

State of the Art for Educational Management in VUCA World

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Abstract: This article was an academic and qualitative data with the objective to propose the concept of educational management in the VUCA world era, which is a new normal characterized by V- Volatility, which is high volatility; rapid change; a situation or environment that is changing rapidly and very fast and cannot be predicted or is the situation suddenly changing unexpectedly, such as what today is disruptive innovation that changes things high rate of change; U-Uncertainty is a state of high uncertainty; difficult to predict; lack of clarity; unable to find clear information can be confirmed in each situation makes it difficult to decide because the current world has high changes and uncertainty; C- Complexity is complexity that is increasing systematically, with many factors and multiple key decision factors; A-Ambiguity is ambiguity; not able to clearly predict the outcome; lack of clarity about the meaning of an event. This is to encourage the general public, especially people in the education field and those working in educational administration, to shift the paradigm and change new management methods to be consistent with the changes. Administrative principles integrated with Buddhist innovative principles and research can be proposed for efficiency and effectiveness of educational administration. Educational administration can also be applied with the principles of Buddhist innovation and the science of research that is suitable for working in the VUCA world era in a changing world and suitable for administration in the 21st century and digital era.

Keywords: State of the Art, Educational Management, VUCA World

1. Introduction

The rapid changes in today's world society are caused by many factors including society, economy, politics, education, and the rapid and violent interaction between cultures through social society. One of these factors is disruption technology, which leads to revolutionary change by replacing old displacement but the replacement of disruption technology has several interesting important points: (1) New technology does not directly eliminate or destroy, but rather causes old things lose their importance and disappear by themselves. (2) New technology causes existing things to decrease in value and replaces them with something that is superior and better. (3) New technology creates rapid changes that are difficult to predict guess. (4) The impact of new technology occurs at the basic level, so adaptation must occur at the attitude level. The scariest thing about new technology is the dehumanization of its users, (Rouse, Margaret, 2016) except disruptive technology shows the nature of technology that causes change, shows the results that technology causes change. Indeed, disruptive technology is neither new nor recent. Scientific advances over the past several hundred years have always replaced the old. Cars have been replacing carts for hundreds of years, Flat screen TVs replace curved screen TVs, e-mail replaces writing letters, cell phone cameras replace cameras. These are both very familiar matters but "Why is it so worrying when discussing the disruptive, disruptive or even disruptive effects of new technology?"

The word that reflects this phenomenon well is the term “VUCA World”, which is an era in which there are rapid changes in technology, competition, business environment, and economy both internally and externally, make every sector significantly affected which is the result of three major world trends which are: 1) Globalization is the trend of integrating society into one society connecting the whole world together. Everyone can communicate or travel to each other around the world in no time. 2) The trend of technological development or Big Bang of technology is the trend of technology developing rapidly and leaps and bounds causing a lot of technological innovation to occur in the world and causing the world to change more rapidly. 3) The hegemony of capital flows (Financialization) is the trend of capitalism. The growth of transactional Capitalism or Financialization in which financial sector businesses play a higher role and proportion in the overall economy. It is caused by financial innovation that converts various assets into capital. Method of study, the paper is based on latest state of the art and scientific knowledge, using social science research means the study and discovery of truth using scientific systems and methods regarding behavior, phenomena, or reactions as well as the feelings and thoughts of humans and society in order to know the knowledge and truth that will be used to solve society's problems or create new knowledge.

2. Literature Review of VUCA World

The article of Robert E. Waller et al. (2019) “Global Higher Education in a VUCA World: Concerns and Projections” stated that higher education has faced many challenges since its inception. However, today's higher education faces. The biggest challenges include economic uncertainty. Responsibility, globalization and new technology daunting to learn and disruptive to implement, VUCA effectively describes the complex, evolving and dynamic environment facing higher education worldwide. Therefore, higher education institutions around the world are working to improve their ability to adapt and adapt to new forms of knowledge, information, and change in a VUCA world.

VUCA describes the current world of higher education operating in educational agencies that often have clearly defined missions, success in a VUCA world is not just about the technology's hardware. It is also about a new kind of education leadership that is values-led and purpose-driven. A VUCA world will not disappear as technology evolves faster and the world has become a truly global market, change in the VUCA world is constant, and the environment is constantly changing. The role of educational administrators in a VUCA world is to create moments of clarity and focus. At the same time, they analyze the changing environment and prepare to respond, strict adherence to the current strategy means risking missed opportunities. Education administrators in a VUCA world need to be flexible and committed enough to keep people motivated. It is complex and challenging but it is also an environment where the ability to be a true educational administrator can be developed. This will help VUCA leaders or administrators view VUCA as an opportunity for greater development and collaboration instead of being the only risk.

As the world becomes more connected through technology-rich environments and rapidly iterating contexts, Leadership is also becoming more and more complex. This is new, volatile, uncertain, complex, and ambiguous environment challenges the leadership context of the past. In the past, leaders relied on past decisions to predict and shape the future. In a new rapidly iterating ecosystem. This practice has become obsolete and is no longer applicable. For this reason, current and future leaders must develop and practice new skills to keep pace with this volatile and ambiguous landscape. This dynamic environment, though, is challenging to lead but it is also full of unique and innovative opportunities for those who can identify and capitalize on the next wave of disruption. Advances in this technology continue to drive innovative solutions that have the potential to impact global problems such as poverty, hunger and inequality. This article aims to ascertain the common strategies and practices of social entrepreneurial leaders that demonstrate social impact in technology-rich ecosystems. As current and future education administrators strive to be more effective in this new, interconnected, complex, and rapidly iterating environment, understanding how to lead and make change in the social realm is even more pressing (Agarwal et al., 2018; Brilliant, 2013). Therefore, the findings from this study can be used to promote or improve paradigms and approaches. In addition, these findings will provide additional insights into the changing practices of educational leadership in a dynamic ecosystem. This helps in fostering current and future social change leaders developing the abilities of these leaders as well as in developing the curriculum for leadership as an educational administrator, program, findings in this research. It was found that there were important points that stood out and

relevant implications for leaders within the VUCA ecosystem are developed. These findings address emerging trends in social entrepreneurial leadership and discusses the impact on current and future executive leaders, special talent development program and educational development programs.

3. State of the Art

The development of the 21st century system is influenced by fluctuations increasing Uncertainty, Complexity, and Ambiguity (VUCA) is an acronym created by the American military (Mack & Khare, 2016; Fridgeirsson et al., 2021) as a method strategically monitors the prediction level and the level of data/content quality of an event or situation (Bennett/ Lemoine, 2014). That is why this article specifically emphasizes the potential to increase the efficiency of project mobilization and management using a dedicated and useful result of an empirical study. Technical change management is a formal discipline. This allows complex products to be designed and manufactured simultaneously shared by multiple stakeholders throughout the product life cycle (Clarkson et al, 2005. p. 265)

Educational administrators must be aware and understand the principles of VUCA World. At the same time, educational leaders or administrators must have a perspective and vision that can connect with the world through technology being ready to work can create motivation and coordinate management relations for personnel in the organization to be more involved both internally and externally, able to build faith and trust in followers to support and strive, carry out work according to the goals set by using skills, knowledge, expertise, and various attitudes including concepts, theories, academic principles, and experiences to lead the organization to its goals. It is an idea and stimulates leaders and educational administrators in managing organizations in the VUCA world era.

Executives are the ones who set the direction for operations according to objectives and goals, which leaders are responsible for coordinating to lead the organization to progress. Leaders who have a broad vision will be able to accept and be willing to follow. A leader in an era of change must be a person who facilitates followers, is both a teacher and a mentor, able to influence every person in the organization in creating objectives, visions, values, beliefs as tools for controlling and creating cooperation. Within the organization by reducing conflict, being open-minded and open-minded in listening to a variety of opinions and can access information thoroughly, work together as a team, own ideas and must always think every employee is highly valued in the organization. (Petrick, & Furr, 1995, p. 69)

The characteristics of executives under volatile, uncertain, complex, and ambiguous (VUCA) situations are discussed. Details are as follows: 1) The live and learn component involves paying attention, learning, and being aware of work performance and co-workers including decision making and improving work efficiency. This is because under a situation that is volatile, uncertain, complex and ambiguous (VUCA), everyone must adapt in changing, 2) Components of personal characteristics involves the character of working faithfully towards stakeholders, have love and like to work, 3) The Self-Esteem relates to the self-worth of the entrepreneur who does not expect anything from others, does not wait for fate, uses his own labor, estimates himself, and acts with determination, does not procrastinate, 4) Network or connection is related to control, adjusting plans, asking for cooperation or assistance from other people or agencies when faced with change and being able to respond well to change, 5) The "Managerial skills" component involves teamwork, problem analysis seeking opportunities, time management to benefit work and respond to the needs of service recipients, have management ability and technical expertise, 6) The competency component (Capability) is related to operating the business with determination, believe in your own abilities seeing the possibilities in management and ready to face risks, 7) The problem-solving component involves solving problems, anticipating and adjusting work concepts and using experience to help approach problems and make decisions, 8) The creative innovation component involves following new news, taking initiative and creating new things, have driven and motivation to run a successful business, 9) Components of leadership involve setting goals, leadership skills in negotiation and finding a path to success, 10) Element of intelligence involves wit or intelligence in selecting people and solving immediate problems, 11) Communication involves the ability to join associations, make friends, and communicate. This is because communication is a tool for transmitting news, information, as well as feelings and opinions from one person to another person or group of people in different ways.

4. VUCA World

VUCA world is an acronym that has recently found its way into the business lexicon. The components it refers to volatility, uncertainty, complexity, and ambiguity are words that have been variously used to describe an environment which defies confident diagnosis and befuddles executives. In a 'VUCA world,' both pundits and executives have said, core activities essential to driving organizational performance like strategic planning are viewed as mere exercises in futility. VUCA conditions render useless any efforts to understand the future and to plan responses.

The notion of VUCA was introduced by the U.S. Army War College to describe uncertain, complex, and ambiguous, multilateral world which resulted from the end of the Cold War. We are moving from a world of problems, which demands speed, analysis and uncertainty to solve in a world of dilemmas, which demands patience, sense making and an engagement with uncertainty. 'VUCA' is Volatile, Uncertain, Complex and Ambiguous are the characteristics of modern strategic dilemmas which requires a different orientation and a set of skills.

The VUCA concept was introduced by the US Army War College to explain the uncertain, complex, and ambiguous multilateral world that resulted from the end of the Cold War. We are moving away from a world of problems. It requires speed, analysis, and uncertainty to solve a world of dilemmas which requires patience cunning and engaging with uncertainty, 'VUCA', the volatility, uncertainty, complexity and ambiguity that characterize modern strategic dilemmas. This requires a different orientation and skill set.

4.1 Characteristics of the VUCA world

A key assumption that underpins science and traditional business models is the law of steady state. This shows that each element is constant and does not predict any dynamic interactions. Between those elements, however, the VUCA framework defines the world's economic and social conditions as volatile, uncertain, complex, and ambiguous. Individual characteristics in a changing VUCA world can impede many aspects of successful organizational operations. It accomplishes very strange and dramatic things like management, forecasting, planning, and much more. Moreover, it is not necessary to display all four characteristics of VUCA simultaneously. For example, some situations are volatile and complex in nature, but it doesn't have to be uncertain or vague. However, a world that can be described by these four characteristics is not only difficult to conceptualize but it must also be managed and responded to, which has the following 4 characteristics:

1) Volatility; a situation can be described as volatile when there is insufficient information to predict that a given course of action will be effective although the situation is well understood. Due to fluctuations but it is difficult to determine the direction of change, magnitude and outcome, global VUCA fluctuations may best be compared to hurricanes. Although scientists understand how it occurs and what conditions must be met for it to continue increasing in size and size, but it's impossible to predict exactly how powerful a hurricane will ultimately be which will receive maximum thrust continuous change a surprising turn of events unpredictable results. These are essential features of a fluctuating reality.

The burst of a "speculative bubble", followed by the financial crisis of 2008, provides an excellent example of the socioeconomic consequences of volatility. All parties involved (e.g., mortgage lenders, financial and insurance institutions, government officials) had a sophisticated understanding of the situation - knowing how the securities were backed. Institutions that packaged, insured and sold them were aware that the "speculative bubble" continued to grow. However, nobody attempted to estimate the critical point at which it would burst. Indeed, most of them doubted that such an eventuality could materialize. The market crash, during the global financial crisis of 2007-2008, has forever changed the way people approach the constantly changing world of VUCA. Prior to 2008, unpredictable global events were underestimated. Nowadays, they have become a firm pillar of the probability models created to measure the volatility of financial and real estate markets, as well as business management or education sectors.

The bursting of the "speculative bubble" followed by the 2008 financial crisis is an excellent example of the economic and social consequences of volatility. All parties involved (e.g., mortgage lenders, financial, insurance institutions, and government officials) have a complex understanding of the situation by knowing how the securities are backed the institutions that package, insure and sell them are well aware that the "speculative bubble" continues to grow, however, no one has attempted to estimate the critical point at which it will burst. Indeed, most of them wondered if such an event would really happen market failures during the global financial

crisis of 2007-2008 changed the way people approached the ever-changing world of VUCA. Before 2008, the unpredictability of global events was underestimated until today they have become a cornerstone of probabilistic models built to measure the volatility of financial and real estate markets including the business management or education sectors.

2) Uncertainty; the second characteristic of a VUCA world is uncertainty being a result of the difficulty in interpreting the events and situations that an organization is facing at a particular time. Both the cause of the event and its consequences may be predictable but it is impossible to predict how they will affect the future of the organization or will it be significant enough to warrant an immediate response/proactive investment in appropriate resources. The uncertainty of a situation makes it difficult to specify a clear description of the meaning and essence of a situation or state as a challenge. Therefore, it is difficult to offer concrete solutions without knowing which methods are most effective and under what circumstances. It is often not clear whether any action should be taken.

Attempts to understand the uncertainty that is a feature of the VUCA world can be exemplified by the issue of terrorism (Bennett, N., Lemoine, G.J., 2023). In the past few years, people have a better understanding of terrorism, both the roots, motivations and limitations, as well as the consequences and difficult emotions of terrorism. Both countries and organizations are spending a lot of resources fighting it but no one can predict whether the measures taken will be sufficient to deter future terrorism, that is, whether resources will be invested in appropriate initiatives to effectively reduce the number of terrorist incidents. If any of our actions today can be effective in winning the global war on terror, many questions regarding uncertainty remain unanswered but one part always remains unknown. Humanity needs new tools to make uncertainty as transparent as possible.

3. Complexity; characteristic is often mistaken for complexity. Complexity means viewing the world through the lens of the need to analyze infinite amounts of data. By nature, People try to divide the overwhelming part into parts that can be more easily managed which they can process and understand. However, segmenting and focusing the analysis on individual parts can lead to situations where some parts are not properly considered. As a result, the whole picture may be blurred or completely obscured. Therefore, focusing on individual elements often becomes a hindrance to an overall correct interpretation. However, it is part of human nature to prefer the familiar and safe over the unpredictable and unknown. Sometimes the bigger picture is too scary. The essence of a VUCA world is the multiplicity of interconnected parts that form a network of information, procedures, and actions. These parts can be separated into several aspects. Multi-component and multi-layered, they do not require any editing and just create a system together.

4. Ambiguity; the last component of the VUCA world, ambiguity, is directly connected to the increasing amount of innovative solutions – in technology and information science as well as in worldviews, management strategies and the society at large. The wisdom of previous generations was based on knowledge gathered and passed down across generations. In many cultures and societies, a local sage – a person who has lived through enough experiences to be considered wise – was their main source. Unfortunately, today's world is composed of building blocks – events that are unprecedented – that did not exist in the past. That is why, nowadays, looking into the past to learn or draw meaningful conclusions does not always make sense. In the VUCA world, lack of knowledge about the rules of the game is fundamental and frequently and absolute. The attempts to face the realities of today's world by means of the wisdom of previous generations may not only be inadvisable, but also dangerous.

An example of ambiguity in today's world is social media with rapid reach, influence, and spread social media allows researchers mathematician and CEOs are constantly confused. People are still learning how to respond to social media to calculate access. They also evaluate the speed and quality of information propagating through their networks. A new multi-dimensional and multi-temporal probabilistic model was created to address these challenges but the reality goes beyond all predictions and calculations. Today, Artificial Intelligence (AI) and ubiquitous algorithms are certainly less prone to errors and more efficient in their decision-making than humans even when such decisions have a direct impact on human outcomes with these new technologies. The position of the philosopher has lost its value and meaning. Today, our learning is based on the reverse paradigm. That is, young people teach older people their place and role in today's world. The present exceeds the most extreme predictions of futurists.

4.2 The Challenges of Management in the VUCA World

The older generation grew up in a paradigm of stability and predictability. Even after the worst fluctuations (such as wars, epidemics), the world tends to return to a state of stability. Therefore, it is sufficient to implement all the elements of the management model in a way that will lead to previously proven success. The reality of VUCA is generally described and presented as a threat to that steady state. Feelings of threat can trigger many different reactions, with displacement and rejection being the most common: “A VUCA world doesn’t exist. Let us continue to do things the way we have always done them.” Sometimes the reaction to VUCA is also anger. This may trigger the desire to force things back to a familiar and safe state. However, these reactions are neither useful nor sufficient in the face of the new realities of today’s world.

The most effective way to manage a VUCA world is to approach it as a challenge. When people interpret a situation as a threat, they often feel overwhelmed and withdrawn. But when they interpret it as a challenge, they show curiosity and a desire to take on challenges. The latter drives innovative solutions and ideas. Usually, the primary constraint of innovation is adherence to a single perspective. This makes it impossible to find new opportunities and it discourages the pursuit of diverse perspectives. However, given the significant uncertainties and challenges of a VUCA world, the ability to remain agile and change with diverse perspectives is essential (McCann, et al., 2009; Horney, et al., 2010). The characteristics of a 21st-century leader also need to be analyzed in this context (Hamel, 2007; Pearce, 2017).

The main challenge posed by a volatile world is the ability to take a broad perspective, decision making with speed and agility find a balance between personal and organizational resources and to reach a comfort level with the evolution of potential goals (Chapman, 2001; Laloux, 2014). How can leaders stay grounded in the face of constant change? How can they maintain their moral compass? And how do you know if the number and type of changes are not adversely changing? In a volatile VUCA world, a leader’s key quality is trustworthiness – self-excellence. Important variables of authenticity include self-esteem, self-efficacy and a deep understanding of one’s core values. This helps people to live in harmony with themselves. A leader who is taught the “right” way of thinking chooses a narrow version of correctness and reasoning. They are not equipped to deal with the vicissitudes of today’s world. Stability breeds routine. Routine reduces vigilance and denies flexibility and enthusiasm. Lack of the latter leads to setbacks in a volatile business environment. Authenticity is therefore a conscious choice to become aware of one’s self in the present moment. It means using your strengths and benefitting from your vast personal experience and potential. It is the essence of one being core identity. The foundation of this approach, however, is deep understanding and peaceful self-acceptance, self-confidence. Organizational confidence as well as confidence in decisions and actions are inexhaustible capital in a volatile world.

The main challenge of uncertain realities is rapid, creative, and customizable data interpretation. It distills important insights from large amounts of data and seemingly conflicting facts being clear that currently widely used algorithms and linear models may not be sufficient. In fact, that is uncertain. Leaders need true openness that is rooted in their own unique worldview. If they see the world as a place full of challenges that enable growth and development, they will remain open to diverse perspectives implementing innovative solutions operate beyond traditional boundaries. Finally, it is a fresh and correct decision. The results of irrational beliefs narrow decision and viewing the world and its people as a threat to one’s position. Managers thus condemn themselves and their organizations to remaining stranded and powerless. Looking towards an uncertain and threatening future. Openness meets authenticity. That is why when leaders know themselves and continue to grow. Not only do they realize the limitless potential of the world and people around them; but also, your own potential staying open in the face of uncertainty is difficult. But it changed everything more importantly, it becomes a source of internal motivation and a source of motivation for the teams they lead.

Key challenges for leaders working in a complex world is the ability to analyze the entire situation (synthesis). Like each part of a situation (analysis) simultaneously and to integrate this information to draw consistent conclusions. Otherwise, the “big picture” may get lost in many details or all-important specific information has been omitted only when focusing on the broader context. Therefore, effective leaders need flexibility in both their thinking and decision-making style. This quality enhances leaders’ credibility and openness in a VUCA world. Their flexibility allows them to quickly recognize and adapt to the needs of the situation by managing both the big picture and individual elements. Leaders or administrators understand the reality of complex and sensitive situations. This helps them to choose the appropriate course of action. They can also make quick decisions regarding the allocation of assets or human capital, flow of information (from domestic and international

markets) regarding customer needs or market growth trends often requires rapid changes in a company's processes. This is why leadership flexibility is the foundation for a company's future stability. In a counterintuitive way Flexibility and bias (vs. uncompromising tenacity) is a key element of stability in a VUCA world.

The impact of authenticity and expanding a leader's self-awareness is collaborative. This is the final characteristic of effective leaders in a VUCA world: Collaboration becomes the source of self-worth and self-efficacy or a sense of agency over one's own life and actions. It gives leaders influence and the ability to work with others. As a result, people around them perceive and respond to a cohesive leader because he or she "makes sense." Collaboration becomes an effective way to respond to challenges arising from the ambiguity of identity, true at present ambiguity (i.e., uncertainty) is often difficult to monitor, control, or predict. While an organization may successfully manage one aspect of a challenging situation, but the other side often loses definition. Collaboration is a sign of the deepest agreement between leaders' identities, beliefs, and values. It leads to unity of thoughts, words and actions. Ambiguous events and unknown situations do not affect a cohesive leader. On the contrary, their cohesive actions become the cornerstone of effective decision-making. That's a lighthouse in a foggy world. In the reality of a VUCA world, answers may seem dubious today are tomorrow's solutions. Collaboration is the most appropriate response to an ambiguous reality.

4.3 The paradigm shift to the Future

Today's world forces people to view the surrounding reality as an interconnected system. Local and global factors that were not considered in the 20th century now need to be skillfully integrated into existing management paradigms. The traditional paradigm is built on the assumption of safety and security. It needs to be improved gradually to keep change at the center of strategy and decision-making. At present, it is impossible to predict that change will eventually occur. Today change is the basic assumption. The reality of VUCA creates a volatile, uncertain, complex and ambiguous world in which human capital management as well as economic and logistical resources. It needs to be viewed as an ongoing challenge for both leaders and their teams. Today's world requires managing the unknown (Lebow, et al., 2002). Therefore, various organizations need to be an emphasis on developing leadership qualities that prepare them to face the challenges posed by a VUCA world and enable them to succeed within it. A combination of the characteristics of today's world: Volatility, Uncertainty, Complexity and Ambiguity. It coalesces into a unique and previously unimaginable reality that is difficult to manage, however, with the right coaching and support educational administrators in 21st century (with authenticity working together openness and flexibility) will be able to create a completely new reality which is greater than the sum of its parts clearly. This new reality creates leaders who are prepared to meet the challenges of a VUCA world.

complexity Characteristics: The situation has many interconnected parts and variables. Some information is available or can be predicted, but the volume or nature of it can be overwhelming to process. Example: You are doing business in many countries, all with unique regulatory environments, tariffs, and cultural values. Approach: Restructure, bring on or develop specialists, and build up resources adequate to address the complexity.	volatility Characteristics: The challenge is unexpected or unstable and may be of unknown duration, but it's not necessarily hard to understand; knowledge about it is often available. Example: Prices fluctuate after a natural disaster takes a supplier off-line. Approach: Build in slack and devote resources to preparedness—for instance, stockpile inventory or overbuy talent. These steps are typically expensive; your investment should match the risk.
ambiguity Characteristics: Causal relationships are completely unclear. No precedents exist; you face "unknown unknowns." Example: You decide to move into immature or emerging markets or to launch products outside your core competencies. Approach: Experiment. Understanding cause and effect requires generating hypotheses and testing them. Design your experiments so that lessons learned can be broadly applied.	uncertainty Characteristics: Despite a lack of other information, the event's basic cause and effect are known. Change is possible but not a given. Example: A competitor's pending product launch muddies the future of the business and the market. Approach: Invest in information—collect, interpret, and share it. This works best in conjunction with structural changes, such as adding information analysis networks, that can reduce ongoing uncertainty.

Figure 1 What VUCA Really Means for You
Source: Nate Bennett and G. James Lemoine (2023)



Figure 2 VUCA MODEL
Source: Bennett & Lemoine (2014)

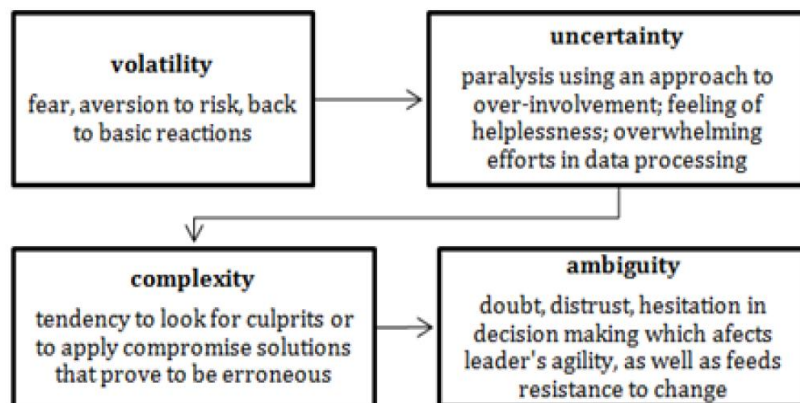


Figure 3 The impact of VUCA variables on leaders
(Authors analysis based on data provided by Kinsinger & Walch, 2012)

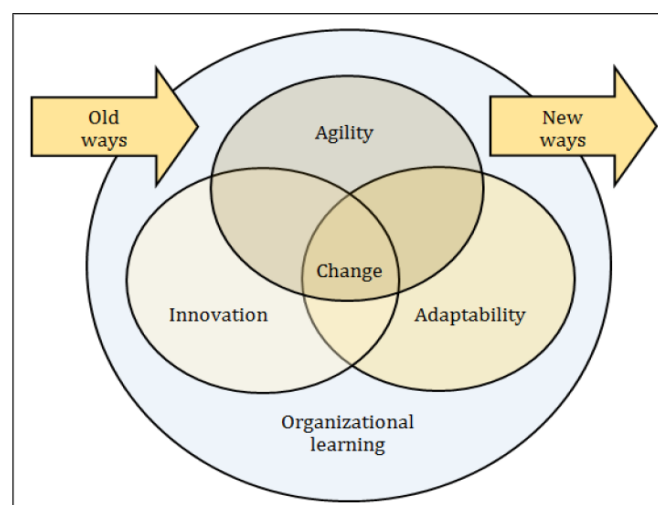


Figure 4 The model of change regarding adaptation to VUCA environments
(Source: JCN 1/17, 2017, p. 7)

Therefore, we can see that the VUCA era is about rapid, uncertain, and difficult to predict changes. It is quite complex and ambiguous making growth in this era of change being very challenging and worrisome, what makes the VUCA era worrisome is because 1) because VUCA is an era of volatility and rapid change. It makes everyone feel insecure and unfamiliar. Moreover, if unable to adapt or adapt slowly, it will affect one's own work and lifestyle; 2) With the VUCA world becoming more competitive, a person with low ability or performance. Life is more difficult because it is difficult to find work; 3) A world like VUCA creates uncertainty and safety. As a result, people's relationship and commitment to the department or organization decreases. Educational institutes are now taking VUCA seriously, and many organizations are trying to adapt their organization to survive and thrive in this era of change. However, even though organizations are adapting but if human resources still cannot adapt. It is difficult to overcome this fluctuation.

5. Educational Management

5.1 Meaning of Educational Management

Educational management is a relatively new academic discipline but it is growing significantly in the United Kingdom and in other countries. Mostly English-speaking, the widespread shift towards self-management has increased the importance of effective leadership within educational institutions and the parallel need for theory and research to establish what constitutes good practice. Rapid and repeated policy changes provide a challenging context for organizing education but it also points to the need to review discipline (Tony Bush, 2023).

Across much of the westernized world, environmental pressures have transformed the context of public education and educational administration. The changing world economy, declining confidence in the welfare state, and adverse social trends have generated strong pressures for change in education systems, and for nothing less than a paradigm shift in educational management. Together, these social forces have produced three interconnected imperatives for educational administrators: a productivity imperative, an accountability imperative, and a community imperative, efforts to respond to these imperatives generate tensions between competing paradigms in educational management.

Good (1973) provided two meanings to educational administration: 1) controlling Managing activities and tasks all of school together with administrative work focusing on the work of the school, which is the end goal of education. 2. Controlling and organizing all school processes, such as administration and human resources, including teachers and students; planning for learning and teaching, planning activities according to the curriculum, teaching methods, equipment, guidance, etc.

Therefore, educational administration refers to various activities that many people work together to develop children, youth, citizens, or members of society in every aspect, such as abilities, behavioral attitudes, values, or morality in society. Politics and economics in order for such people to be good and efficient members of society by various processes both systematic and unstructured. It is a process of working with two or more people collaborating with youth developers. People in everywhere in an orderly manner, work will be carried out smoothly and the objectives set for development of children, youth, and the public will be achieved in various areas and work will be successful. Everyone must work together to manage education, meaning work processes or activities, education in which the people involved work together to carry out the work using administrative resources to develop human resources to be good, quality members of society according to the objectives that have been set.

5.2 Concepts about educational managerial (administrative) innovation

The use of innovations in educational administration in the administration of educational agencies will be comprehensive and relevant. There are two types of educational innovation: (1) policy innovation, it is an innovation that involves improving regulatory policy. For educational agencies and educational institutions to pilot in the area of innovation in educational administration and organize education more flexibly and efficiently, and (2) Innovation in teaching and management in educational institutions. It is an innovation to solve problems and develop the quality of learning for students, which is related to the curriculum. Teaching and learning management and administration by educational institutions can select teaching innovations and management that has been

proven both domestically and abroad to truly create the quality of students and schools that can be used for further development (Thailand Education Partnership, 2018). There are two dimensions of operating guidelines: Horizontal dimension is the process dimension which consists of four phases of the innovation process: (1) motivation that causes innovation, (2) creation of new ideas or practices (Invention/idea linking), (3) Leading to practical application (Implementation/idea testing), and (4) Set a clear process model; Vertical dimension is the dimension of the change makers, both inside and outside the organization (Birkinshaw, et al., 2008).

6. Buddhist Innovative Integration

The principles of Buddhism teach us to be aware of changes, always be alert with carelessness, not become distracted or lethargic, and teach yourself to be enthusiastic and hasten in performing your duties, especially to be mindful, aware, alert and prompt, then hurry to prevent and eliminate and correct the causes of deterioration, and accelerate the creation of causes for prosperity. (Somdet Phra Buddhaghosacharya (P. A. Payutto), 2023). Therefore, quality educational administration according to Buddhist principles generally has 4 aspects: 1) Academic administration, 2) Personnel management according to the manpower plan, develop a system for producing and developing teachers who have quality and have the spirit of being a teacher, 3) Budget management is transparent and verifiable, improving the educational administration structure, and 4) General administration in collaboration with the community. There is a tendency to participate in educational administration into practice, including curriculum development teaching process measurement and evaluation, production, and development of teachers, faculty, and educational personnel strategy for producing and developing manpower by promoting the practice of Sarāṇiyadhamma principles (D.III. (Thai) 245; A.III. (Thai) 288-9), namely creating unity, help and be generous to others, have good speech, be polite and sweet, share without taking advantage of each other, and work together to manage education with quality and efficiency (Tree Pawangkanan et al., 2021).

Efficient educational administration will result in learners being complete human beings with body, mind, intelligence, knowledge and morals, having ethics and a culture of living, being able to live happily with others as well as responding to the needs of world society Buddhism is a religion of wisdom and practice. All teachings in Buddhism refer to the principles of reality according to natural laws. In this regard, the principles of Buddhism consist of moral principles and ethics, focusing on knowing the truth of the world and life. At present, especially in the management according to Buddhism principles, it is the use of Buddhist principles in management in terms of developing administrators and personnel to have quality and be committed to goodness and not be ignorant of the frustration that provokes it, such as corruption, violence in the use of emotions, propensity to dominate subordinates. It also creates trust and belief in being a good example of a leader, able to rule subordinates peacefully. Administrators will perform their duties successfully if they have Buddhist principles to support them, such as the Dutiyapāpanika Sutta (A.III. (Thai) 20/20) principles, which are 1) Cakkhumā: Have a vision, 2) Vidhuro: Have a good business, and 3) Nissayasampanno: Fully equipped with shelter or has a good network integrated personnel management using the Threefold Principles (D.III. (Thai) 220; A.I. (Thai) 229) and administration in educational institutions by using the 4 Iddhipāda principles of management, etc. (D.III. (Thai) 221; Vbh.(THai) 216; Sitthichai Sannita and Worrakrit Thuenchang, 2022).

7. Knowledge of Study

This paper trends to study and propose state of the art for educational management in VUCA World. Knowledge of the study of this academic paper can be shown as the following figure.

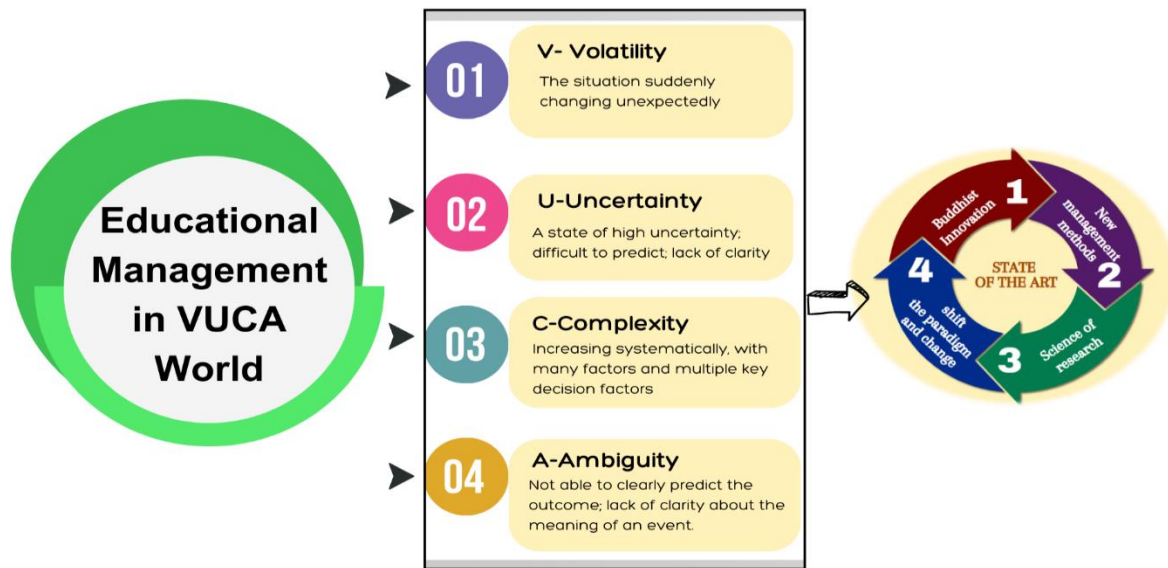


Figure 5 State of the Art Model for Educational Management in VUCA World
(Source: Lampong Klomkul and others, 2023)

8. Conclusion

Coping with this fluctuating world trend, everyone is focused on education which is considered the foundation for human development. Thai education has always been a response to learning with knowledge that has changed little. This is not consistent with the present where knowledge changes quickly, is uncertain, complex and obscure: Uncertainty, Complexity, and Ambiguity (VUCA). Therefore, educational institutions must change from giving importance to knowledge. Let's focus on the thought process of the learner. One of the skills that are brought up to be discussed in developing the thinking process of students is the necessary skills according to development guidelines in the 21st century, which consist of 1) learning and innovation skills is creative, problem solving, and attentive to innovation, have good communication, know how to think critically and have cooperation. 2) Information, media and technology skills, namely knowing how to follow news and information, knowledgeable in information technology, media literacy and smart in communication 3) life and career is flexible, know how to adapt, have leadership, take initiative, take care of yourself, learn about culture, know how to socialize, have diligence, take responsibility and know how to develop own self, promoting learners according to the 21st century guidelines is the answer to human development in the midst of the world in the VUCA era because it helps fill gaps from the impacts that may occur in the movement of the VUCA trend, such as V (Volatility) is volatility, rapid change unpredictable. It can also fill the gaps from this impact. Educational administrators should know how to follow the news, media literacy and adaptability; U (Uncertainly) means uncertainty difficult to decide. It can also fill the gaps from this impact, using critical thinking and have courageous leadership in making decisions; C (Complexity) is complexity that is increasingly increasing in the system, holes from this impact can be filled by taking advantage of innovation and technology to help make work easier; A (Ambiguity) is ambiguity and unclearness. The outcome cannot be clearly predicted. We can close the gaps from this impact by knowing how to communicate, being smart at communicating, and knowing how to work cooperatively. It can be seen that necessary skills in the 21st century is an important weapon in developing people in the education system to deal with the VUCA trend that is taking control of the world every now and then. Some educational institutions that are aware and adapt first will be able to survive. While some places that don't care or resist social trends may be affected by trends that affect people and organizations in one way or another, it is time for educational agencies to seriously focus on education for development in the 21st century because otherwise educational institutions will be among those institutions that will be swallowed up from the world by VUCA, new era and when that day actually comes, we will lose the opportunity to develop people and the country. VUCA world is an abbreviation for Volatility, Uncertainty, Complexity, Ambiguity with guidelines for dealing with 1) having a vision, 2) understanding, 3) clarity, and 4) agility.

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