

# A Study of Factor and Indicators of School Administrators' Competency in the BANI World Era Under the Secondary Educational Service Area Office Bangkok 2

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Received: June 18, 2025

Revised: July 10, 2025

Accepted: July 14, 2025

**Abstract:** This mixed-method research aimed to (1) analyze the factors and indicators of school administrators' competencies in the BANI World era, and (2) propose guidelines for applying those identified factors and indicators. The study was conducted under The Secondary Educational Service Area Office Bangkok 2. The research consisted of two phases. The 1<sup>st</sup> phase was quantitative research involved school administrators and teachers from 52 affiliated schools, with a population of 5,785 teachers. The sample consisted of 361 school administrators and teachers, and the research instrument was a five-point Likert scale questionnaire. Data were analyzed using Confirmatory Factor Analysis (CFA). The 2<sup>nd</sup> phase was qualitative research involved five purposively selected participants, including education administrators, school administrators, and educational supervisors. The research instruments included structured interviews and content analysis. The findings revealed that: (1) The factors of school administrators' competencies in the BANI World consisted of ten key factors: 1) Sustainability, 2) Adaptability, 3) System Thinking, 4) Creativity and Innovation, 5) Emotional Intelligence, 6) Ability to Learn, 7) Decision-making under Uncertainty, 8) Cooperation and Communication, 9) Strategic Thinking, and 10) Adaptation to Digital Technologies, comprising a total of 43 indicators. (2) The model measuring school administrators' competencies showed a good fit:  $\chi^2 = 585.03$ ,  $df = 634$ ,  $p\text{-value} = 0.918$ ,  $RMSEA = 0.000$ . (3) The study also proposed recommendations for implementing the competency factors and indicators of school administrators in the BANI era, emphasizing the core competencies that should be prioritized for development. This process includes self-analysis by school administrators or organizational analysis, followed by competency development activities through targeted training and seminars focused on specific competencies. Additionally, professional learning communities (PLC) are established to promote continuous learning, along with regular reflection, monitoring, and evaluation. Schools that effectively apply these competencies can foster a strong and resilient organizational culture.

**Keywords:** Factor and indicators, School administrators' competency, BANI World

## Introduction

The modern world in the aftermath of the Coronavirus Disease 2019 (COVID-19) pandemic is undergoing rapid and unprecedented transformation. This accelerated pace of change is the result of multiple overlapping factors, including Digital Disruption, shifts in human behavior, the rise of aging societies, and the emergence of novel infectious diseases. (Thai Post, 2022). A widely recognized conceptual framework that has been used to explain the dynamics of the modern world characterized by volatility, uncertainty, complexity, and ambiguity is the VUCA World. This model illustrates how such conditions create significant obstacles to effective decision-making, often resulting in operational disruptions that hinder organizations from achieving their objectives. The acronym VUCA represents four key dimensions of instability: Volatility, Uncertainty, Complexity, Ambiguity. As the pace of change in the modern world accelerates, its impacts have become increasingly intense. These impacts extend beyond strategic decision-making by organizational leaders to encompass the psychological well-being of employees who must operate within a landscape of constant confusion and instability. Consequently, the VUCA World framework despite being in use for over three decades has become insufficient to fully explain or address the complexity of

organizational development in today's environment. In response, leaders and professionals across various sectors have adopted the BANI World framework as a more precise model for interpreting the current global landscape. The BANI model—capturing conditions that are Brittle, Anxious, Nonlinear, Incomprehensible—offers a clearer lens through which to understand and navigate change. Importantly, it also considers both the structural and emotional dimensions of organizations, making it more adaptable for managing the multifaceted challenges of this rapidly evolving world. (Wisedonwai, 2022).

In the context of the BANI World, all sectors are inevitably affected—including the field of education. In the aftermath of the COVID-19 pandemic, early childhood education experienced a significant learning decline. Simultaneously, the educational technology industry witnessed rapid growth, driven by the shift toward online learning. However, this shift also exposed critical gaps: segments of the population lacked access to technology, digital information, and essential digital skills, resulting in a widening digital divide. Moreover, the post-pandemic period has brought about profound emotional and psychological challenges for students, educators, and educational personnel. Many individuals have been left emotionally fragile, facing heightened levels of stress, anxiety, and depression. These issues highlight the urgent need for education systems to adapt not only technologically but also emotionally in order to support all stakeholders more effectively in this complex and evolving environment. These challenges have significantly impacted the effectiveness of educational management in achieving its core objectives—particularly in the development and enhancement of student and youth quality. As the world continues to evolve at a rapid pace, there is an increasing demand for leaders who are flexible, adaptive, and committed to continuous learning. Such leaders are essential for navigating ongoing change and guiding their organizations toward long-term and sustainable success.

The Secondary Educational Service Area Office Bangkok 2 is an educational agency under the supervision of the Office of the Basic Education Commission. The direction for developing the quality of basic education in the fiscal year 2024 includes the objective that administrators, teachers, and educational personnel become lifelong learners who keep pace with technological changes, possess competencies, knowledge, expertise, ethics, professional standards, and the spirit of teaching. Furthermore, the fourth strategic objective emphasizes effective and context-appropriate participation promotion by the Educational Service Area Office and schools. The development guidelines include restructuring the organization to be flexible and modern to accommodate changes, as well as developing school administrators, teachers, and educational personnel to have technological knowledge aligned with digital literacy and comprehensive teacher competencies. Based on the context of the Secondary Educational Service Area Office Bangkok 2 and its organizational objectives, which state that administrators, teachers, and educational personnel should be lifelong learners with competencies attuned to technological changes, combined with the organizational strategy prioritizing development to ensure flexible structures capable of responding to the rapidly changing world, the office is well-prepared to adapt and respond to the challenges of the BANI World characterized by brittleness, anxiety, nonlinearity, and incomprehensibility. This readiness enables it to serve as a pilot organization in organizational adaptation to ongoing changes. Moreover, the Secondary Educational Service Area Office Bangkok 2 oversees 52 affiliated schools, including 22 extra-large schools and 22 large schools, making it a large-scale organization with significant capacity to develop the competencies of school administrators and educational personnel. Therefore, the researcher is interested in studying the population and sample groups affiliated with the Secondary Educational Service Area Office Bangkok 2.

From the literature review on key competencies of administrators in the BANI World era, there are discussions regarding business administrators based on the concepts of Walker & Lloyd-Walker (2019), Marnewick & Marnewick (2020), and Natalia & Olena (2023). In terms of school administrators, Bushuyev, et al. (2023) studied algorithms for modeling the environment in educational system innovation development. They found that administrators in the BANI environment should possess ten essential competencies. Due to changes in social context, era, and economy, school administrators must adapt by developing necessary competencies to effectively respond to changes and transition into the BANI World era. School administrators with these competencies can better manage uncertainty than those without them. This presents a significant challenge for educational management in the modern era. Therefore, it is necessary to conduct in-depth qualitative research to find appropriate competency development approaches for school administrators in the BANI World that suit the Thai context. Furthermore, confirmatory factor analysis (CFA) should be employed to identify suitable indicators clearly, leading to actionable knowledge that can be practically applied.

Based on the above significance, the researcher was interested in studying the factors and indicators of school administrators' competencies in the BANI World era under the Secondary Educational Service Area Office Bangkok 2. The primary objective is to identify clear and essential competency factors required for educational leaders in this new context. The objectives of this study are (1) analyze the factors and indicators of school administrators' competencies in the BANI World era, and (2) propose guidelines for applying those identified factors and indicators framework as applied in the Secondary Educational Service Area Office Bangkok 2.

## Research methodology

This study employed a mixed-methods research design, with the research process divided by the researcher into two phases as follows:

Phase 1: The analysis of factors and indicators of school administrators' competencies in the BANI World era under the Secondary Educational Service Area Office Bangkok 2, conducted as a quantitative study. The population consisted of school administrators and teaching staff in educational institutions in the academic year 2024, totaling 5,785 individuals from 52 schools. The sample group comprised school administrators and teaching staff from the same population. The researcher determined the sample size using the criteria from Krejcie & Morgan's table (1970), resulting in a sample of 361 participants. The research instrument employed was a questionnaire regarding the competency factors of school administrators in the BANI World era.

Based on the literature review, the researcher is interested in studying the essential competency factors of school administrators according to the framework proposed by Bushuyev, et al. (2023). This framework provides a detailed and universal description of the necessary competencies for school administrators in the BANI environment. It consists of ten factors: (1) Sustainability, (2) Adaptability, (3) System Thinking, (4) Creativity and Innovation, (5) Emotional Intelligence, (6) Ability to Learn, (7) Decision-making under Uncertainty, (8) Cooperation and Communication, (9) Strategic Thinking, and (10) Adaptation to Digital Technologies. The framework also includes 43 indicators, as shown in Table 1.

Table 1: Factors and indicators of school administrators in the BANI World era

Factors of School Administrators' competency	Indicators
1. Sustainability	1. Adaptability to changing circumstances 2. Ability to recover quickly from failure 3. Effective confrontation of challenges 4. Development and advancement of existing school resources toward the future 5. Ability to maintain work effectiveness
2. Adaptability	6. Ability to modify strategies or plans in response to changing situations 7. Willingness to embrace change 8. Openness to new ideas 9. Rapid adaptability to new circumstances
3. System thinking	10. Ability to navigate complex systems 11. Ability to analytically assess complex systems 12. Ability to perceive interconnections and continuity among various factors 13. Ability to anticipate potential impacts of decisions 14. Ability to prioritize problem-solving tasks
4. Creativity and innovation	15. Ability to think creatively 16. Possessing creative problem-solving methods 17. Capability to generate innovations 18. Application of innovation in management 19. Exploration of novel solutions to problems
5. Emotional intelligence	20. Ability to perceive and understand 21. Management of one's own emotions 22. Empathy towards teachers and school personnel 23. Ability to collaborate effectively with teachers and school personnel 24. Building positive relationships among administrators, teachers, educational staff, students, parents, and other stakeholders
6. Ability to learn	25. Consistency in learning 26. Continuous pursuit of new knowledge 27. Ability to analyze, synthesize, and summarize received information
7. Decision-making under conditions of uncertainty	28. Ability to make decisions based on available information 29. Ability to assess risks associated with decision-making 30. Thoughtfulness in considering data to support decisions
8. Cooperation and communication	31. Ability to work efficiently 32. Communication skills 33. Collaboration in task execution with teachers and educational personnel 34. Building cooperation through communication to enhance the school's image

Table 1: (continued)

Factors of School Administrators' Competency	Indicators
9. Strategic thinking	35. Ability to see the overall view 36. Forecasting future trends 37. Determining the best course of action to achieve desired goals 38. Strategic planning for long-term development
10. Adaptation to digital technologies	39. Integrating technology to transform work processes 40. Incorporating digital technology into management practices 41. Digital technology literacy 42. Utilizing digital technology for data analysis 43. Applying digital technology to support decision-making

The questionnaire regarding the competency factors of school administrators in the BANI World era was subjected to content validity assessment by measuring the congruence between the questionnaire items and the intended objectives using the Index of Item-Objective Congruence (IOC). The revised questionnaire was then pilot tested (try-out) with a population of 30 individuals exhibiting characteristics similar to the target sample group. Subsequently, the reliability of the questionnaire was determined using Cronbach's Alpha coefficient (Cronbach, L. J., 1990).

The researcher conducted data collection according to the following procedures: First, a letter of approval was requested to obtain permission for data collection from the sample group. Then, the questionnaires were distributed via postal mail, electronic forms (Google Form), and by personal visits to the sampled schools. The researcher verified the accuracy of the collected data and analyzed the data using statistical methods including mean and standard deviation, coefficient of variation, skewness, and kurtosis, using the Jamovi software.

Additionally, confirmatory factor analysis (CFA) was conducted using the LISREL program. First-order CFA was used to examine the structural validity of the observed variables within each factor. Second-order CFA was then performed to evaluate the model's overall fit with empirical data and to assess the construct validity. The model fit was evaluated using the following fit indices and recommended criteria: Chi-Square Statistic ( $\chi^2$ ), Goodness of Fit Index: GFI (GFI > 0.90), Adjusted Goodness of Fit Index: AGFI (AGFI > 0.90), Comparative Fit Index: CFI (CFI > 0.95), relative Chi-Square ( $\chi^2/df < 2.00$ ), Standardized Root Mean Square Residual: SRMR (SRMR < 0.05), and Root Mean Square Error of Approximation: RMSEA (RMSEA < 0.05).

Phase 2: The development of guidelines for applying the factors and indicators of school administrators' competencies in the BANI World era within the Secondary Educational Service Area Office Bangkok 2, conducted as a qualitative study. Key informants in this study comprised five individuals: educational administrators, school administrators, and educational supervisors. Purposive sampling was employed based on the following criteria: the informants are educational administrators, school administrators, or educational supervisors with extensive experience in school administration; they have demonstrated outstanding performance; they are currently working in schools; they hold at least a proficient professional level; and they have a minimum of eight years of work

experience. The research instrument used was a semi-structured interview guide aimed at exploring guidelines for applying the competency factors and indicators of school administrators in the BANI World era.

After identifying indicators with factor loadings greater than .80 and selecting the top three indicators with the highest mean scores from the preliminary testing, these were used to develop a research instrument in the form of a semi-structured interview. The interview guide consists of two parts: Part 1 focuses on guidelines for applying the competency factors and indicators of school administrators in the BANI World era, and Part 2 gathers additional recommendations for the implementation of these competency factors and indicators. Data collection was then conducted by contacting experts to explain the interview objectives, requesting official approval letters for assistance with the interviews, scheduling interview appointments, and conducting the interviews either through in-person visits or online sessions.

## Research results

Phase 1: The analysis of factors and indicators of school administrators' competencies in the BANI World era under the Secondary Educational Service Area Office Bangkok 2.

From the total sample of 361 participants, demographic characteristics were analyzed as follows: (1) Gender: the majority were female (220 participants), accounting for 60.90%. (2) Age: the largest proportion were aged 30–39 years (175 participants), representing 48.50%.

(3) Educational attainment: most participants held a bachelor's degree (203 participants), which is 56.20% of the sample. (4) Salary: the majority reported an income of 20,000–30,000 Baht per month (155 participants), or 42.90%. (5) Educational level: most participants had 5–10 years of work experience (159 participants), making up 44.00% of the sample. The data obtained from the questionnaires were subsequently analyzed using Confirmatory Factor Analysis (CFA) as illustrated in Figure 1.

Results of the Confirmatory Factor Analysis (CFA) of the revised model of school administrators' competencies in the BANI World era under the Secondary Educational Service Area Office Bangkok 2 revealed that the model demonstrated a good fit with the empirical data. The fit indices were as follows:  $\chi^2 = 585.03$ ,  $df = 634$ ,  $\chi^2/df = 0.92$ ,  $p\text{-value} = 0.92$ ,  $CFI = 1.00$ ,  $GFI = 0.93$ ,  $AGFI = 0.90$ ,  $RMSEA = 0.00$  and  $SRMR = 0.04$ . All indices met the acceptable thresholds, indicating that the revised model of school administrators' competencies in the BANI World era aligned well with the empirical data.

The factor with the highest standardized factor loading was Factor 3: Systematic Thinking, with a factor loading of 0.96 ( $R^2=0.93$ ). Similarly, Factor 6: Learning Ability also showed a high standardized factor loading of 0.96 ( $R^2=0.92$ ). On the other hand, the factor with the lowest standardized factor loading was Factor 5: Emotional Intelligence, with a loading of 0.78 ( $R^2=0.61$ ).

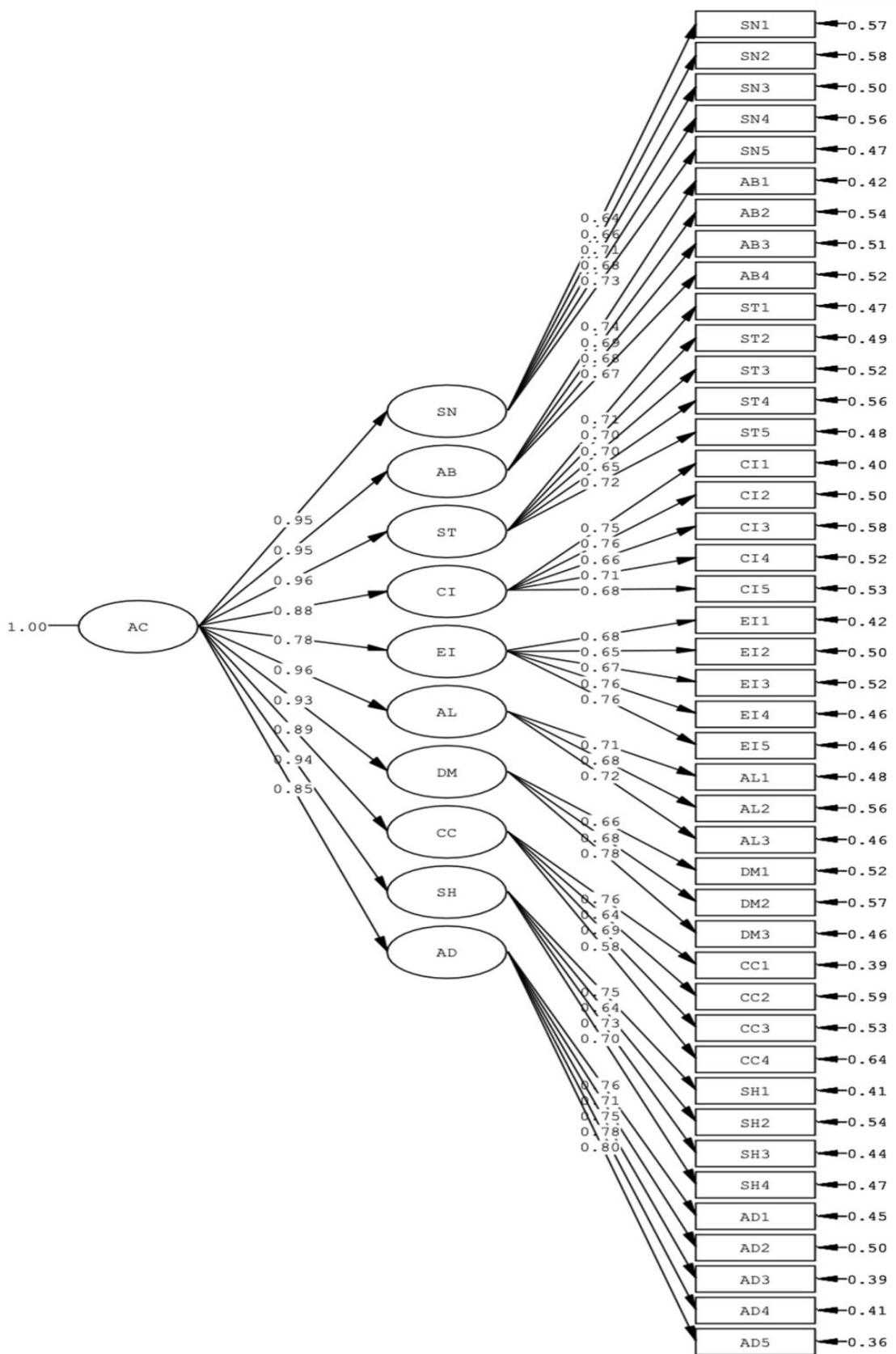


Figure 1: Factors of school administrators' competencies in the BANI World era under the Secondary Educational Service Area Office Bangkok 2 (Revised Model)

Table 2: Fit Indices from the second-order confirmatory factor analysis of school administrators' competency factors in the BANI World era under the Secondary Educational Service Area Office Bangkok 2

Fit index	Evaluation criteria	Pre-adjusted model		Post-adjusted model	
$\chi^2$	-	2272.05		585.03	
df	-	850		634	
$\chi^2/df$	< 2.00	2.673	O	0.923	P
p-value	> .05	0.000	O	0.918	P
CFI	> .90	0.98	P	1.00	P
GFI	> .90	0.77	O	0.93	P
AGFI	> .90	0.75	O	0.90	P
RMSEA	< .05	0.068	O	0.00	P
SRMR	< .05	0.052	O	0.035	P

O: Indicates does not meet the criteria

P: Indicates meets the criteria

Source: Byrne (2010); Hair et al. (2010)

## Phase 2: Results of the Proposed Guidelines for Implementing the Factors and Indicators of School Administrators' Competencies in the BANI World Era Under the Secondary Educational Service Area Office Bangkok 2

From in-depth interviews with 5 key informants regarding the implementation of the factors and indicators of school administrators' competencies in the BANI World era under the Secondary Educational Service Area Office Bangkok 2, it was found that the informants shared a consistent perspective. They agreed that while some of these competencies are already being practiced by current school administrators, others still require further development. The informants emphasized that these competencies could be adapted and applied effectively to foster the growth of educational leaders in alignment with the demands of the modern era. As a result, the key informants offered their insights and suggestions on the practical application of the competencies and indicators across the following key areas:

**Issues 1: Integrating School Administrators' Competencies in the BANI World Era into Current School Management Practices.**

The global shift into the BANI World era presents a significant challenge for school administrators under the Secondary Educational Service Area Office Bangkok 2. Effective school management increasingly requires the integration of competencies that are essential in the BANI context. This integration enables schools to adapt to current global disruptions and uncertainties while strengthening institutional resilience and sustainability. In response to the volatile, unpredictable, and constantly shifting environment, schools must evolve accordingly. However, the implementation and adaptation of these competencies may vary depending on the specific context and challenges faced by each school.

**Issues 2: Competency Factors That School Administrators Should Adapt or Develop to Thrive in the BANI World Era**

The most critical competency that school administrators under the Secondary Educational Service Area Office Bangkok 2 should prioritize for adaptation and development in the BANI World era is Ability to learn. This is followed by Adaptability,

and lastly, Adaptation to digital technologies. Each of these competencies carries varying levels of importance depending on the specific context of each school. School administrators are encouraged to focus on developing competencies that align most closely with the needs of their institutions. In doing so, they may also develop related or interconnected competencies simultaneously. Furthermore, it is essential to foster these competencies not only among administrators but also across the broader school workforce. This collaborative development will enhance organizational effectiveness, cultivate flexibility among personnel, and enable the institution to respond effectively to a rapidly changing world.

#### Issues 3: Guidelines for Implementing the Factor and Indicators of School Administrators' Competencies in the BANI World Era within Educational Institutions

The implementation of the Factor of School Administrators' Competencies in the BANI World era should begin with an analysis of the administrators' and the organization's strengths, weaknesses, and anticipated challenges. This diagnostic process will help identify areas in need of development. Subsequent steps should involve targeted competency development activities through workshops, seminars, and experiential learning practices. These approaches emphasize hands-on learning and practical application aimed at enhancing specific competencies. Competency development should be prioritized, beginning with the most essential competencies aligned with the school's context and strategic goals. It is not necessary for every school to develop all 10 competencies at once; rather, they should select those that are most relevant and feasible given their particular context and readiness. Furthermore, the formation of Professional Learning Communities (PLCs) is encouraged to promote collaborative growth. Regular monitoring and performance tracking should also be established to ensure sustained implementation and continuous improvement.

## Discussion

Phase 1: The analysis of factors and indicators of school administrators' competencies in the BANI World era under the Secondary Educational Service Area Office Bangkok 2.

The Results of Confirmatory Factor Analysis on the Competency Factors of School Administrators in the BANI World Era under the Secondary Educational Service Area Office Bangkok 2 is consistent with empirical data. The model demonstrated a good fit based on several statistical indices:  $\chi^2 = 585.03$ ,  $df = 634$ ,  $\chi^2/df = 0.92$ ,  $p\text{-value} = 0.92$ ,  $CFI = 1.00$ ,  $GFI = 0.93$ ,  $AGFI = 0.90$ ,  $RMSEA = 0.00$  and  $SRMR = 0.04$ . This is consistent with the established criteria. The competency factors of school administrators in the BANI World era consist of the following 10 competencies: 1) Sustainability 2) Adaptability 3) System thinking 4) Creativity and innovation 5) Emotional intelligence 6) Ability to learn 7) Decision-making under conditions of uncertainty 8) Cooperation and communication 9) Strategic thinking 10) Adaptation to digital technologies. When considering the standardized factor loadings, all factors were found to have values greater than 0.50, ranging from 0.78 to 0.96, and all were statistically significant at the .001 level. These findings confirm the reliability and validity of the proposed model. This result is consistent with the study by Bushuyev et al., (2023), who explored algorithmic approaches for modeling environments that foster innovation in educational systems. Their research emphasized that in the context of the BANI environment, school administrators should possess 10 essential competencies to effectively navigate and lead educational institutions through uncertainty and disruption. Including: 1) Sustainability 2) Adaptability 3) System thinking 4) Creativity and innovation 5) Emotional intelligence 6) Ability to learn 7) Decision-making under conditions of uncertainty 8) Cooperation and communication 9) Strategic thinking 10)

Adaptation to digital technologies. This is also consistent with the literature of Marnewick & Marnewick (2020), who explored the core competencies required of managers in the era of Industry 4.0. Their study identified nine key competencies essential for success in this context: 1) Creating Awareness 2) Reframing and Systems Thinking 3) Solving Unstructured Problems 4) Critical Thinking 5) Design Thinking and Creativity 6) Leadership and Project Management 7) Digital Competency 8) Emotional Intelligence 9) Social Intelligence

Moreover, the research findings revealed that the factor with the highest standardized factor loading was Factor 3: Systems Thinking, with a loading of 0.96 ( $R^2 = 0.93$ ). This result indicates that school administrators must possess the ability to understand and analyze complex systems, recognize the interconnections and continuity of various factors, prioritize problems effectively, and anticipate the potential consequences of their decisions. This aligns with the concept of systems thinking described as an individual's ability to analyze problems or phenomena in a step-by-step manner, considering both internal and external factors, following a logical sequence with clear goals, and accepting the constant changes, complexities, and interconnections among elements in order to develop patterns that lead to optimal task accomplishment (Rungreungwanitkun, 2009). In addition, Factor 6: Learning Agility also demonstrated a high standardized factor loading of 0.96 ( $R^2 = 0.93$ ). The findings suggest that school administrators need the ability to critically analyze, synthesize, and summarize key information. They must demonstrate consistency in learning and continually seek new knowledge to remain adaptive and responsive to change. This is consistent with the concept of learning ability described as a diverse set of learning skills, including the ability to analyze, synthesize, and summarize information; to identify methods of learning from various sources; and to effectively read, write, and collaborate with others in the learning process (Sombun, 2022).

The factor with the lowest standardized factor loading was Factor 5: Emotional Intelligence, with a loading of 0.78 ( $R^2 = 0.61$ ). The research findings indicate that school administrators possess the ability to perceive and understand their own emotions, manage their emotional responses effectively, and demonstrate empathy towards teachers and staff. They are capable of collaborating harmoniously with teachers and personnel without conflict, fostering positive relationships among the administrative team, teachers, educational staff, students, parents, and other stakeholders involved with the school. According to Wongkanya (2023), emotional intelligence refers to an individual's ability to understand and manage both their own emotions and the emotions of others in an appropriate and effective manner. It involves emotional awareness, recognizing the causes of emotions, and the ability to regulate emotional responses. People with high emotional intelligence can live happily with others in society and solve problems creatively.

**Phase 2: Results of the Proposed Guidelines for Implementing the Factors and Indicators of School Administrators' Competencies in the BANI World Era Under the Secondary Educational Service Area Office Bangkok 2.**

The Secondary Educational Service Area Office Bangkok 2 is the organization responsible for managing and developing secondary education within the Bangkok metropolitan area. It oversees 52 affiliated schools, including both large and extra-large schools. Therefore, it plays a vital role in planning and supporting the enhancement of teaching quality as well as the development of the capabilities of administrators, teachers, and educational personnel. Each school has a unique context and must adapt to the changes brought by the transition into the BANI World—characterized by brittleness, anxiety, unpredictability, and complexity. This poses a challenge for modern school administrators, as traditional management approaches cannot be fully applied. Consequently, the integration

of school administrators' competencies in the BANI World era is essential for school management. While all competency factors can be applied, it may be necessary to select those most relevant to the current situation. School administrators who possess the necessary competencies for the BANI World will be better able to handle the uncertainties they face than those without these competencies.

The competency that school administrators in the BANI World era should most focus on developing and adapting is the ability to learn. Since the BANI World is characterized by constant and rapid change, learning is a fundamental competency that every individual should possess and continuously engage in. Without learning, other competencies cannot be developed. Therefore, school administrators should consistently cultivate this competency. If administrators fail to learn, school management will neither progress nor be effective. Similarly, Somboon (2022) defines the ability to learn as a diverse set of learning skills, including the capacity to analyze, synthesize, and summarize information, the ability to find learning methods from various sources, as well as the skills in reading, writing, and collaborative learning.

The secondary competency is adaptability. In the BANI World, characterized by rapid and unpredictable changes, school administrators must possess high flexibility. They need to be able to learn and adapt to any situation quickly and transition smoothly to new circumstances. Administrators should be capable of adjusting strategies or plans to accommodate emerging situations in order to steer the school towards its strategic goals and objectives, aligning with the policies of the Ministry of Education and the Educational Service Area Office. At the same time, school administrators should listen to the opinions of teachers, educational personnel, and stakeholders to discover the most effective and efficient solutions. This aligns with concept of adaptation, which refers to an individual's ability to adjust effectively to themselves and the external world, achieving maximum satisfaction and well-being, exhibiting behavior appropriate to the social environment, and possessing the capacity to face and accept the realities of life.

The final competency is digital technology adaptability. In the BANI World, which is a fragile society where plans are at constant risk of failure, work must be flexible and supported by tools that enhance efficiency. Digital technology serves as a crucial driver in management. School administrators can utilize technology in administration, data analysis, and planning decisions to reduce the risk of failure. Additionally, technology plays a key role in facilitating online meetings and teaching. Moreover, technology can be used for public relations and disseminating information that affects the school's image. This is consistent with Jitwirat (2018) explanation of digital technology adaptation, stating that for organizations to survive and maintain sustainable competitive potential, they must rapidly transform into digital organizations. This involves a comprehensive revolution encompassing human resources, organizational culture, and the adoption of technologies such as robotics and AI to replace human labor, thereby enhancing long-term competitive capabilities. In the digital economy, competition is driven by technology and innovation, so organizations must truly understand and keep pace with digital-era innovations.

The adaptation or development of competencies depends on the context of each school and the school administrators to determine which competencies are necessary, appropriate, and most relevant to their specific circumstances. The guideline for applying the competency factors of school administrators in the BANI World era, under the Secondary Education Service Area Office Bangkok Area 2, begins with self-analysis by the administrators through creating an Individual Development Plan (IDP). This serves as a framework or guideline for development to enable administrators and staff to achieve their goals. Additionally, studying the school's strategy or conducting an organizational analysis

(SWOT Analysis) helps identify strengths, weaknesses, and potential critical issues in progressing toward the desired future state, alongside adjustments to organizational culture.

Subsequently, competency development activities should be organized through training, seminars, and experiential learning, focusing on the development of specific competencies. Prioritize the key competencies that need development first. Each school does not need to develop all ten competencies but should select those most relevant and suitable to the context and readiness of the school. With continuous development, a Professional Learning Community (PLC) can be established, incorporating reflection, monitoring, and regular evaluation. Schools that implement this approach will strengthen their organizational culture and improve operational efficiency, enabling them to better cope with the ongoing changes in the world.

## Conclusion

This research can be summarized as follows: The competency factors of school administrators in the BANI World era under the Secondary Education Service Area Office Bangkok Area 2, based on the framework by Bushuyev et al., (2023), consist of ten key competencies: 1) Sustainability 2) Adaptability 3) System thinking 4) Creativity and innovation 5) Emotional intelligence 6) Ability to learn 7) Decision-making under conditions of uncertainty 8) Cooperation and communication 9) Strategic thinking 10) Adaptation to digital technologies, supported by a total of 43 indicators.

The approach to applying the competency factors of school administrators in the BANI World era, under the Secondary Education Service Area Office Bangkok Area 2, should begin with self-analysis by the administrators through the development of an Individual Development Plan (IDP). This should be followed by studying the school's strategies or conducting an organizational analysis (SWOT Analysis) to identify strengths, weaknesses, and organizational culture. Competency development activities should then be organized through targeted training and seminars, focusing on specific competencies prioritized according to the school's needs. It is not necessary for every school to develop all ten competencies; they should select only the competencies they need to improve. With continuous development, a Professional Learning Community (PLC) can be established as a model for competency development in various areas. Reflection, monitoring, and evaluation should be conducted regularly. Schools that successfully implement these competencies can foster a strong organizational culture.

Once the factors and indicators of school administrators' competencies in the BANI World era are identified, the development of these competencies can be carried out effectively to achieve targeted goals, leading to improved management efficiency in schools. Educational administrators in the Secondary Educational Service Area Office Bangkok 2 and other educational areas can utilize the research findings to plan competency development for school administrators in the right direction. This also serves as a guideline for developing training curricula for school administrators' competencies in the new era. Future research may consider incorporating concepts from other scholars to further enrich the study.

## References

Bushuyev, S., et al. (2023). Innovative development of educational systems in the BANI environment. *Scientific Journal of Astana IT University*, 6(14), 104-115.

Jitwirat, K. (2018). Adaptation model of business organizations from the digital disruption impact in the 21<sup>st</sup> century. *Journal of the Researcher Association*, 23(2), 74-88.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607-610.

Marnewick, C., & Marnewick, A. L. (2020). The demands of Industry 4.0 on project teams. *IEEE Transactions on Engineering Management*, 67(3), 941-949.

Nataliia, H., & Olena, M. (2023). The key administrative competencies of managers required for company development in the BANI world. *Innovative and Economics Research Journal*, 11(2), 289-305.

Rungreungwanitkun, O. (2009). *A study of some factors affecting systems thinking of undergraduate students in the Bachelor of Education Program at Srinakharinwirot University* (Master's thesis, Srinakharinwirot University).

Soombun, T. (2022). *Lifelong learning habits can be cultivated: Chulalongkorn education researcher suggests how*. Chulalongkorn University Press.

Thai Post. (2022). Permanent secretary of the Ministry of Education points out the world entering the BANI World era: All chaos affecting education directly, policy given to cope with learning loss. *Thai Post*. <https://www.thaipost.net/education-news/255668/>

Walker, D., & Lloyd-Walker, B. (2019). The future of the management of projects in the 2030s. *International Journal of Managing Projects in Business*, 12(3), 583-602. <https://doi.org/10.1108/IJMPB-02-2018-0034>

Wisedonwai, J. (2022). Goodbye VUCA, hello BANI: Inviting school directors to adapt themselves and their schools to keep up with changes. <https://www.educathai.com/knowledge/articles/652>

Wongkanya, K. (2023). *School administrators' emotional intelligence and teachers' teamwork in schools under the Samut Songkhram Primary Educational Service Area Office* (Master's thesis, Silpakorn University).