
Innovation of Enterprises in the Business Services Sub-Sector in Poland: Adaptation of the VUCA Concept

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Abstract:

Purpose: The aim of the article is to present the possibilities of adapting the VUCA concept to building innovativeness of enterprises in the business services subsector.

Design/methodology/approach: The verification of the hypothesis and the implementation of the goal were carried out through theoretical and empirical research of enterprises in the business services subsector. Due to the diversity of enterprises in the business services subsector, empirical research was directed to groups of internally coherent entities whose functioning and development are based on professional knowledge.

Findings: In the 21st century, many changes have taken place in Poland that have had a positive impact on the ability to think about innovation. However, this did not translate into the innovativeness of the Polish economy, which is still low compared to other countries that claim to be at least medium-developed. Improving the innovativeness of Polish enterprises requires a new approach to innovation. This will be facilitated by the use of the VUCA concept.

Practical implications: The article proposes a new reference model of enterprise innovation. Its use by enterprises in the business services subsector will enable them to maintain or increase innovation in VUCA conditions. The application of this concept requires a reliable analysis of four areas of enterprise innovation and VUCA conditions.

Originality/Value: Research described in the literature indicates similar strategies for maintaining enterprise innovation. However, the literature on the subject does not address the topic in relation to enterprises in the business services subsector and does not fully take into account the VUCA conditions. This article fills this gap.

Keywords: Innovation, enterprise, business services, VUCA concept.

JEL codes: O31, D22, L84.

Paper type: Research article.

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1. Introduction

Innovation is the driving force of the global economy and a strategic priority of almost every company owner (Dyer, Gregersen, and Christensen 2012). The ability to create and absorb innovations is also the greatest challenge of the 21st century (Pomykalski, 2001). This statement is invariably true, especially in relation to enterprises in the business services subsector, the functioning of which largely determines the quality of the knowledge-based economy. Despite the existence of many studies in the field of innovation in the literature on the subject, both domestic and foreign, there are no items relating this issue to the business services subsector.

Therefore, this article will help fill this gap, at least partially. This argument and the importance of the subsector in question, measured by its share in the creation of GDP, added value and employment, decided to undertake research aimed at presenting the possibilities of adapting the VUCA concept to building innovativeness of enterprises in the business services subsector.

The research hypothesis was formulated as follows: in uncertain times, maintaining the innovativeness of enterprises in the business services subsector may be facilitated by the use of recommendations resulting from the VUCA concept.

The structure of the article was subordinated to the verification of the research hypothesis, which included theoretical foundations (referring to issues related to innovation and the VUCA concept), characteristics of the research material and methodology, results of research on innovation and related discussion, and a summary.

2. Literature Review

2.1 Innovation in Theoretical Terms

There is no single, generally acceptable and unambiguous explanation of the concept of innovation in the literature. However, much space is devoted to comparative analyzes of individual interpretations (Niedzielski, 2013). The definition created by J. Schumpeter is most often repeated, according to which innovation is considered (Schumpeter, 1994):

- introducing new products/services into production or improving existing ones,
- opening a new market,
- applying a new method of selling or purchasing,
- use of new raw materials and semi-finished products,
- introduction of a new production organization.

J. Schumpeter was both the creator and supporter of the approach that considered only new solutions to be original, and their dissemination was called imitation (another application of the invention). From studies on the literature on the subject, two main trends in the interpretation of the concept of "innovation" can be identified:

- in a broad sense, it refers to everything that is perceived by people as new, regardless of the objective newness of a given idea or thing (e.g., Rogers, 1978; Harman, 1971; Hagen, 1962; Parker, 1974),
- in a narrow sense, it refers to production methods and products by obtaining new or previously unused knowledge (e.g., Kuznets, 1959; Freeman, 1962; Mansfield, 1968),
- according to Ch. Freeman, innovation refers to the first commercial use of a new product, process, system or device (Wasilewska and Wasilewski 2016).

The above definitions were created at the beginning of the 20th century, in the conditions of the industrial economy. With the development of the service sector, the scope of this concept has expanded significantly and gone beyond the technological framework, referring the concept of innovation not only to a new good, but also to a new service or idea that is perceived by someone as new (Kotler, 1994; Norena-Chavez and Thalassinos, 2022).

For the purposes of this article, the definition and division of innovation according to the Oslo Manual was used. It was therefore assumed that *"an innovation is a new or improved product or process (or their combination) that differs significantly from previous products or processes of a given entity and which has been made available to potential users (product) or introduced for use by the entity (process)"* (GUS, 2020).

Both the definition and the division are used in Poland and the EU. The Oslo Manual includes four types of innovations (Oslo Manual, 2005; Table 1).

It should be noted that the presented division of innovations was presented only in the third edition of the Oslo Manual. In previous editions, the division was limited only to product and process innovations. This was related to economic changes that forced the expansion of the division to include marketing and organizational innovation.

The taxonomy in the Oslo Manual, based on A. Schumpeter's guidelines, has been supplemented with technological innovations, which include product and process innovations as well as non-technological innovations, i.e., organizational and marketing innovations. The next edition from 2018 included a fifth type of innovation: Product and business process development. Most likely, it was not explicitly taken into account earlier and was classified as a process innovation.

In this article, the development of products and business processes will also be included in process innovations. Therefore, the innovation dimension will be adopted, including product, process, organizational and marketing innovations.

Table 1. Division of innovations according to the Oslo Manual

<p>Product innovation is the introduction of a product or service that is new or significantly improved in terms of its features or applications. This includes significant improvements in technical specifications, components and materials, embedded programming, ease of use or other functional features</p>	<p>Process innovation is the implementation of a new or significantly improved production or delivery method. Significant changes fall into this category in terms of technology, devices and/or software.</p>
<p>Marketing innovation is the implementation of a new marketing method involving significant changes in the design/construction of the product or in packaging, distribution, promotion or pricing strategy.</p>	<p>Organizational innovation is the implementation of a new organizational method in the operating principles adopted by the company, in the organization of the workplace or in relations with the environment.</p>

Source: Own elaboration based on Oslo Manual 2015.

2.2 VUCA Concept – A New Approach

In uncertain times, the traditional approach to enterprise innovation seems incomplete and insufficient. The VUCA concept may be an important addition.

The acronym VUCA, created by American military officials to describe the world order at the end of the Cold War, defined the conditions for the functioning of enterprises. VUCA stood for volatility, uncertainty, complexity and ambiguity. However, in unpredictable times, creative business owners change their approach to management. They are aware that the future depends on them. B. Johansen (Johansen, 2012) deciphers the VUCA abbreviation in a different way:

1. Vision instead of variability. Having a vision of the organization's operations is particularly important in turbulent times, allowing it to survive the turbulence.
2. Understanding instead of uncertainty. Effective management needs feedback and good mutual communication to be able to implement action strategies and visions.
3. Clarity instead of complexity. Appropriate management processes should be introduced to provide decision-makers with the information necessary to make appropriate decisions.
4. Agility instead of ambiguity. Organizations should have the ability to quickly adapt and implement changes that adapt the principles of their functioning to the chaotic environment.

A similar approach is taken by, among others, N. Bennett and J. Lemoine (Bennett and Lemoine, 2014), S. Abidi and M. Joshi (Abidi and Joshi, 2015), J. Bartscht (Bartschat, 2015) and P. Hollingworth (Hollingworth, 2016).

However, this approach to the VUCA concept requires completely different leadership skills. These include (Johansen, 2012):

1. *Maker Instinct*: Exploit your inner drive to build and grow things, as well as connect with others in the making. Leaders are very clear about what they are making, but very flexible about how it gets made.
2. *Clarity*: See through messes and contradictions to a future that others cannot yet see. Leaders are very clear about what they are making, but very flexible about how it gets made.
3. *Dilemma Flipping*: Turn dilemmas — which, unlike problems, cannot be solved — into advantages and opportunities.
4. *Immersive Learning Ability*: Immerse yourself in unfamiliar environments to learn from them in a first-person way.
5. *Bio-Empathy*: See things from nature's point of view; to understand, respect, and learn from nature's patterns.
6. *Constructive Depolarizing*: Calm tense situations where differences dominate and communication has broken down — and bring people from divergent cultures toward constructive engagement.
7. *Quiet Transparency*: Be open and authentic about what matters to you — without advertising yourself.
8. *Rapid Prototyping*: Create quick early versions of innovations with the expectation that later success will require early failures.
9. *Smart Mob Organizing*: Create, engage with, and nurture purposeful business or social change networks through intelligent use of electronic and other media.
10. *Commons Creating*: Seed, nurture, and grow shared assets that can benefit other players — and sometimes allow competition at a higher level .

Unexpected times pose many challenges for leaders. Changes, however, seem inevitable. The rules of leadership that worked well in the past cannot be extrapolated to the present. The 'directive' breed of leaders who expect their orders to be obeyed without a word of dissent cannot function in a VUCA world (Piątkowska, 2021; Sinha and Sinha, 2020).

3. Materials and Methods

Extensive theoretical and empirical research indicates the great importance of preparing enterprises for unpredictable times (economic crises, pandemics, wars). At the level of research on the application of the VUCA concept in enterprises, there are many theories, but they often have little practical utility and limited possibilities of application in building innovation. This gap is partially filled by pilot studies, the results of which are presented in this article.

The research hypothesis will be verified and the goal will be achieved through:

1. Theoretical identification of factors shaping the innovativeness of an enterprise in the business services sector.
2. Performing a literature review of the VUCA concept and presenting the author's concept.
3. Empirical verification of the factors shaping the innovativeness of enterprises in the business services sub-sector in VUCA conditions (pilot studies).
4. Presenting the possibilities of using the VUCA concept to build the innovativeness of enterprises in the business services subsector and the possibility of conducting broader research in this area.

The implementation of the research objectives will be possible thanks to the use of the following research methods and techniques:

- a) the method of induction and deduction, which will include checking the correctness and verification of all elements of scientific and research work that will be performed to verify the hypothesis;
- b) criticism of the examined problem in the aspect of current scientific achievements through the analysis of the literature on the subject (and other Internet sources) in the field of innovation and the VUCA concept;
- c) the multiple case study method, which, in addition to the general heuristic method, will be used to conduct primary research. The choice of method was determined by the purpose of the research and the diversity of real situations (Meredith, 1998).

In accordance with the principles of theoretical (literal) replication, similar cases of enterprises were selected for research (Eisenhardt and Grabner, 2007; Wójcik, 2013). The study used the in-depth interview (IDI) technique. Interviews were conducted in ten Polish enterprises belonging to the business services subsector.

Due to the diversity of enterprises in the business services subsector, the empirical research was directed to groups of internally coherent entities whose functioning and development are based on professional knowledge.

Therefore, based on purposeful selection, the following types of activities were qualified for the empirical study:

- a) other financial service activities, excluding insurance and pension funds (section K, group 64.9),
- b) other money intermediation (section K, class 64.19),
- c) activities supporting insurance and pension funds (section K, group 66.2),
- d) legal, accounting and tax consultancy activities (section M, division 69),
- e) advertising, market and public opinion research (section M, division 73),
- f) employment-related activities (Section N, division 78).

The literature presents various views on the number of cases that should be analyzed for the conclusions of the study to be scientific. The dominant view suggests conducting four to ten case studies (Glaser and Barney, 2001).

The goal is not statistical but theoretical replication. This number also has practical reasons, i.e., it results from financial and time constraints. The contact details came from her own database (the author has been conducting research focused on the service sector since 1999).

The sample selection was carried out using an expert method, based on the knowledge and experience of specialists in the field of the phenomenon under study. Only companies that undertake activities aimed at building innovation in VUCA conditions were invited to participate in the interviews.

The interviews were conducted in the second quarter of 2023, based on a structured scenario consisting of two parts: the registration part, containing information about the examined entity (enterprise size, length of existence on the market) and the main part containing information on the assessment of enterprise innovation, and using the VUCA concept to build innovation. The interviews were supplemented with the process of examining company documents and their content.

Rich documentation made it possible to characterize enterprises taking into account parameters that could not be identified in quantitative research. Thanks to, among other things, this research, it was possible to examine the process of preparation for building innovativeness of enterprises in VUCA conditions and the planned changes in this area. The research resulted in a reference model of an enterprise using the VUCA concept and prepared to build innovation in unpredictable times.

Research is the first step in the process of theory verification and its falsification (Keating, 1995). Conclusions drawn on the basis of case study research, consistent with the assumptions of the phenomenological paradigm, allow for the explanation of unique phenomena.

These phenomena may be valuable in another environment and in another organization as an interpretation of the phenomena, but they cannot be completely predictable in the future. G. Walsham lists four situations in which generalization of conclusions is justified: developing concepts, creating theories, drawing specific implications and contributing to knowledge in the form of a rich description of the phenomenon (Walsham, 1995).

In this research, the multiple case study method will be used to describe, test and create a new theory that will be used in economic practice (Eisenhardt and Graebner 2007).

4. Discussion

The research was carried out in accordance with the logic of theoretical analytical replication. Companies differing in size, location and duration of existence were selected for a multiple case study. The ten enterprises included four enterprises belonging to the group of micro-enterprises, three small enterprises and three medium-sized enterprises (according to the criterion of the number of employees and net turnover from the sale of goods, services and financial operations).

Two of the analyzed enterprises have existed for less than 5 years, three for 5 to 10 years, three for 10-20 years and two for more than 20 years. Therefore, some companies remember the economic crisis of 2008/2009, and all of them existed at the beginning of the COVID 19 pandemic and the war in Ukraine.

The research was conducted using the multiple case study method. Four aspects of enterprise innovation were taken into account: product and process innovation, marketing and organizational innovation, and four conditions of the new VUCA concept: vision, understanding, clarity, agility.

As part of the innovation survey, entrepreneurs were asked the following questions:

- How do you generally assess the innovativeness of your company in relation to the competitiveness of enterprises?
- Was the company's innovativeness higher before the COVID 19 pandemic?
- Please assess the company's product innovation compared to the competition.
- Please assess the company's process innovation compared to the competition.
- Please assess the innovativeness of the services provided by the company compared to the competition.
- Please assess the marketing innovativeness of the company compared to the competition.
- Please evaluate innovation in the development of products and business processes compared to the competition.

As part of the study on building enterprise innovation in accordance with the VUCA concept, the following questions were asked:

- Is replacing volatility, uncertainty, complexity and ambiguity with Vision, Understanding, Clarity and Agility justified?
- How important is the impact of the vision on the company's innovation?
- How important is understanding for innovation?
- Does clarity influence innovation?
- Is the company agile? How does this affect innovation?

- Which elements of the new VUCA concept are most and least important in unpredictable times?
- Has the COVID 19 pandemic influenced interest in the VUCA concept? If so, how?

In terms of innovation research, managers were asked a question about the current assessment of their company's innovativeness compared to the competition. Six enterprises rated their innovativeness at a higher level than their competitors (large and medium-sized enterprises), and four at a comparable level.

At the same time, the answers to the questions regarding the level of innovation before the COVID 19 pandemic were the same for all entrepreneurs. Respondents stated that the non-technological innovation of their enterprises was higher before the pandemic. The answers to the additional question regarding the justification for this assessment indicated the failure to invest in non-technological innovation during the pandemic. The assessment of technological innovation is different.

According to eight out of ten companies, their innovation in this area increased due to the pandemic. Interesting information is also provided by answers to questions regarding the assessment of individual areas of innovation. In terms of product innovation, 7 out of 10 companies rate themselves higher than their competitors (the remaining three companies rate themselves at a level similar to the competition). They include, among others: virtual access to databases (e.g., accounting information).

In terms of process innovation, four companies believe that they are at a level similar to their competitors, and six feel better than them. The mentioned process innovations include: the use of computer programs for accounting and the introduction of network systems connecting suppliers and recipients. In terms of organizational innovation, only five out of ten managers rate it better than the competition (the rest are at a similar level).

Organizational innovations include, the introduction of a more relaxed organizational structure and the use of an e-learning training system. Entrepreneurs in the business services sector mostly believe that they are less innovative in terms of marketing than their competitors (this was stated by six out of ten respondents).

Other entrepreneurs evaluate themselves similarly to their competitors. The answers to the additional question regarding the reasons for this state of affairs indicate that entrepreneurs in this subsector do not feel the need for extensive marketing activities. Mainly marketing agencies and IT companies are active in marketing.

Accounting offices and law firms undertake significantly fewer marketing activities. Interesting information is also provided by the respondents' answers to questions regarding the assessment of innovation in the development of products and business

processes compared to the competition. As many as 9 out of 10 companies consider themselves less innovative than their competitors. Perhaps this is the result of extraordinary events, such as the pandemic or the war in Ukraine. They resulted in companies focusing more on operational activities guaranteeing survival rather than on the development of the organization.

Interesting information is also provided by answers to questions about building the company's innovativeness in accordance with the VUCA concept. Only companies that were familiar with this concept were invited to participate in the study. First, respondents were asked whether they believed it was appropriate to change the way the acronym VUCA was deciphered. Is it justified to replace Volatility, Uncertainty, Complexity and Ambiguity with Vision, Understanding, Clarity and Agility?

Entrepreneurs agreed that a change in approach was appropriate. This has a significant impact on communicating management processes to employees. It is easier to talk about vision than about variability, which by definition causes fear and uncertainty.

According to entrepreneurs, vision and its proper development and communication also have a significant impact on the company's innovativeness (seven out of ten respondents say so). Additionally, entrepreneurs indicate that innovation should be included in the vision (this is what five companies say). According to entrepreneurs, understanding is also very important for innovation, especially organizational innovation. This reduces uncertainty. Good mutual communication can also help realize the vision. Brightness is probably the least appreciated element of the VUCA concept.

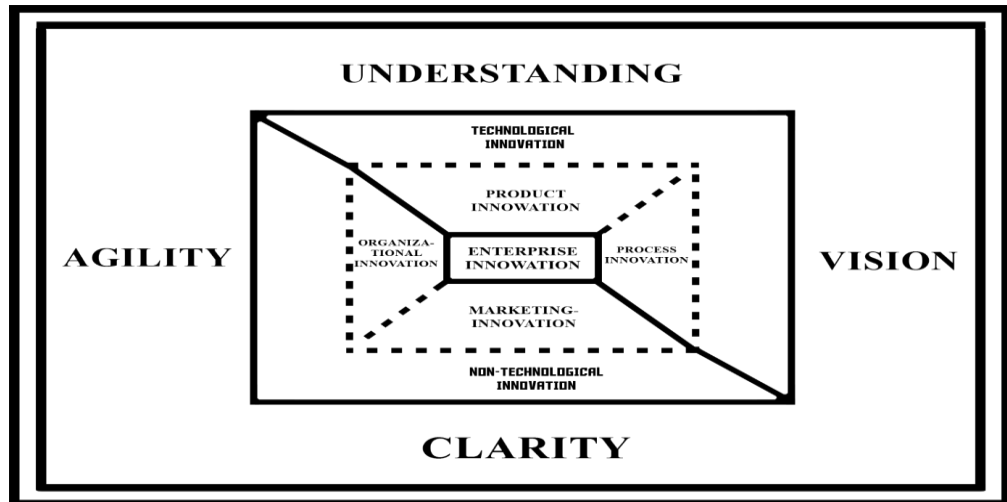
On the one hand, entrepreneurs believe that it is necessary to provide appropriate information to decision-makers, and on the other hand, few managers notice its impact on innovation (only two out of ten surveyed entrepreneurs). A feature certainly appreciated by entrepreneurs is agility. It is perceived as a factor in the company's success and a decisive factor in the growth of innovation (this is what all respondents say).

The ability to quickly adapt to a changing environment and the ability to quickly introduce changes are features that will determine the survival of the company in unpredictable times. The summary of the research conducted was a question regarding the impact of the Covid 19 pandemic on interest in the VUCA concept. Eight out of ten surveyed enterprises said that their interest in enterprise management concepts increased during the pandemic.

Their attention is mainly focused on employees, who have often proven to be a great support during the pandemic. According to the opinion of entrepreneurs, the VUCA concept may support building the innovativeness of enterprises.

The theoretical research and multiple case studies carried out allow for the creation of a reference model of an innovative company using the VUCA concept (Figure 1).

Figure 2. The concept of innovation of enterprises in the business services subsector in VUCA conditions



Source: Own study based on conducted research.

The conducted research, which requires continuation, allowed for the identification of initial boundary conditions necessary to meet when introducing the concept of enterprise innovation in VUCA conditions:

1. The model is introduced based on the concept of innovation of enterprises in the business services subsector in VUCA conditions.
2. The introduction of the model is preceded by a thorough analysis of four areas of enterprise innovation: product innovation, process innovation, innovation of services provided, and marketing innovation.
3. The model must be adapted to VUCA conditions (vision, understanding, clarity, agility). Failure to meet the condition may result in the company losing its innovativeness.

Efficient implementation of the proposed solutions may contribute to minimizing the economic effects of unpredictable threats. The expected effects of the ongoing pandemic, as well as subsequent economic crises, indicate the need to properly prepare enterprises and go beyond traditional operating patterns. Such a solution for enterprises that want to remain innovative is the VUCA concept.

5. Conclusion

In the 21st century, many changes have taken place in Poland that have had a positive impact on the ability to think about innovation. However, this did not

translate into the innovativeness of the Polish economy, which is still low compared to other countries that claim to be at least medium-developed. In the Global Innovation Index in 2020, Poland took 38th position out of 132 countries (Dutta, Lanvin, León L, and Wunsch-Vincent, 2023).

According to research conducted in enterprises of the business services subsector, in terms of product innovation, most enterprises rate themselves higher than their competitors, and in terms of process innovation, four enterprises believe that they are at a level similar to the competition, and six feel better than it. In terms of organizational innovation, only five out of ten managers rate it better than the competition (the rest are at a similar level).

Entrepreneurs in the business services sector mostly believe that they are less innovative in terms of marketing than their competitors (this was stated by six out of ten respondents). Other entrepreneurs evaluate themselves similarly to their competitors. Unpredictable events, according to most managers, delay the innovation processes of enterprises. However, there are areas, such as organizational innovation, where, for example, the pandemic accelerated innovation. The constant acceleration of the process of catching up with innovation in enterprises requires changes. These are:

- application of the VUCA concept to build enterprise innovation, including the ability to formulate a vision of the enterprise, building good communication in the team, clarity and agility of the organization,
- visionary and transformational leadership,
- sensitivity to changes in the business environment and appropriate preparation for them.

The indicated activities would contribute to the increase in innovativeness of enterprises in the business services subsector in accordance with the VUCA concept and would prepare them for the occurrence of unpredictable threats.

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