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# VERBALIZATION OF CONCEPT ‘DIGITALIZATION’ IN MODERN ENGLISH-LANGUAGE DISCOURSE

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*Abstract*

*This article presents a comprehensive study of the characteristics of the verbalization of concept ‘digitaliZation’ in modern English-language discourse. It examines the main theoretical foundations of conceptology, outlines modern approaches to interpreting the concept as a multidimensional cognitive structure, and identifies the specific features of its linguistic representation. Particular attention is paid to the analysis of lexical, word-formation and metaphorical means of expressing the concept ‘DIGITALISATION’, as well as its functioning in academic, media, professional and journalistic discourses.*

*It has been established that the concept ‘DIGITALISATION’ has a complex, multi-level structure combining technological, economic, communicative and socio-cultural components. It has been determined that the core of the concept is formed by meanings associated with the transition to digital technologies, automation and data processing, whilst the peripheral zones encompass innovation, digital communication, the transformation of social practices, digital literacy and the virtualization of modern society.*

*The study was based on data from the COCA and COHA corpora, which made it possible to trace the diachronic development of the lexeme ‘digitalization’, identify trends in its frequency of use, key collocation patterns, and typical contexts of usage. It was found that the active spread of the lexeme has been occurring since the late 20th century and correlates directly with the development of digital technologies and globalization processes. Analysis of the corpus material revealed high productivity of word-formation patterns and significant variability in the linguistic means of representing the concept.*

*It has been demonstrated that the verbalization of the concept ‘DIGITALISATION’ reflects not only technological changes but also the transformation of social values, communication models and the cognitive mechanisms of modern humans. The results obtained confirm the dynamic nature of the concept and its important role in shaping the modern English-language linguistic worldview.*

***Keywords**: concept, digitalization, verbalization, English-language discourse, cognitive linguistics, linguistic representation, corpus analysis, metaphor, collocations, digital transformation.*

***1. Introduction.***

In modern linguistics, there is growing interest in the study of dynamic concepts shaped by global socio-cultural transformations, among which the concept 'DIGITALIZATION' occupies a special place. Its relevance stems not only from the rapid development of information and communication technologies, but also from profound changes in the ways knowledge is produced, processed, and transmitted, which are directly reflected in the linguistic picture of the world. Within the framework of cognitive linguistics, a concept is viewed as a mental unit that structures human experience and is represented in language through a system of verbal means, making the study of its verbalization an important tool for understanding the interaction between language, thought and culture.

Contemporary approaches to the analysis of concepts are based on a combination of cognitive and discursive dimensions, which allows for consideration of both the internal structure of the concept and the characteristics of its functioning in various types of discourse. In this context, the concept 'DIGITALISATION' emerges as a complex, multidimensional construct encompassing not only the technological processes of transition from analogue to digital forms, but also broader social, economic and cultural changes. Its verbalization in contemporary English-language discourse is characterized by the variability of lexical means, the active use of metaphorical models and complex word-formation processes, which testifies to the intensive conceptualization of this particular aspect of reality.

The relevance of this study stems from the need for a systematic analysis of the linguistic means used to represent the concept 'DIGITALIZATION', taking into account its dynamic development and discursive specificities. The increasing frequency of use of the relevant vocabulary, as recorded, in particular, in corpus resources such as the Corpus of Contemporary American English, the Corpus of Historical American English, and others, confirms the intensification of the processes of conceptualizing digital reality in the linguistic consciousness of native English speakers. In this regard, the study of the verbalization of this concept contributes to a deeper understanding of both linguistic changes and the transformations of cognitive models in contemporary society.

***2. Literature Review.***

The theoretical foundation for the study of concepts is established in the works of leading figures in cognitive linguistics, notably G. Lakoff and M. Johnson, who established the role of metaphor as a fundamental mechanism for conceptualising reality (Lakoff, 1980). Their ideas were further developed in the research of R. Langacker, who views language as a reflection of cognitive structures (Langacker, 2008), and C. Fillmore, the author of frame semantics, which allows concepts to be analysed as parts of structured knowledge about the world (Fillmore, 1985). Z. Kövecses, who investigated metaphorical models of conceptualisation (Kövecses, 2003), and T. Dijk (Dijk, 2008; 2009), whose works

laid the foundations of discourse analysis as a tool for studying the linguistic representation of social phenomena, also made significant contributions to the development of concept theory.

It would be advisable to include within this range of theoretical sources the work of Ukrainian scholars who have explored issues of conceptualisation, discourse and linguistic representation of knowledge, which are relevant to the analysis of the concept 'DIGITALIZATION'. Within the Ukrainian linguistic tradition, S. Zhabotynska has made a significant contribution to the development of the cognitive-discursive approach; she substantiates a frame-based model of knowledge organisation and proposes a toolkit for the reconstruction of concepts (Zhabotynska, 2004). Her approach allows 'DIGITALIZATION' to be interpreted as a multi-level cognitive structure comprising interrelated scenarios of technological and social change.

A. Prykhodko has played a key role in shaping the cognitive-discursive approach; he views concepts as complex mental constructs that form concept systems and reflect the interaction of individual and collective experience. In his work, concepts are treated as multidimensional structures possessing a core and a periphery, and are verbalised through various linguistic means depending on the type of discourse (Prykhodko, 2008). The researcher emphasises the importance of taking the discursive context into account for an adequate analysis of concepts, since it is within discourse that their actualisation and interpretation take place. In the context of analysing 'DIGITALIZATION', this provides grounds for interpreting the concept in question as part of a broader conceptual framework of the modern era.

Issues relating to cognitive semantics and the linguistic world view are explored in the works of O. Selivanova, which systematise the key concepts of cognitive linguistics (Selivanova, 2006). N. Slukhai has made a significant contribution to the development of Ukrainian conceptology, analysing how language shapes ethnic worldviews and how conceptual constructs function in linguistic consciousness (Slukhai, 2002).

The research of I. Holubovska, who examines the interrelationship between language, culture and thought, is also significant (Holubovska, 2004). In the context of digitalisation, this allows for cultural aspects to be taken into account when formulating the relevant concept. A similar issue is raised by T. Kosmeda, who studies linguistic identity and communicative strategies in contemporary discourse (Kosmeda, 2011).

Thus, a review of the academic literature shows that research into the concept 'DIGITALIZATION' lies at the intersection of cognitive linguistics, discourse analysis and interdisciplinary studies covering the social and technological aspects of societal development. Drawing on the works of both foreign and Ukrainian scholars allows us to establish a comprehensive theoretical foundation for analysing the verbalisation of this concept, revealing it as a complex cognitive-discursive construct that reflects the transformation of the contemporary linguistic worldview under the influence of digitalisation.

***3. Aim and Objectives.***

The aim of this paper is to define characteristics of the verbalisation of concept 'DIGITALIZATION' in modern English-language discourse, taking into account its cognitive structure, semantic content, and discursive realisation, as well as to identify the main trends in the development of this concept against the backdrop of global technological transformations.

Achieving this aim involves addressing the following objectives:

1) to clarify the content and structure of concept 'DIGITALIZATION' as an element of the contemporary conceptual sphere;

2) to identify the main lexical means of its representation in English-language discourse;

3) to analyse the metaphorical models involved in its conceptualisation;

4) to investigate the word-formation features of units associated with this concept; to conduct a contextual analysis of the functioning of the lexeme 'digitalization' in various types of discourse.

***4. Methodology.***

The research methodology is based on a combination of general scientific and specialised linguistic methods, ensuring a comprehensive nature of the analysis. In particular, the method of conceptual analysis was applied to reconstruct the semantic structure of concept 'DIGITALIZATION'; the method of semantic analysis to identify the semantic components of the relevant lexical units; discourse analysis to study the functioning of the concept in various communicative contexts; elements of corpus analysis utilising data from the Corpus of Contemporary American English and the Corpus of Historical American English to identify frequency and contextual realisations. The combination of these methods ensures the reliability and scientific validity of the results obtained.

***5. Results.***

***5.1. Diachronic Corpus Analysis of a Lexeme 'Digitalization'.***

An analysis of corpus data (COHA, 2010) makes it possible to trace the diachronic development of the lexeme 'digitalization' in the English language – from its emergence to its current stage of active usage. The use of this data provides a comprehensive approach to the study, combining quantitative indicators with a qualitative analysis of contexts, which, in turn, allows us to reconstruct the semantic evolution of the concept in question.

The frequency distribution shows that the lexeme 'digitalization' is virtually absent from the corpus until the last quarter of the 20th century and is first recorded only in the 1980s. The low number of occurrences at the initial stage is explained both by the novelty of the phenomenon itself and by the limited scope of its use in highly specialised fields. At the same time, a trend towards a gradual increase in frequency was already observed in the 1980s and 1990s, which has significantly intensified in the 21st century. This trend correlates directly with

extralinguistic factors, primarily the development of information technology, digital platforms, and global data processing infrastructure, which led to the emergence and establishment of the term in question within the language system.

A contextual analysis of early usage shows that, in its initial phase, the lexeme functioned predominantly within technical and scientific-academic discourse. In particular, in texts from 1987, it is used to describe the modernisation of network systems and technological infrastructure, where ‘digitalization’ appears as a component of engineering and information transformations. In these contexts, the word has a clearly defined terminological meaning, denoting the process of transition from analogue to digital forms of information processing. Thus, at an early stage, the concept’s basic technological dominance is formed, defining its core meaning.

Further development of the semantics can be traced as early as the 1990s, when the lexeme begins to appear in broader communicative contexts, particularly in media and artistic discourse. Its use in cinematic texts indicates that the term has moved beyond the confines of a narrow professional sphere and is gradually integrating into general language use. This stage can be interpreted as the beginning of a process of determinologisation, in which a specialised unit acquires broader functional potential whilst retaining its basic meaning.

The development of semantics in the 21st century is particularly telling, as evidenced by corpus data from the 2010s. An analysis of contexts shows that the lexeme ‘digitalization’ retains its presence in technical discourse, yet at the same time significantly broadens its scope of usage. For instance, in a scientific and technical text from 2011 (Geo-Eco-Marina), it functions in a highly specialised sense related to geographic information systems (GIS), where it forms part of the terminological field of spatial data processing (in particular, extraction, post-processing, and hand-made digitalisation). In this context, particular attention is drawn to the contrast between automated and manual digitisation, with the latter being regarded as more accurate, thereby highlighting the semantic components of accuracy, efficiency, and instrumentality (see Table 1).

**Table 1.**

*Diachronic trends (1990–2019)*

| Period | Nature of usage |
|---|---|
| 1990–1995 | isolated instances related to digital technologies |
| 1996–2005 | gradual increase in technical and economic texts |
| 2006–2015 | widespread use in media and academic discourse; metaphorical conceptualisation |
| 2016–2019 | high frequency, concept of global transformation |

The distribution of the lexeme ‘digitalization’ across genres in the COCA corpus (COCA, 2008) demonstrates its uneven functional activity across different types of discourse. The highest frequency rates are recorded in the subcorpus of academic texts (ACAD), which provides grounds for considering ‘DIGITALIZATION’ as an established term in scientific discourse, used to

conceptualise processes of technological, economic, and social transformation. Within academic discourse, the lexeme functions predominantly in analytical contexts, where it forms part of term combinations denoting systemic changes (e.g. *digitalization of data*, *digitalization of urban environments*, *digitalization in retailing*). This frequency pattern indicates a high degree of institutionalisation of the concept and its establishment within the scientific worldview.

In the news text subcorpus (NEWS), an average frequency level is observed, though the lexeme's functional load shifts somewhat. Here, 'DIGITALIZATION' acts as a marker of socially significant changes and is used to interpret current events related to the reform of public services, the development of the digital economy, and the transformation of the labour market. Unlike academic discourse, where terminological precision prevails, in media discourse the lexeme takes on a more generalised, interpretative character and is often combined with evaluative or prognostic components.

A similar trend can be observed in the magazine subcorpus (MAG), where 'DIGITALIZATION' features in business and technology journalism. Here, it is conceptualised as a tool for innovative development and competitive strategy, reflecting the pragmatic dimension of the concept. In this type of discourse, the lexeme is often accompanied by semantic partners such as *innovation*, *transformation,* and *platforms*, which shapes the perception of digitalisation as a driving force of the modern economy.

In contrast, in the fiction (FIC) and screen (MOV/TV) subcorpora, the frequency of the lexeme is minimal. This is explained by the abstract nature of the concept 'DIGITALIZATION', which is less suited to the narrative and figurative needs of literary discourse. In isolated instances, its use is linked to technocratic plots or the representation of the digital environment as an element of contemporary reality (see Table 2).

**Table 2.**

*Frequency of the lexeme 'digitalization' by genre*

| Corpus genre | Source type | Frequency of use of 'DIGITALIZATION' | Context of use |
|---|---|---|---|
| ACAD | academic journals | high | technological and economic developments |
| NEWS | news | medium | social and political changes |
| MAG | magazines | medium | business and innovation |
| FIC | literary works | low | occasional use |
| MOV/TV | film scripts | low | technological context |

Thus, the genre distribution of the lexeme 'digitalization' (COCA, 2008) demonstrates its clear orientation towards scientific and journalistic discourse, confirming the word's status as a key verbaliser of the concept of digital transformation. At the same time, the decrease in frequency in literary texts indicates the limited integration of this concept into the aesthetic sphere of language.

### *5.2. The Semantic Structure of Concept 'DIGITALIZATION'.*

The concept 'DIGITALIZATION' is characterised by a complex, multi-level structure that integrates cognitive, semantic, socio-cultural, and economic components. This concept has a core-periphery structure: its core is formed by the invariant meaning 'the process of transition from analogue to digital technologies', whilst the peripheral zones encompass derivative meanings associated with automation, innovation, efficiency, network interaction and the transformation of social practices.

The concept belongs to the category of abstract, dynamic and socially conditioned concepts and is characterised by a frame-based organisation that includes such basic scenarios as 'technological transformation', 'process optimisation', 'digital communication' and 'integration of information systems'. Its structure represents the interaction of several key components: technological (the transition from analogue to digital formats), socio-cultural (changes in modes of interaction and communication), economic (the development of the digital economy, innovation, and automation) and cognitive (the formation of new models of thinking and digital competence).

Within the contemporary conceptual landscape, 'DIGITALIZATION' is closely intertwined with related concepts (technology, innovation, automation, globalisation), forming a cohesive semantic cluster that reflects the digital paradigm of societal development. The core elements of this concept are verbalised through key lexemes such as *data, digital tools, digital transformation, automation, connectivity, virtuality*, *efficiency* and *innovation*, which represent its fundamental semantic characteristics and ensure the multi-faceted nature of its linguistic realisation.

The semantic structure of concept 'DIGITALIZATION' in modern English-language discourse is characterised by polycentricity and a hierarchical organisation, within which several dominant elements are identified that form the corresponding semantic field. This field is constructed as a system of interrelated semantic zones reflecting various aspects of society's digital transformation. Analysis of linguistic material, particularly corpus data, provides grounds for identifying technological, communicative, economic, and socio-educational dominants as key components of the concept.

The technological dominant forms the core of concept 'DIGITALIZATION' and represents it as a process of introducing and utilising digital technologies. It encompasses such semantic components as automation, data processing, integration of information systems and the development of intelligent technologies. In linguistic terms, this dominant is realised through the lexemes *automation, artificial intelligence, cloud computing, big data, machine learning* and *smart systems*. Corpus examples confirm the actualisation of this meaning (COCA, 2008):

***Artificial intelligence*** *and* ***machine learning*** *are at the core of* ***digitalization*** *strategies.*

***Cloud computing*** *and* ***big data*** *are transforming how organizations manage information.*

***Smart systems*** *enable* ***automation*** *across multiple sectors of the economy.*

In these contexts, 'DIGITALIZATION' emerges as the technological foundation of modern innovation, ensuring the efficiency and scalability of processes.

The communicative dimension reflects changes in the ways people and institutions interact, driven by digital technologies. It includes such semantic components as remoteness, interactivity, networkedness, and accessibility of communication. Lexical representatives include *online communication, remote access, digital collaboration* and *virtual learning spaces*. The following examples are recorded in the corpora (COCA, 2008):

***Online communication*** *has become essential in a digitally connected world.*

***Remote access*** *allows employees to work from virtually any location.*

***Digital collaboration*** *tools are transforming teamwork across borders.*

These contexts demonstrate that 'DIGITALIZATION' is transforming not only the technical means of communication but also the very nature of communication itself, making it more flexible and globalised.

The economic perspective presents 'DIGITALIZATION' as a driver of economic development, innovation and competitiveness. It encompasses components such as digital markets, e-commerce, financial technologies, and innovation capacity. In discourse, this is reflected through the lexemes *digital economy, e-commerce, fintech, digital competitiveness* and *innovation capacity*:

*The* ***digital economy*** *is reshaping global markets and creating new business models.*

***E-commerce*** *continues to expand as more consumers move online.*

***Fintech innovations*** *are increasing the* ***competitiveness*** *of financial services.*

'DIGITALIZATION' thus emerges as a key driver of economic change and modernisation.

The social and educational dimension reflects the impact of 'DIGITALIZATION' on social processes, access to resources and the development of skills. It encompasses such semantic components as inclusivity, accessibility of education, the development of digital skills and the transformation of educational practices. The main lexical representatives are *digital inclusion, digital literacy, e-learning* and *blended education*. The corpus data records (COCA, 2008):

***Digital inclusion*** *is essential for ensuring equal access to information.*

***Digital literacy*** *has become a key skill in the modern workforce.*

***E-learning*** *platforms are expanding educational opportunities worldwide.*

***Blended education*** *combines traditional teaching with digital tools.*

These examples demonstrate that 'DIGITALIZATION' is a key driver of social change, helping to broaden access to knowledge and foster the development of new forms of learning.

Thus, the semantic field of the concept 'DIGITALIZATION' takes shape as a multidimensional structure in which the technological dimension defines its core,

whilst the communicative, economic, and socio-educational dimensions expand and specify its content. This organisation reflects the complex nature of 'DIGITALIZATION' as a phenomenon that encompasses various spheres of social life and is reflected in diverse ways in modern English-language discourse.

### *5.3. Lexical Resources, Word-Formation Productivity, and Metaphorical Conceptualisation of the Concept 'DIGITALIZATION'.*

The concept 'DIGITALIZATION' is expressed in modern English-language discourse through a wide range of linguistic means that reflect various aspects of how this complex socio-cultural phenomenon is understood. The central lexeme is 'digitalization', which functions alongside the similar units 'digitization' and 'digital transformation', reflecting different aspects of conceptualization.

The Corpus of Historical American English (COHA, 2010) records early uses of the lexeme in technical and infrastructure contexts:

***Digitalization*** *has been concentrated at the inter-regional level.*

*The aim is to extend* ***digitalization*** *progressively to smaller parts of the network.*

These examples demonstrate that, in its initial stage, the concept functions as a highly specialised term associated with the modernisation of technological systems and networks.

Further development is reflected in later contexts, where a generalised meaning of the process emerges:

***Digitalization*** *in progress. Insufficient data*.

Here, we observe the term moving beyond purely technical discourse and entering popular culture, indicating an expansion of its conceptual scope.

Materials from the Corpus of Contemporary American English (COCA, 2008) demonstrate a significantly broader range of usage, particularly in socio-economic and media discourse:

*The* ***digitalization*** *of the economy is transforming how businesses operate.*

***Digitalization*** *has accelerated communication and access to information.*

*The company is investing heavily in* ***digitalization*** *strategies.*

In these examples, the concept 'DIGITALIZATION' is presented as a complex process encompassing economic, communicative, and managerial changes.

Peripheral terms include the lexemes '*automation, datafication, smart technologies, digital economy, digital society*', which specify particular segments of the concept.

In corpus data (COCA, 2008), the lexeme '*automation'* represents a technological component and is associated with the optimisation of production processes:

***Automation*** *is transforming manufacturing and reducing the need for manual labour.*

*The rise of* ***automation*** *has changed the nature of work in many industries.*

These examples demonstrate the interpretation of *automation* as a component of broader digital transformations.

The lexeme *'datafication'* represents the information-analytical aspect of 'DIGITALIZATION', associated with the conversion of activities into data (COCA, 2008):

***Datafication** allows organisations to track and analyse user behaviour in real time.*

*The **datafication** of everyday life raises concerns about privacy and surveillance.*

The contexts highlight the emphasis on information processing and the social implications of this process.

The phrase *'smart technologies'* highlights the innovative and applied dimension of the concept (COCA, 2008):

***Smart technologies** are improving urban infrastructure and energy efficiency.*

*The integration of **smart technologies** into homes is becoming increasingly common.*

Here, 'DIGITALIZATION' is understood as the introduction of intelligent systems into everyday life.

The lexeme *'digital economy'* reflects the economic aspect of the concept (COCA, 2008):

*The **digital economy** is growing faster than traditional sectors.*

*Governments are adapting policies to support the **digital economy**.*

These examples highlight the transformation of economic models under the influence of digital technologies.

The phrase *'digital society'* represents the socio-cultural dimension of 'DIGITALIZATION'(COCA, 2008):

*In a **digital society**, access to information is crucial for participation.*

*Education systems must adapt to the needs of a **digital society**.*

The contexts demonstrate an understanding of 'DIGITALIZATION' as a factor driving change in social practices and communication.

Word-formation patterns also play a significant role, particularly derivational forms (*digitalize, digitalized, digitalizing*) and compound terms (*digital infrastructure, digital platform, digital services*), which demonstrates the high productivity and adaptability of this concept within the linguistic system. In the discursive dimension, these units function in academic, media and professional contexts, giving rise to different interpretative emphases.

The derived forms of the verb *'digitalize'* and its grammatical variants represent the processual aspect of the concept (COCA, 2008):

*Many libraries have begun to **digitalize** their collections to improve access.*

*The company **digitalized** its records in order to streamline operations.*

*Industries are rapidly **digitalizing** their services to stay competitive.*

These examples demonstrate the active use of verbal forms to denote the dynamic process of introducing digital technologies in various fields.

Compound terms such as *'digital infrastructure', 'digital platform'*, and *'digital services'* reflect the institutional and practical dimension of the concept (COCA, 2008):

*Investment in **digital infrastructure** is essential for economic growth.*

*The platform operates as a **digital platform** connecting users worldwide.*

*Banks are expanding their **digital services** to meet customer demands.*

*Governments are developing **digital infrastructure** to support innovation.*

The contexts provided demonstrate that complex terms function as stable nominal units which specify individual segments of digital transformation and are actively used in media, academic and professional discourse.

An analysis of the metaphorical models involved in the conceptualisation of 'DIGITALIZATION' reveals that this phenomenon is understood through basic cognitive schemas that structure abstract experience. The most productive are process metaphors (*digitalization as a process*), which emphasise the phased nature of change; movement and development (*digitalization as a driving force*), where digitalisation emerges as a driving force for transformation; and spatial-infrastructural metaphors (*digitalization as a network / environment*), which represent it as an environment or a system of interconnected elements. Also common are metaphors of instrumentality (*tool, platform*), which emphasise the functional aspect of digitalisation, and metaphors of transformation (*shift, transition, revolution*), which reflect the radical nature of the changes. The use of such models is consistent with the theoretical propositions of G. Lakoff and M. Johnson (Lakoff, 1980) regarding metaphor as the primary mechanism of conceptualisation, as they facilitate the transfer of meaning from concrete spheres of experience to the abstract realm of digital processes.

The metaphor of the process (*digitalization as a process*) is realised through its combination with verbs denoting gradualness and phased progression (COCA, 2008):

***Digitalization is a** gradual **process** that requires long-term investment.*

***The process of digitalization** is reshaping traditional industries.*

These examples emphasise the phased, long-term nature of the changes.

The metaphor of movement and development reflects the perception of digitalisation as a driving force (COCA, 2008):

***Digitalization** is driving innovation across multiple sectors.*

*The rapid growth of **digitalization** is pushing companies to adapt.*

Here, the concept emerges as an active factor in development and change.

Spatial and infrastructural metaphors (*digitalization as a network / environment*) represent 'DIGITALIZATION' as an environment or system (COCA, 2008):

***Digitalization** creates a global network of interconnected services.*

*Businesses operate within a rapidly evolving **digital environment**.*

In these contexts, 'DIGITALIZATION' is understood as a space for interaction.

Metaphors of instrumentality (*tool, platform*) emphasise the functional aspect (COCA, 2008):

***Digitalization** has become a key **tool** for improving efficiency.*

*The **digital platform** enables users to access services instantly.*

'DIGITALIZATION' is presented as a means or tool for achieving goals.

Metaphors of transformation (*shift, transition, revolution*) emphasise the radical nature of the changes (COCA, 2008):

*The **shift** towards **digitalization** is transforming the global economy.*

*We are witnessing a **digital revolution** driven by rapid technological change.*

These examples reflect the interpretation of 'DIGITALIZATION' as a profound transformation of society.

At the same time, the verbalisation of the concept 'DIGITALIZATION' is accompanied by the use of evaluative vocabulary, reflecting the ambivalence of its perception within society. On the one hand, positive characteristics such as *innovative, efficient, user-friendly* and *transformative* are highlighted, emphasising the progressive potential of digital change (COCA, 2008):

***Digital solutions** are **innovative** and **efficient**, allowing companies to improve productivity.*

*The new system is **user-friendly** and designed to enhance customer experience.*

***Digitalization** is **transforming** industries and creating new opportunities.*

*These **innovative technologies** are reshaping the way people interact and work.*

The examples given highlight the benefits of digital technologies, their ability to streamline processes and improve collaboration.

On the other hand, lexemes with negative connotations (*invasive, risky, destabilizing, disruptive*) are employed, representing the risks and challenges associated with digitalisation (COCA, 2008):

*Some critics argue that **digital technologies** are **invasive** and threaten user privacy.*

*The rapid pace of **digitalization** can be **risky** for traditional industries.*

***New technologies** are often **disruptive**, challenging established business models.*

*The shift toward **digital systems** may be **destabilizing** for workers without technical skills.*

These contexts highlight the ambivalence surrounding perceptions of 'DIGITALIZATION', where positive assessments are accompanied by concerns regarding its impact on privacy, employment, and the stability of socio-economic systems.

Thus, the linguistic representation of this concept reflects not only its conceptual complexity but also the contradictory nature of the assessment of digital transformations in contemporary discourse.

***5.4. Collocation Characteristics of the Lexeme 'Digitalization'.***

A collocation analysis of the lexeme 'digitalization' reveals the characteristics of its semantic organisation and the ways in which the corresponding concept is expressed in English discourse. The most productive pattern is the construction N + of + *digitalization* / *digitalization* of + N, which expresses object-process relations: *digitalization of services* 'digitalisation of services', *digitalization of data* 'digitisation of information', *digitalization of healthcare* 'digital healthcare', *digitalization of industry* 'transformation of manufacturing'. Within this model, 'DIGITALIZATION' acts as the core of the predicative semantics, whilst the dependent noun denotes the scope of application of the process (e.g., s*ervices, data, healthcare, industry*). This indicates that the concept 'DIGITALIZATION' is conceived primarily as a universal process aimed at transforming various fields of activity.

Attributive collocations of the type Adj + digitalization also play a significant role, highlighting the dynamic and quantitative characteristics of the process: *rapid digitalization* 'rapid digital transformation', *global digitalization* 'global process'. The adjectives *rapid* and *global* emphasise the speed and scale of the changes, shaping the perception of digitalisation as an intense and all-encompassing phenomenon of the modern age. Thus, through attributive modifiers, the basic meaning of the lexeme is evaluated and conceptually specified.

Constructs of the form digitalization in + N (e.g. *digitalisation in retailing*) represent the localised aspect of the concept, emphasising the sphere in which it operates. In such cases, the sectoral dimension of digitalisation is clarified, which contributes to its differentiation as a multidimensional phenomenon.

An analysis of collocations also demonstrates close semantic links between 'DIGITALIZATION' and lexemes belonging to the fields of technology (*data, networks*), the economy (*industry, retail*), and innovation (*transformation, innovation*). This allows the lexeme under study to be viewed as a central element of a broader conceptual network in which various aspects of contemporary social development are intertwined.

Thus, the collocation profile of the lexeme 'digitalization' confirms its status as a process-oriented concept with a high degree of abstraction. Through typical lexical combinations, this concept is concretised in terms of scope, intensity, and scale, ensuring its effective verbalisation in various types of discourse.

Verbal collocations with the lexeme 'digitalization' represent the dynamic aspect of the concept and reflect the various stages, conditions and mechanisms involved in the implementation of digital transformations. Analysing them allows us to identify the semantic nuances, pragmatic attitudes and cognitive models that underpin the verbalisation of this process.

The collocation *to drive digitalization* means 'to actively stimulate, to be the driving force behind digitalization'. The verb *to drive* implies an intense, purposeful influence of the subject on the process, emphasising the role of agency and control. Cognitively, this collocation is based on the metaphorical model of

'digitalization as movement', where 'DIGITALIZATION' is presented as a process requiring a driving force (COCA, 2008):

*Government policies play a crucial role in* ***driving digitalization*** *across industries.*

In this case, the subject (*government policies*) acts as the initiator and catalyst of change.

The collocation *to accelerate digitalization* means 'to speed up the process of digitalization'. The verb *to accelerate* emphasises the temporal aspect and indicates an increase in the pace of digital technology adoption. Semantically, it highlights the idea of temporal dynamics and the intensity of change (COCA, 2008):

*The pandemic* ***has accelerated digitalization*** *in the education sector.*

The collocation *to enable digitalization* is interpreted as 'creating the conditions for digitalization, making it possible'. The verb *to enable* indicates an indirect influence, consisting of providing the resources, infrastructure or prerequisites for the process to take place. Cognitively, this corresponds to the 'digitalization as potential' model, where 'DIGITALIZATION' is viewed as a process requiring certain conditions for its realisation (COCA, 2008):

*Advanced technologies* ***enable digitalization*** *in various sectors.*

In this case, technologies act as the instrumental basis for change.

The phrase *to foster digitalization* means 'to promote and support the development of digitalization'. The verb *to foster* implies a prolonged, gradual, and often institutionally driven process of stimulation. It carries connotations of care, development and support, bringing 'DIGITALIZATION' closer to the metaphorical model of 'digitalization as growth' (COCA, 2008):

*International cooperation* ***fosters digitalization*** *and innovation.*

Here, the role of interaction as a factor in long-term development is emphasised.

In summary, the aforementioned verbal collocations form a semantic field of active action regarding the concept 'DIGITALIZATION' and reflect various types of influence on it: intensive (*to drive*), temporal (*to accelerate*), conditionally instrumental (*to enable*) and supportive (*to foster*). Their functioning in discourse indicates the conceptualisation of 'DIGITALIZATION' as a controlled, dynamic and multifactorial process.

### *5.5. Discursive Representation of the Concept 'DIGITALIZATION'.*

The lexeme 'digitalization' is characterised by high frequency and functional variability in modern English-language discourse, which accounts for its widespread use across various communicative domains. An analysis of corpus and contextual data allows us to identify three main types of discourse within which it is verbalised: academic, media, and journalistic-business.

In academic discourse, the term 'DIGITALIZATION' functions as a specialised term used to describe technological processes, sectoral transformation and systematic data analysis. In articles in publications such as *Pharmaceutical*

*Technology, Landscape Architecture Frontiers, Journal of Shipping and Trade*, and *Geographical Review*, this lexeme acquires terminological precision and forms part of complex syntagmatic constructions.

***Digitalization** of supply chains enhances operational efficiency and data transparency.*

*The **digitalization** of healthcare systems enables more accurate data-driven decision-making*.

In such contexts, it conveys a denotative meaning, devoid of emotional or evaluative connotations, and serves as a key element in the scientific description of innovative processes.

In news discourse, as reflected in the coverage of publications such as *the Minneapolis Star Tribune, the New York Times* and *the Chicago Sun-Times*, the lexeme 'digitalization' takes on a broader social resonance and functions as a marker of societal change. It presents 'DIGITALISATION' as a global trend, an economic factor, and a key component of the modernisation of public services. In particular, the following examples are found in journalistic texts:

***Digitalization** is reshaping public services and improving access to information.*

*The rapid **digitalization** of the economy has created both opportunities and challenges for workers.*

In this discourse, there is a combination of informative and evaluative functions, which contributes to the formation of public opinion regarding digital transformations.

In journalistic and business discourse, particularly in publications such as *MarketWatch* and *Business Insider*, the lexeme 'digitalization' is actively used in the context of corporate strategies, innovative development, and the transformation of business models. It often forms part of pragmatically oriented statements aimed at assessing the effectiveness of management decisions:

*Companies are investing heavily in **digitalization** to stay competitive in the global market.*

***Digitalization** drives innovation and accelerates business growth.*

In this type of discourse, the positive connotation of the lexeme is emphasised, highlighting its association with progress, efficiency, and competitiveness.

Thus, the lexeme 'digitalization' functions as an interdisciplinary term with a wide range of meanings that vary depending on the type of discourse. In an academic context, it performs a nominative-descriptive function; in the media, a socio-interpretative one; and in business discourse, a pragmatic-evaluative one. Such multifunctionality testifies to its key role in shaping the contemporary linguistic picture of the world associated with digitalisation processes.

### *6. Discussion.*

The results obtained in this study confirm that the concept 'DIGITALIZATION' represents a dynamic and evolving cognitive structure

whose verbalization reflects ongoing technological and societal transformations. The diachronic corpus analysis (COCA, 2008; COHA, 2010) demonstrates that the lexeme ‘digitalization’ emerged relatively late and expanded its functional scope in parallel with the development of digital technologies. This finding is consistent with previous linguistic and sociological research, which emphasizes the dependence of conceptual change on extralinguistic factors. The expansion of the semantic field identified in this study, including technological, communicative, economic, and social-educational dominants, thus reflects the transformation of ‘DIGITALIZATION’ into a systemic phenomenon of the so-called network society.

The reconstructed semantic structure of the concept indicates its gradual evolution: the initial technological focus, linked to digitization and automation processes, is over time supplemented by communicative, economic, and socio-educational components. This allows us to view ‘DIGITALIZATION’ not merely as a technical process, but as an integral socio-cultural phenomenon. The expansion of the semantic field reflects a shift in emphasis from the instrumental to the systemic level, which corresponds to contemporary understandings of digital transformation as a complex phenomenon.

The identified lexical and word-formation features confirm the high productivity of linguistic means of representing the concept. The existence of a ramified system of derivational forms and complex terms indicates the active integration of the concept into the linguistic system and its adaptation to various discursive needs. The coexistence of the lexemes ‘digitalization’ and ‘digitization’ deserves particular attention, as it points to a semantic differentiation between a narrowly technical and a broader social meaning.

From the perspective of cognitive linguistics, the results also align with the framework proposed by G. Lakoff (Lakoff, 1980), according to which abstract concepts are structured through metaphorical models. The identification of dominant metaphors such as process, movement, environment, and transformation supports the idea that ‘DIGITALIZATION’ is conceptualized through basic embodied schemas. These findings are in agreement with studies by Z. Kövecses (Kövecses, 2003), who emphasizes the role of conceptual metaphor in structuring technologically complex phenomena.

Equally important is the identification of the concept's axiological ambivalence. Alongside positive characteristics (innovativeness, efficiency, transformational potential), negative assessments (riskiness, destabilizing influence, invasiveness) are also recorded. This duality reflects the contradictory perceptions of ‘DIGITALIZATION’ in society and is consistent with sociological approaches to the analysis of digital change, particularly M. Castells’ concept of the network society, where technology acts as both a source of development and a factor in new challenges (Castells, 2000; 2005; 2023).

Furthermore, further comparative analysis with other languages is promising, allowing for the identification of universal and specific features of the conceptualization of ‘DIGITALIZATION’. In sum, the synthesis and evaluation of

the results demonstrate that the concept ‘DIGITALIZATION’ is not static but continuously reshaped by technological progress and societal change. Its verbalization reflects a complex interplay of cognitive, linguistic, and cultural factors, which makes it a productive object of interdisciplinary research.

***7. Conclusions.***

The study allowed for a comprehensive analysis of the verbalization of the concept of ‘DIGITALIZATION’ in modern English-language discourse and the identification of its key cognitive and semantic characteristics. It was found that this concept has a multi-level structure organized according to a core-periphery principle, where the core represents the meaning of the digital transformation process, while the periphery encompasses a wide range of social, economic, and communicative meanings.

A diachronic corpus analysis revealed that the lexeme ‘digitalization’ is a relatively new unit, the emergence and development of which is directly linked to the technological changes of the late 20th and early 21st centuries. Its evolution from a specialized term to a commonly used unit reflects the integration of digital technologies into various spheres of public life.

It has been established that the semantic field of the concept is formed around four main dominants – technological, communicative, economic, and socio-educational – which together reflect the multidimensionality of ‘DIGITALIZATION’ as a phenomenon. Lexical and word-formative representational tools are characterized by high productivity and variability, ensuring the concept’s flexibility in various discursive environments.

An analysis of metaphorical models confirmed that ‘DIGITALIZATION’ is understood through basic cognitive schemas that structure it as a process, a driving force, an environment, and a tool. At the same time, the identified axiological ambivalence testifies to the complex nature of ‘DIGITALIZATION’ perception, which combines both positive and negative assessments.

Thus, the concept ‘DIGITALIZATION’ acts as a dynamic cognitive-discursive formation, reflecting the profound transformations of modern society and the linguistic worldview. Prospects for further research are seen in the expansion of the corpus base, cross-linguistic comparison and in-depth analysis of the discursive practices in which this concept is realized.

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*Анотація*

*У статті здійснено комплексне дослідження особливостей вербалізації концепту ЦИФРОВІЗАЦІЯ у сучасному англомовному дискурсі. Розглянуто основні теоретичні засади концептології, окреслено сучасні підходи до трактування концепту як багатовимірної когнітивної структури та визначено специфіку його мовної репрезентації. Особливу увагу приділено аналізу лексичних, словотвірних і метафоричних засобів вираження концепту ЦИФРОВІЗАЦІЯ, а також його функціонуванню в академічному, медійному, професійному та публіцистичному дискурсах.*

*Встановлено, що концепт ЦИФРОВІЗАЦІЯ має складну багаторівневу структуру, у якій поєднуються технологічний, економічний, комунікативний і соціокультурний компоненти. Визначено, що ядро концепту формують значення, пов'язані з переходом до цифрових технологій, автоматизацією та обробкою даних, тоді як периферійні зони охоплюють інноваційність, цифрову комунікацію, трансформацію соціальних практик, цифрову грамотність та віртуалізацію сучасного суспільства.*

*Матеріалом дослідження стали дані корпусів COCA та COHA, що дозволило простежити діахронічну динаміку функціонування лексеми ‘digitalization’, визначити частотні тенденції її вживання, ключові колокаційні моделі та типові контексти реалізації. Виявлено, що активне поширення лексеми відбувається з кінця XX століття та безпосередньо корелює з розвитком цифрових технологій і глобалізаційними процесами. Аналіз корпусного матеріалу засвідчив високу продуктивність словотвірних моделей і значну варіативність мовних засобів репрезентації концепту.*

*Доведено, що вербалізація концепту ЦИФРОВІЗАЦІЯ відображає не лише технологічні зміни, а й трансформацію суспільних цінностей, моделей комунікації та когнітивних механізмів сучасної людини. Отримані результати підтверджують динамічний характер концепту та його важливу роль у формуванні сучасної англомовної мовної картини світу.*

***Ключові слова:*** *концепт, цифровізація, вербалізація, англомовний дискурс, когнітивна лінгвістика, мовна репрезентація, корпусний аналіз, метафора, колокації, цифрова трансформація.*

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