Estrategias educativas y de liderazgo para afrontar el nuevo escenario europeo VUCA[1]

Educational and leadership strategies to face the new European VUCA scenario

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Resumen:

La sociedad europea vive momentos de Volatilidad, Incertidumbre (Uncertainty), Complejidad y Ambigüedad que se ha definido como mundo VUCA. Para hacer frente al nuevo escenario económico, político y social, necesitamos redefinir el conjunto de competencias que esperamos de los graduados que llegan al mercado laboral europeo. Este artículo presenta la incorporación de nuevos enfoques en los planes de estudios de los cursos de Grado en Gestión en Polonia. El trabajo sigue una metodología descriptiva y se basa en el análisis de investigaciones e informes que recogen las necesidades y perfiles que demandan las empresas y la sociedad en un futuro próximo. Los principales hallaz-

Abstract:

European society is experiencing moments of Volatility, Uncertainty, Complexity, and Ambiguity leading to what has been known as the VUCA world. To face the new economic, political, and social scenario we need to redefine the set of competences we expect from the graduates entering the European labour market. This article presents the process of incorporating new approaches into the curricula of the management courses in Poland. This study follows a descriptive methodology and is based on the analysis of research and reports that collect the needs and profiles demanded by companies and society in the near future. The main findings show how certain soft skills will allow our stu-

gos muestran cómo ciertas competencias "blandas" permitirán a nuestros estudiantes competir con un futuro robotizado, y satisfacer las necesidades de la sociedad y el mercado laboral. Las habilidades blandas son típicamente humanas y difícilmente se automatizarán, o al menos no sucederá rápidamente, convirtiéndose en las más importantes para los empleados del futuro. La elaboración de currículos dinámicos permitirá resolver tareas innovadoras, evaluar y gestionar riesgos y contrarrestar estas amenazas.

Palabras clave:
Competencias en Gestión; VUCA; formación universitaria; educación

dents to compete with a robotized future and to meet the needs of society and the labour market. Soft skills are typically human and will not be automated, or at least this will not happen imminently, and they will become the most important skills for employees of the future. The elaboration of dynamic curricula will allow us to solve innovative tasks, evaluate and manage risks and counter threats.

Key Words:
Managerial Skills; Vuca; University Training; Education.

Résumé:
La société européenne connaît des moments de volatilité, d'incertitude, de complexité et d'ambiguïté qui ont été définis comme le monde VUCA. Pour faire face au nouveau scénario économique, politique et social, nous devons redéfinir l'ensemble des compétences que nous attendons des diplômés entrant sur le marché du travail européen. Cet article présente le processus d'incorporation de nouvelles approches dans les programmes des cours de gestion en Pologne. Le travail suit une méthodologie descriptive et est basé sur l'analyse de recherches et de rapports qui recueillent les besoins et les profils exigés par les entreprises et la société dans un avenir proche. Les principaux résultats montrent comment certaines compétences non techniques permettront à nos étudiants de rivaliser avec un avenir robotisé et de répondre aux besoins de la société et du marché du travail. Les compétences non techniques sont généralement humaines et ne seront pas automatisées, ou du moins cela ne se fera pas rapidement, et elles deviendront les plus importantes pour les employés du futur. L'élaboration de programmes dynamiques permettra de résoudre des tâches innovantes, d'évaluer et de gérer les risques et de contrer les menaces.

Mots clés:
Compétences managériales; VUCA; formation universitaire; enseignement.

Introducción

Europe is a coherent, dynamic continent but maintains a diversity of cultures, thus it is always necessary to converge the different types of educational approaches (Null, 2023). Cross-national analysis of university curricula are interesting, but international approaches, commonly studied through student mobility programmes, are particularly rare (Zapp &

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Lerch, 2020). We cannot forget that the practical organization of education has medium- and long-term influences on societies (Osberg & Biesta, 2021), catalysing the political and social dilemmas of contemporary Europe (Krause, 2022). In this sense, and from each country, we have to prevent students from simply accumulating studies and titles inconsistently, integrating all this training into a system with social and personal goals shared by all, especially from the university perspective (Gedeon, 2020).

Education focuses on providing students with knowledge, skills and competencies appropriate to their needs, but talking about employment and training for strengthening the competencies of an individual one should first concentrate on the most current needs and trends on the labour markets. The up-to-date researches show the importance of the surveying of the demand not only for the specific jobs but rather skills that the individuals possess. For years the impact of technology, and more specifically, of networks in educational methodologies has been very important. Nowadays, the way of teaching and learning has been particularly affected by new phenomena of great magnitude (Fombona, Fombona-Pascual & Vázquez-Cano, 2023), in this sense, the pandemic has caused effects in the educational field throughout the world and at all educational levels, this has generated profound social changes, and educators reconsider the role and objectives of education (Sarid Levanon, 2022). Added to this are the war in Europe, migration, the incorporation of new educational policies for social inclusion and employment, etc. We must question whether educational institutions offer the right range of training and courses, and we have to analyse how managerial skills follow the changes in the modern world, and how is the new profile of human resources that society and companies need.

In this new environment, education must face new dualities and tensions, to engage in deep learning and personal development. The set of changes is being grouped in a common denominator with four variables: Variability, Uncertainty, Complexity and Ambiguity, VUCA (Bennis & Nanus, 1985). VUCA is more and more the main feature of the world around us, as well as its economic and social situation. The events of the last few decades or years, or even months and weeks encourage us to reflect on the dynamics of changes, the unpredictability of the environment, the complexity and ambiguity of our decisions. A world overtaken by the COVID-19 pandemic, economic activity partially blocked by manda-

ted lockdowns, and the health service burdened to the limit by fighting the "new enemy". On the other hand, the realities of everyday life such as natural threats, the fight against pollution, but also social inequalities, and wars. In this scenario Arnett's concept of emerging-adulthood is important as it provides additional theory to connect the principles of education in this form of dualities (Bennis & Nanus, 1985). We probably need to prepare our students for new unpredictable phenomena, and to do it within a common, coherent and European perspective. Are such traits identifiable and trainable, or are they rather innate and difficult to describe? (Taleb, 2007). Should we focus on any special skills of human beings that will allow us to effectively use the opportunities given to us and overcome threats? (Taleb, 2012).

The VUCA environment

VUCA is initially used in the military terminology from which it comes (Stiehm & Townsend, 2002), but also common in business or strategic management. This acronym is used to describe the Uncertain, Highly Variable, Complex and Ambiguous reality in which we operate. It is an abbreviation first used to refer to the leadership theory (Bennis & Nanus, 1985), then it was used to describe the variability and complexity of the functioning world as a result of the end of the Cold War to finally be included in economic literature after the 2001 World Trade Center attacks (Stiehm & Townsend, 2002).

Individual elements of the VUCA acronym describe the economic reality and problems in the field of strategic management as follows (Mack & Khare, 2016): Volatility determines the pace and speed of changes that the institution experiences in the surrounding environment. Uncertainty is the inability to predict situations and events that may occur. It is caused by the variability of the environment or the lack of sufficient knowledge to assess the consequences of events. Complexity consists of a network of information with variety of procedures, a multiplicity of problems that may occur and without specifying of a cause-and-effect relation. It is a situation where different institutions may obtain different results despite using the same procedures. Ambiguity refers to difficulties in understanding the environment and is associated with different interpretations of events. Ambiguity is reflected in situations where one pro-

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blem has many solutions and it is not possible to decide which solution should be chosen.

Today's world is a dynamic world, full of uncertainties, and deviation from usual guidelines and rules, it is a scenery of liquid modernity constantly changing way (Bauman, 2018). Neither the educational organization's leadership nor its strategies are spared in today's VUCA world. Experiences, dogmas and paradigms must be scrutinized; it is no longer about finding a single path or management tool: standards are giving way to new methodologies. The head is responsible for the lion's share of decisions about the parameters that define the way an organisation works. The increase in volatility, uncertainty, complexity and ambiguity means that the leader and his/her institution, under changed circumstances, must seek new directions and adopt a fresh approach to management. VUCA challenges to find the own way and heads must understand logic and develop new behaviour, and be more concerned with people and their needs (Kostro et al., 2021).

Previous research (Nikseresht et al., 2022) encourages to continue exploring these VUCA scenarios, in addition artificial intelligence and robotics change the traditional variables and goals of education. In this line, there is a pressing need for an updated model of cultural literacy that can serve as a powerful tool for living in the VUCA world (Shliakhovchuk, 2021). More specifically, university students struggle with VUCA circumstances and do not seem to receive sufficient preparation in the domain of social-emotional competencies to face these challenges (Hadar et al., 2020).

Objectives

The objective of this study is to show the changes in the educational programming and methodology that are being carried out with the Management students of the Ignacy Mo cicki University of Applied Sciences in Ciechanów, Poland. This model analyses the development of new competencies that the person in charge of managing human teams must have, be it a manager of a company or an educational head.

This type of innovation is justified by the need to address the new expectations of students and the new problems that arise with new educational methodologies, especially in Europe.

Method

New educational strategies are being implemented with the Management students at the Ignacy Mościcki University of Applied Sciences in Ciechanów (www.puzim.edu.pl). Each academic year between 70 and 80 students begin their 2nd level studies for master's degree in Management. These courses last 2 years. 90% (65-70 people) of the students continue on the second year, 85% (55-60 people) of which graduate writing the master's thesis. The ages in both cases range between 22 and even 55 years old, with the median of 25 years old. The ratio of men to women is 43% of men and 57% of women. These are students previously graduated the 1st level of university education (bachelor) in different areas, such us Agriculture, Economics, Logistics, Engineering, IT or even Nursing. Students must be trained in the most up-to-date formative modality, in addition to following the European perspective, within the common European area of education, and the commitment of the signatory countries of the Bologna Education Plan to promote reforms of their educational systems.

The team of teachers (5-8) is made up of PhD's in Management, Economics, Pedagogics or IT. They all have high expertise both in teaching and in business, all being the employees of the Finance and Management Department. The University's Quality Policy assures us that the changes in course curriculums that we plan and sugest will be made as soon as posible. It's important as we all know how quick and dynamic the changes of economical enviroment can be. Those people, involved in the curriculum quality improvement project, have carried out an exploration of previous resesarch in which the characteristics and profile of the students are detailed in connection with the needs of the companies and the society that will accommodate these students in the near future. Thus, every year, at the beginning of the winter semester they are being deeply investigated by this university's academics to discover what competences do they really need, and what the potencial employers do need from them. After that the curriculum of the whole course is being analysed to actualize it.

This study focuses in the leadership career given the social and labour importance of management teams. In the academic field, the figure of the manager and director of the educational center is also important, however, the distinction between leader and follower is increasingly de-

batable given that all those involved in knowledge work have responsibilities both to lead and to know the work developed by the workers (Davis, 2018). In any case, academic management and leadership models have been disrupted after the Covid-19 pandemic (Antonacopoulou et al., 2019). On the students hand, the VUCA scenario has generated a climate of insecurity where students need a high level of long-term work commitment. Schools must also be aware of students' interests and personality traits, and their interest in connecting with the security of the professional world in the long term (Gong et al., 2022).

Results

First, the research collected the findings of the most recent literature of scientific impact, related to the requirements of the new way of leadership, both business and educational environment, as well as the implications for curricula, and the need to provide resources and strategies for the heads of schools, in this new post-pandemic normal life (Sum, 2022). We must highlight great leaders, managers, people who lead small or large organizations have many things in common - some innate, some acquired: the natural, personal or formal authorities (Bartkowiak & Niewiadomski, 2011); the ability to convince others to their own views or actions.

On the other hand, the academics of this university analyse reports to develop and complete the programming, and the first job in selecting content for programming is to explore current socio-economic real areas that are understaffed, with staff shortages, and those that have surplus of employees or are overstaffed.

International reports on employment

It is verified that education continues to be a vital backbone for the development of society, and its methodology and curricula must improve its capacity to face the VUCA challenges (Russo-Netzer, 2022). Thus, the report of employment institutions such as Adecco (Adecco, 2022) collect suggestions indicating that the current model of education is currently not adjusted to the rapidly changing needs of the labour market, and the

framework is too rigid, while more flexibility is needed to educate a modern, skilled workforce. The report covers the entire labour market, with particular emphasis on the professions in which employees are most in demand. IT-related professions are on the top of the list. Managerial positions are to be found in virtually each of the analysed industries. The features which, according to the authors of the report, are particularly sought after in the labour market are divided into hard and soft competences, including in the first case Strategic management in IT, Mechanical engineering, Search engine positioning (SEO), Cybersecurity, Data analysis, etc. but they highlight on the second case Leadership and crisis management, Perseverance and resilience, Flexible problem solving, Mutual cultural understanding, Entrepreneurship, and Ability to analyse data. It seems we should pay special attention to soft skills supplementing them with analytical skills. In this sense, the report lists the skills of the currently employed senior heads: Sales management; Business planning; Marketing in social media; Start-ups creation and management; Internet Marketing; Entrepreneurship; Product development; Management consulting; Online Advertising; and Business Analysing. They make a series of recommendations for universities, the authors of the report suggest increasing the link between the funding of the University and specific fields of study and the results in the form of employment of students after their graduation, thus, links with practice and the market should lead to clear effects. This report clearly shows the growing demand for knowledge of management techniques and interdisciplinary knowledge.

The demand for the development of specific skills and competences varies and will vary depending on what the expectations of employment, and the statement about the need to train our students in soft skills may have a completely different meaning yesterday, today and tomorrow (Donahue, 2018). The World Economic Forum guidelines (2021) suggest that more than half of employees will have to significantly improve their qualifications or retrain in these lines:

1. Analytical and innovative thinking;
2. Learning strategies and active learning;
3. Creativity, originality and initiative;
4. Critical thinking and analysis;
5. Solving complex problems;
6. Leadership and the ability to influence others;
7. Emotional intelligence;

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8. Reasoning, problem solving and building concepts and ideas;
9. System analysis and drawing conclusions.

They highlight the emerging tendency to employees to be independent in shaping their competences profile. These skills may relate to various aspects of management, such as planning, organizing, motivating, control, and have a synergistic effect on the efficiency of the team's work.

In the Infute Hatalsa Foresight Institute (2019) report, for each of the forecast possible scenarios were identified the desired competences that will be required on the labour market and the main motive for taking up employment by an employee of the future. Research suggests several scenarios for the future, and it highlight replacing employees with robots, and emerging the Hollywood work model. In this model, teams of diverse professionals come together occasionally around a project, with specific contracts, and each one fulfils a task that is difficult to automate, disintegrating when finished. They search for features and competences that will help humans maintain an advantage over robots, and they suggest that it is primarily soft skills that distinguish us from the machines. Among them, attention was paid to the ability to learn actively; the ability to appreciate the impact of new information on current knowledge and skills; the creativity not only in artistic fields, but also as the ability to think abstractly and combine knowledge and experience from various fields; the ability to share knowledge with others and to cooperate. These soft skills, with a strong emphasis on the ability to use ICT, for example to supplement specialist knowledge to the extent needed at a given moment, could be an indispensable element of education.

Discussion

Our findings are consistent with Stein (2021), and it seems that the new educational models go beyond the transmission of static content or skills and, instead, these models should foster students' capacities for analysis, analysis, and responsibility. These methodological changes must involve all education providers, including both teachers and educational policy administrators (Juera, 2022). In this sense, self-management can effectively contribute to the impact of self-efficacy on organizational resilience (Yu et al., 2022).

The future job skills to cope with a VUCA work environment, several authors (Seow, Pan & Koh, 2019) determined the importance of cognitive, interpersonal and intrapersonal skills, more specifically interdisciplinarity, close collaboration between faculty and external partners, and active mentoring. In this line, higher education should focus on developing multidisciplinary qualities in its students, such as analytical thinking, the ability to create their own knowledge, and the comprehensive development of a cultured personality (Mielkov et al., 2021). Thus, the research of Rodionov et al. (2021) found that the vocational training of students in the VUCA world is increasingly technological, more specialized and more competitive.

We agree with the latest research highlights (Nikseresht et al., 2022) where VUCA phenomena are addressed by Artificial Intelligence, leaving people limited spaces in which to develop very specific skills. In this sense, it is important to incorporate new employment-oriented methodologies (Fombona, Fombona-Pascual & Vazquez-Cano, 2023): Interconnection and work in large networks; Flexible and personalized training; Vocational Training in a close connection with the companies; and the importance of specific transversal skills: digital, scientific-technical, and foreign languages.

The training aim at the immediate socio-labor impact, and it is an important meta-competency for educational leadership success (Harvey & Valerio, 2022). Management and leadership theory converge in the theory of educational organization, which conceptualizes the competence of individuals and the complexity of organizations to face VUCA complexity (Wendt & Manhart, 2022).

Our research agrees with Aftab et al. (2022) determining that agile leadership plays an important role in determining job satisfaction and satisfaction with academic life. Resilience is an effective way to face adversity situations, so resilient leadership is also useful in multiple fields and social sectors to reverse unfavorable circumstances (Villa-Sánchez, 2020).

Addressing VUCA for the future

The design of educational methodologies and curricula are a forecast of how education will impact society. In this line, some of the professions

that will be popular in the decades to come are currently emerging, and the competences that employers will expect from children differ significantly from what teachers now teach (Donahue, 2018). Thus, the competences expected from future instructors will be based primarily on the skill to make decisions in a rapidly changing reality. Also it will be important the ability to work with a virtual team consisting of units often extremely different, not necessarily having any contact with each other. The challenge here is not so much technical or organizational possibilities, but more and more frequently encountered problems of a psychological nature and lack of contact with people.

Johansen (2012) stated that the VUCA challenges were opportunities to improve our future. **Volatility:** As a result of the speed of change, the long-term detailed plans created by heads quickly become obsolete. This is due to the fact that the conditions and assumptions on the basis of which the plan had been created, time earlier, have already changed. Hence the conclusion that the more time we spend on planning, the greater the chance that the plan will be out of date at the time of its presentation. **Uncertainty:** The key in this case is the information resources possessed, and the patterns that contribute to determining the consequences of the situation. In case of uncertainty, heads have a low level of understanding of events and problems that occur (Johansen, 2012). It is difficult to predict what the effect of the actions will be, this uncertainty may lead to a longer planning processes. **Complexity:** The people are in possession of some information or can predict some events, but the number and nature of the data analysed affect the decision-making process. **Ambiguity:** To resolve the ambiguity of situations it is necessary to be flexible and adapt to new scenarios, focusing on the essential.

According Johansen (2012) we should focus on leadership competencies that did not matter a while ago, and he proposes a new version of the acronym VUCA to find a solution redefining the words VUCA to Vision, Understanding, Clarity and Agility. It is a vision to allow them to address new times, understanding from good communication can facilitate the realisation of the vision. Transparent and well-organized processes will allow you to make the right decisions, and agility will allow the organization to easily adapt and carry out changes. The organization and the people who create it should build competences that enable the most effective operation even when everything is collapsing. Thus, Johansen describes 10 competences necessary to function efficiently in

a changing reality: Maket instinct; Clarity of goals; Immersive learning ability; Bio-empathy and learning from nature; Constructive depolarisation, easing tensions and combining different views; Quiet transparency, showing openness; Rapid prototyping and own visions; Smart-mob organising, building and organizing social networks; Commons creating; Dilemma flipping, and dilemmas that cannot be solved should be seen as an opportunity.

Even more, traditional head skills seem not enough to address the VUCA scenario. The growth of instability and VUCA uncertainty in all areas of life requires that specialists and directors of organizations have extensive knowledge and an adequate response to situations to predict the negative development of certain events. The professional role of teacher educators is to participate in the formulation of policies for change as part of their contribution to a fit-for-purpose future (Smith & Rushton, 2022). In the VUCA scenery, technology is driving new flat structures that involves interaction of the organization's employees at different levels, including self-connecting cross-functional teams, where employees are result oriented (Mezhevov, Nikolaev & Meleshkin, 2022).

The workers of the future will surely have to demonstrate professional skills that cannot be programmed, and the constant development of artificial intelligence will automate hard and routine daily operations. But, at the same time, it should be emphasized that due to the fact that soft skills are typically human and will not be automated, or at least it will not happen quickly, and they will become the most important for employees of the future.

Limitations and impact of the research

It is necessary to highlight some limitations of this study. In this sense, the research refers to a sample of specific students from the University of Applied Sciences, however it can be an indicative reference of this case. It is necessary to take into account that university professors have a space of freedom when designing educational programs, and the dissemination of this research can contribute to the enrichment of the contents to be developed in lessons, all from an international perspective. Let us not forget that Europe is a dynamic and diverse continent that is constantly seeking its internal coherence. This variety of approaches and cultures is

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a limitation and a barrier to the uniformity and homologation of studies, but it is also a study setting for innovation and progress. In this sense, we could ensure that European educational advances are benchmarks throughout the world. Thus, it is conceivable that the impact of curricular designs and educational actions, like this case, exceed the actions on specific students and their society, involving other countries and other educational environments that use European designs as a model to follow (Zapp & Lerch, 2020).

It is difficult to carry out research that can have representative samples of the set of situations on our planet. Three forces that organize university curricula: universalization; national policies and legislative frameworks; and the influence of technology (Krause, 2022), and the universalization is probably the trend with the greatest impact on the organization of educational plans. This phenomenon is hardly incomprehensible today. It assumes globalization trends lead to a reduction and generalization of educational characteristics, but this simplification allows theories could be assimilated in other countries.

Conclusions

The desk studies conducted among management students of Ignacy Mościcki University of Applied Sciences in Ciechanów, allow the academics to create an integrated model of educational programming for the coming future in the middle of the VUCA challenges. Thus, the conclusions from the cyclic, continued desk studies supplemented by main findings of specialized reports influence the way the curriculums of the courses, both in the methods used and kind of competences trained, and they are being constructed and actualized.

The elaboration of dynamic curricula allows solving innovative tasks, evaluating and managing risks and countering threats. Curricula have never been set "forever" and are constantly modified, now we should do it more often while being aware that there will always be place for further improvement. This is what continuous improvement is about, not only the entire organization, but also each of its elements separately. The researchers are forecasting the key competences of the future will include, in addition to the indicated skills in the area of exact sciences, the so-called STEM (science, technology, engineering, and math), and also: the ability

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to actively learn, creativity, the ability to share knowledge, cooperate with others, focus on problem solving, critical thinking and negotiation skills.

Training in active learning, creativity and the ability to share knowledge with peers are necessary elements in the new curricula. In any case, it seems that mastering soft skills will be the way to compete with the robotization of society. These soft skills are typically human and will not be automated, or at least not happen quickly, and they will become the most important for employees of the future.

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