b>1.1 Flexibility, Adaptability, and Risk Management.</b>	• In the BANI era, the changes are rapid and uncertain, the leaders must be flexible, adaptable, and effectively manage risks for the survival and sustainability of the organization.
	<b>1.2 Learning Ability and Self-Confidence.</b>	• The ability to learn new things, continuously develop skills, and self-confidence of leaders are essential to leading organizations through the challenges of a rapidly changing era.
	<b>1.3 Teamwork and Use of Technology to Support Work.</b>	• Effective collaboration within teams and the use of technology as a support tool will be key factors in moving organizations forward in a complex and uncertain environment.
	<b>1.4 Communication and Creative Thinking.</b>	• Effective communication and creative thinking are essential tools for problem-solving and developing new ideas to address complex challenges in the BANI era.

**Table 1.** Continued.

<b>The elements</b>	<b>Sub- elements</b>	<b>Indicators</b>
	<b>1.5 Positive Attitude and Mindset.</b>	<ul style="list-style-type: none"> <li>• A good positive attitude and mindset of a leader will help to enhance achievement motivation and promote a good working atmosphere in the context of organizational leadership in the BANI era.</li> </ul>
<b>2. Human Resource Management for Changes.</b>	<b>2.1 Development of High-Performance Human Resources.</b>	<ul style="list-style-type: none"> <li>• Developing high-performance personnel is the most important thing in the BANI era, by High-performance people can adapt and cope better with challenges, and rapid changes, and also help organizations to be competitive and sustainable.</li> </ul>
	<b>2.2 Focus on Performance Creation and Driving Personnel Potential as the Main Factor.</b>	<ul style="list-style-type: none"> <li>• A strong focus on performance and driving the organization to its full potential with a focus on creating effective results will enable the organization to succeed in a complex environment.</li> </ul>
	<b>2.3 Human Resource Management Strategy.</b>	<ul style="list-style-type: none"> <li>• Having a clear strategy for human resource management is essential to ensure that personnel development and organizational drive are aligned with key goals in this rapidly changing era.</li> </ul>
	<b>2.4 The Role of Human Resource Executives.</b>	<ul style="list-style-type: none"> <li>• The role of human resource leaders is crucial in driving the potential of people who are a key factor in leading the organization in the desired direction.</li> </ul>
<b>3. Strategic Management for Changes.</b>	<b>3.1 Strategic Objectives.</b>	<ul style="list-style-type: none"> <li>• Strategic objectives are essential in setting clear operational goals to be effective in an uncertain and complex environment by creating opportunities for goals to be adjusted according to circumstances and stakeholder feedback.</li> </ul>

Table 1. Continued.

The elements	Sub- elements	Indicators
	<b>3.2 Strategic Planning.</b>	<ul style="list-style-type: none"> <li>• Systematic strategic planning that allows people to participate in determining the direction of operations can build trust and acceptance in a strategic plan that is flexible and relevant to the situations that affect the organization.</li> </ul>
	<b>3.3 Strategic Formulation Process.</b>	<ul style="list-style-type: none"> <li>• Involving personnel and stakeholders in the strategy formulation process fosters a sense of ownership and participation in the change process, and decentralizing decision-making from the planning stage helps to make the resulting strategy comprehensive and meet the needs of all parties.</li> </ul>
	<b>3.4 Implementation of the Plan.</b>	<ul style="list-style-type: none"> <li>• Putting the plan into action in the BANI era is a crucial step in the face of rapid and uncertain change, with decentralized decision-making at different levels of the organization enabling timely and effective responses to emerging situations.</li> </ul>
<b>4. Decentralization, and Participation in Changes.</b>	<b>4.1 Delegation of Responsibility.</b>	<ul style="list-style-type: none"> <li>• Clear assignment of responsibilities is essential in the decentralization of the BANI era, it involves not only delegation of duties but also cooperation, and participation in decision-making.</li> </ul>
	<b>4.2 Co-knowledge, Co-thinking, Co-practicing and developing, Co-evaluation.</b>	<ul style="list-style-type: none"> <li>• Participation of all sectors in decision-making, and implementation is essential in the BANI era to help create mutual understanding and buy-in, and to facilitate a smooth, effective transition from planning to evaluation, enabling the process to be inclusive and adaptable.</li> </ul>



**Table 1.** Continued.

<b>The elements</b>	<b>Sub- elements</b>	<b>Indicators</b>
	<b>4.3 Building a Network of Partnerships.</b>	<ul style="list-style-type: none"> <li>• Strengthening the network of partnerships to address the challenges of the BANI era in a diverse manner and enabling the exchange of resources, knowledge, and experiences of the benefits of adaptation and sustainability.</li> </ul>
<b>5. Sustainable Corporate Culture.</b>	<b>5.1 Personnel-Oriented Culture.</b>	<ul style="list-style-type: none"> <li>• Creating a personnel-focused culture will help create a work environment that supports the development of personnel’s skills and well-being, which is essential to retain and develop the capabilities of the team in the BANI era in taking care of and valuing people is the key to creating sustainability for the organization.</li> </ul>
	<b>5.2 Innovation-Oriented Culture.</b>	<ul style="list-style-type: none"> <li>• In the BANI era of rapid change and uncertainty, an innovation-focused culture will enable organizations to adapt to changing environments and innovate in a chaotic environment, empowering employees to think and act in new ways, which are key factors in driving a sustainable organization.</li> </ul>
	<b>5.3 Detail-Oriented and Results-Oriented Culture.</b>	<ul style="list-style-type: none"> <li>• Focusing on details, results will be critical to organizational performance in a context of rapid and abrupt change.</li> </ul>

b) Causal Relationships between Sustainability Education Management Scenarios under Changes in the BANI era.

The causal relationships between sustainability education management scenarios under changes in the BANI era including 1) leadership competencies in the disruption era (LCD), 2) human resource management for changes (HRMC), 3) strategic management for changes (SMC), 4) decentralization, and participation in changes (DPC), and 5) sustainable corporate culture (SCC). By the level of sustainability education management scenarios under changes in the BANI era in all 5 elements of high levels (Mean of 4.22, Std. of 0.46). When considering each aspect separately, it was found that the aspect with the highest average value is leadership competencies in the disruption era (Mean of 4.27,

Std. of 0.52), next in line such as human resource management for changes (Mean of 4.23, Std. of 0.56), strategic management for changes (Mean of 4.22, Std. of 0.55), decentralization, and participation in changes (Mean of 4.21, Std. of 0.58), the part with the lowest average value is sustainable corporate culture (Mean of 4.15, Std. of 0.72), respectively. The skewness has a negative value between 0.429 - and 0.992, and kurtosis has a value between 0.184 to 0.761, as shown in Table 2.

**Table 2.** Mean and standard deviation, skewness, kurtosis, and variances in all 5 variables.

<b>Sustainability education management scenarios under changes in the BANI era.</b>	<b>Mean.</b>	<b>Std.</b>	<b>Skewness.</b>	<b>Kurtosis.</b>	<b>Variances.</b>
1. Leadership Competencies in the Disruption Era (LCD).	4.27	0.52	0.694	0.719	0.271
2. Human Resource Management for Changes (HRMC).	4.23	0.56	0.429	0.184	0.318
3. Strategic Management for Changes (SMC).	4.22	0.55	0.517	0.399	0.305
4. Decentralization, and Participation in Changes (DPC).	4.21	0.58	0.576	0.327	0.345
5. Sustainable Corporate Culture (SCC).	4.15	0.72	0.992	0.761	0.522
<b>Totals.</b>	<b>4.22</b>	<b>0.46</b>			

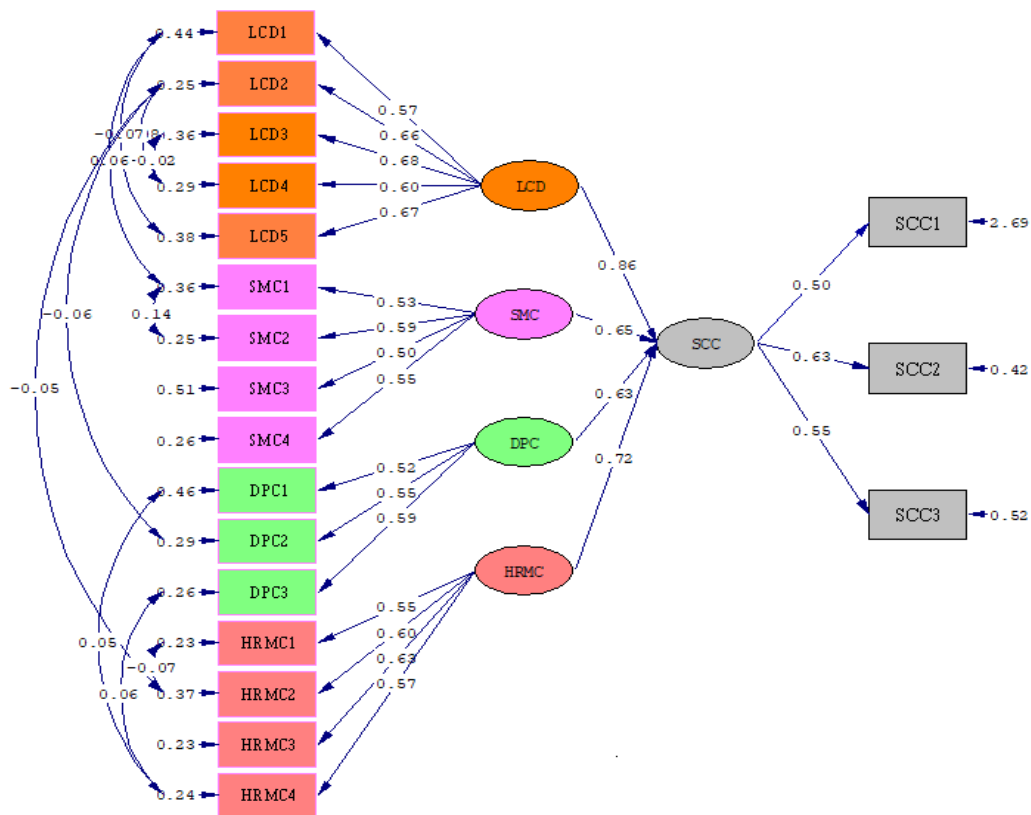
While, the causal relationships between sustainability education management scenarios under changes in the BANI era of all 5 variables are consistent with empirical data, considering the fit index values that passed the acceptance criteria, namely Chi-square of 234.69, df of 132, RMR of 0.023, AGFI of 0.92, RMSEA of 0.044, with both directly and indirectly influences being positive to consistent the empirical data at statistical significance a level of 0.01, as shown in Table 3, Figure 1, and Table 4.

**Table 3.** The correlation coefficient in all 5 variables.

<b>Composite Variable.</b>	<b>Mean.</b>	<b>Std.</b>	<b>LCD.</b>	<b>SMC</b>	<b>DPC</b>	<b>HRMC.</b>	<b>SCC.</b>
Leadership Competencies in the Disruption Era (LCD).	4.27	.520	1	-			
Strategic Management for Changes (SMC).	4.22	.552	0.699**	1	-		
Decentralization, and Participation in Changes (DPC).	4.21	.587	0.698**	0.728**	1	-	
Human Resource Management for Changes (HRMC).	4.23	.563	0.729**	0.746**	0.721**	1	-
Sustainable Corporate Culture (SCC).	4.15	.722	0.431**	0.468**	0.455**	0.484**	1

\*\* Statistical significance a level of 0.01.

**Figure 1.** The model of causal relationships.



Chi-square of 234.69, df of 132, RMR of 0.023, AGFI of 0.92, RMSEA of 0.044.

**Table 4.** Direct influence: DE, indirect influence: IE, and total influence: TE in all 5 variables.

Causal variables	Relationship	Results variables
		Sustainable Corporate Culture (SCC).
Leadership Competencies in the Disruption Era (LCD).	DE	0.86**
	IE	-
	TE	0.86**
Strategic Management for Changes (SMC).	DE	0.65**
	IE	-
	TE	0.65**
Decentralization, and Participation in Changes (DPC).	DE	0.63**
	IE	-
	TE	0.63**
Human Resource Management for Changes (HRMC).	DE	0.72**
	IE	-
	TE	0.72**

\*\* Statistical significance a level of 0.01.

## DISCUSSION

The sustainability education management scenarios under changes in the BANI era include 1) leadership competencies in the disruption era to flexibility, adaptability, and risk management, learning ability and self-confidence, teamwork, and use of technology to support work, communication, and creative thinking, positive attitude, and mindset, 2) human resource management for changes to the development of high- performance human resources, focus on performance creation and driving personnel potential as the main factor, human resource management strategy, the role of human resource executives, 3) strategic management for changes to strategic objectives, strategic planning, strategic formulation process, simple-mentation of the plan, 4) decentralization, and participation in changes to a delegation of responsibility, co- knowledge, co- thinking, co-practicing and developing, co-evaluation, building a network of partnerships, and 5) sustainable corporate culture to personnel-oriented culture, innovation-oriented culture, and detail-oriented and results-oriented culture. The causal relationships between sustainability education management scenarios under changes in the BANI era, with both direct and indirect influences being positive to consistent with the empirical data at statistical significance a level of 0.01. This is due to the BANI era a situation where everything is more complex, facing constant challenges, radically changing working lifestyles, and complex mental issues. These are challenges for driving the management of educational organizations that must be implemented to improve and solve complex problems to produce good results. (Bennett, N. & Lemoine, J., 2014) In many of these challenges, leaders of organizations with leadership competencies in the disruption era from the ability to lead the organization through rapid and uncertain changes are the most important thing in high-performance leaders who can make decisions under complex and unpredictable situations to be able to drive the organization forward sustainably.

Meanwhile, human resource management for changes in managing and developing the personnel can adapt and respond to rapid changes as an important factor in creating sustainability for the organization. (Coopersmith, 2022) So, the personnel in the organization have high performance and skills that are consistent with the challenges in the BANI era, which will help the organization to operate effectively. (Kenaphoom & Jantanukul, 2023). Solving complex problems requires opportunities for people with diverse abilities to work together, brainstorm, and integrate their work to create effective problem-solving and positive changes through the creation of a high-potential and capable team. (Ke & Yu, 2023) Another important issue that is a challenge in sustainability education management scenarios under changes in the BANI era is strategic management for changes in planning and management to set direction and adapt to changes having a clear and flexible strategy will help the organization to adapt to changes in the BANI era. Good communication of the leaders' important goals to the staff will help drive the organization to progress according to the goals. Effective communication will allow for smooth collaboration, understanding of the organization's goals in the same direction, and understanding of the problems more clearly. (Clarke, C., and Nelson, C., 2021) In addition, it also helps create good relationships, impressions, and mutual trust. (Anamai et al, 2024) However, decentralization and participation in changes from all sectors of the organization will help build resilience and the ability to respond quickly to changes in the context of the BANI era. Participation of all sectors in decision-making, and implementation is essential in the BANI era to help create mutual understanding and buy-in and to facilitate a smooth. (Nakwichet, 2018) The effective transition from planning to evaluation enables the process to be inclusive and adaptable. (Jedaman et al, 2021) Strengthening the network of partnerships to address the challenges of the BANI era in a diverse manner and enabling the exchange of resources, knowledge, and experiences of the benefits. (Sanders, J.E., Hopkins, W.E., and Geroy, G.D., 2019) To adaptation and sustainability. In this regard, a sustainable corporate culture in creating a personnel-focused culture will help create a work environment that supports the development of personnel's skills and well-being. (Jong & Den Hartog, 2017) Is essential to retain and develop the capabilities of the team in the BANI era taking care of and valuing people is the key to creating sustainability for the organization. Therefore, the key that is mediator that will make everything connect perfectly is the leaders and personnel of the educational organization who have the potential and ability to adjust the work to be consistent with the changes and more complex in the BANI

era that has changed the management landscape and invented a way to manage everything systematically, opening opportunities and promoting personnel in all departments to work in the organization to work towards the goal of managing education efficiently and sustainably.

## **CONCLUSION**

The sustainability education management scenarios under changes in the BANI era include the leadership competencies in the disruption era of the ability to lead an organization through a rapid and uncertain change is of utmost importance, with high-performing leaders able to make effective decisions, human resource management for changes in developing human resources that can adapt and respond to rapid changes is essential to create sustainability for an organization, strategic management for changes of strategic planning and management to set the organization's direction and have a clear strategy, with flexibility that can adapt to changes, decentralization and participation in changes from all parts of the organization that enhance flexibility and the ability to respond quickly to change, and sustainable corporate culture in creating a personnel-focused culture will help create a work environment that supports the development of personnel's skills and well-being, which is essential to retaining and developing the capabilities of the team, and valuing personnel is the key to creating sustainability for the organization. The causal relationships between sustainability education management scenarios under changes in the BANI era, with both direct and indirect influences being positive to consistent with the empirical data at statistical significance a level of 0.01. A key mediator that will make everything connect perfectly is the leaders and personnel of the educational organization who have the potential and ability to adjust the work to be consistent with the changes and more complex in the BANI era that has changed the management landscape and invented a way to manage everything systematically, opening opportunities and promoting personnel in all departments to work in the organization to work towards the goal of managing education efficiently and sustainably.

## **IMPLEMENTATION**

The sustainability education management scenarios under changes in the BANI era in the rapidity, intensity, volatility, vulnerability, and anxiety of the staff, the leaders of educational organizations who are in the role of managing and directing the organization must create a balance in the organizational direction to be able to grow sustainably in the long term, and the balance in people to be able to manage the personnel who are the main force in building the educational organization to achieve the desired goals. While, key leadership competencies to meet the challenges of a volatile world, include a mindset in working, seeing the world and having a positive attitude based on reality, being open to accepting change, seeking new ways and creating innovations to prepare for change, modernity in following and being aware of the changes that occur, knowing and being proficient in technology, creativity thought to respond to rapidly changing knowledge and emphasizing teamwork, flexibility, and adaptability, capacity in goal and vision sharing to achieve important goals effectively.

## REFERENCES

1. Ademola, A., Marian, R., Chertow Ellen, H. M., & Pannell, D. J. (2014). Science, Technology, and Innovation for Sustainable Development Goals. Insights from Agriculture, Health, Environment and Energy.
2. Anamai, P., Jedaman, P., & Srichaiwong, P. (2024). Role of Strategic Management towards Sustainable Educational Organizations. An Overview of Literature. *Language and Education Research*, 1, 154–171. <https://doi:10.9734/bpi/aoller/v1/623>.
3. Bennett, N., & Lemoine, J. (2014). What a difference a word makes: Understanding threats to performance in the VUCA world. *Business Horizons*, 57(3), 311–317. <https://doi:10.1016/j.bushor.2014.01.001>.
4. Chanphet, K. (2018). The influence of transformational leadership perceptions on creative performance through trust based on emotion and cognition. *Phranakhon Rajabhat Research Journal*, 1(11), 125–135.
5. Chullasutthi, N., Kasorn, K., Charoenphol, S., & Jedaman, P. (2023). Innovative Leadership with Change Management in Government Organization under the VUCA Era. *Journal of Multidisciplinary in Humanities and Social Sciences*, 7(1), 310–328.
6. Clarke, C., & Nelson, C. (2021). New Governance Paradigms. *Research Papers in Economics*, 131-151. <https://doi:10.1007/978-3-030-59204-25>.
7. Coopersmith, K. (2022). Personal Development Planning, Vertical Leadership Development in a VUCA World. <https://scholar.valpo.edu/cgi/viewcontent.cgi?article=1380&context=jvbl>.
8. Dararuang, K. (2021). Learning organization model and knowledge management towards becoming a learning organization. *Academic Journal of the Association of Private Higher Education Institutions of Thailand*, 21(2), 133–145.
9. Duangchuen, P. (2018). Organizational leaders in a VUCA world. *Christian University Journal*, 24(3), 450–458.
10. Grabmeier, S. (2020). The BANI versus VUCA: A new acronym to describe the world. <https://stephangrabmeier.de/bani-versus-vuca/>
11. Guzmána, E. V. (2020). Characteristics and Skills of Leadership in the Context of Industry 4.0. *Procedia Manufacturing*, 43(1), 543–550. <https://doi:10.1016/j.promfg.2020.02.167>.
12. Janlasee, P., Nuntee, S., & Prommuangkun, S. (2024). Scenarios of Educational Administration of Secondary Schools in Thailand During the Next Decade (A.D. 2022-2031). *International Education Studies*, 17(1), 77–84. <https://doi:10.5539/ies.v17n1p77>.
13. Jedaman, P., Buaraphan, K., Yongyong, C., Pimdee, P., Sukmat, A., & Suksap, C. (2023). Educational management strategies in the dynamics of the 21st century towards a sustainable ASEAN community of the Greater Mekong Subregion countries. *Journal of Multidisciplinary in Humanities and Social Sciences*, 6(1), 168–186.
14. Jedaman, P., Kenaphoom, S., Jongmuanwai, B., & Niyomves, B. (2021). Analyzed and causal factors of the 21st-century leadership 4.0 of science education for sustainability. *Journal of Physics: Conference Series*, 1835(1), 012097. <https://doi:10.1088/1742-6596/1835/1/012097>.
15. Jedaman, P., Singma, S., Srichaiwong, P., & Kenaphoom, S. (2023). The paradigm shift of change management in the 21st-century to a sustainable educational organization. *Progress in Language, Literature, and Education Research*, 2. <https://doi:10.9734/bpi/pller/v2/6974B>. <https://files.eric.ed.gov/fulltext/ED638273.pdf>
16. Jong, J. P., & Den Hartog, D. N. (2017). The Leaders Influence Employees' Innovative Behavior. *European Journal of Innovation Management*, 10(1), 41–64. <https://doi:10.1108/14601060710720546>
17. Ke, W., & Yu, S.-C. (2023). Abusive Supervision and Employee Creativity: The Mediating Effect of Role Identification and Organizational Support. *International Journal of Multidisciplinary in Management and Tourism*, 7(1), 39–52. <https://doi:10.14456/ijmmt.2023.4>.

18. Kenaphoom, S., & Jantanukul, W. (2023). Local administration is based on the new governance paradigm. *Journal of Local Administration and Innovation*, 7(3), 359–378.
19. Makmee, S. (2018). The Scenarios of Primary School Administration in Thailand. *Journal of Educational Administration Silpakorn University*, 9(1), 212–224.
- Nakwichet, K. (2018). Creative leadership for developing educational quality. *Journal of Educational Studies*, 31(4), 125–137.
20. Office of the Permanent Secretary, Ministry of Higher Education. (2023). Higher Education Plan to Produce and Develop Human Resources in Thailand. Revised Edition, 2023-2027 AC. Bangkok: The Office.
21. Pramjeeth, S., & Mutambara, E. (2022). A conceptual leadership framework and process for leading in a volatile environment. *Academy of Strategic Management Journal*, 21(1), 1–15.
22. Ratanapitakhada, C., & Trirat, P. (2023). Educational Leaders' Competencies to Survive and Thrive in a BANI World. *The Journal of Pacific Institute of Management Science*, 9(1), 16–28.
23. Sakdadach, T., Chaiyuth, S., & Aksornsua, P. (2023). Scenarios of Secondary School Management During the Digital Era in the Next Decade (2022-2031). *International Education Studies*, 16(3), 80–90. <https://doi: 10.5539/ies.v16n3p80>.
24. Samkoset, W. (2022). Conceptual framework from VUCA to BANI. *Bangkok Business*.
25. Sanders, J. E., Hopkins, W. E., & Geroy, G. D. (2019). Transactional to transcendental: Toward an integrated theory of leadership. *Journal of Leadership & Organizational Studies*, 9(4), 21–31. <https://doi:10.1177/107179190300900402>
26. Victoria Kimball, B. (2019). Disrupted Leadership: Strategies and Practices of Leaders in A VUCA World. <https:// www.researchgate.net/>