Federal State Higher Education Institution Saint Petersburg State University The Institute "Graduate School of Management» Master in Management Program

## FACTORS AFFECTING THE CHOICE OF KNOWLEDGE MANAGEMENT PLATFORM IN A COMPANY

2nd year student, Lyubov A. Shelkova

Scientific advisor: Doctor of Technical Sciences, Professor of the Department of Information Technologies in Management Tatiana A. Gavrilova

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## ЗАЯВЛЕНИЕ О САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ ВЫПОЛНЕНИЯ ВЫПУСКНОЙ КВАЛИФИКАЦИОННОЙ РАБОТЫ

Я, Шелкова Любовь Александровна, студентка второго курса магистратуры направления 38.04.02 «Менеджмент», заявляю, что в моей магистерской диссертации на тему «Факторы, влияющие на выбор платформы управления знаниями в компании», представленной в службу обеспечения программ магистратуры для последующей передачи в государственную аттестационную комиссию для публичной защиты, не содержится элементов плагиата.

Все прямые заимствования из печатных и электронных источников, а также из защищенных ранее выпускных квалификационных работ, кандидатских и докторских диссертаций имеют соответствующие ссылки.

Мне известно содержание п. 9.7.1 Правил обучения по основным образовательным программам высшего и среднего профессионального образования в СПбГУ о том, что «ВКР выполняется индивидуально каждым студентом под руководством назначенного ему научного руководителя», и п. 51 Устава федерального государственного бюджетного образовательного учреждения высшего образования «Санкт-Петербургский государственный университет» о том, что «студент подлежит отчислению из Санкт-Петербургского университета представление за курсовой или выпускной квалификационной работы, выполненной другим лицом (лицами)».

\_(Подпись студента) (Дата) 01.06.2023

## STATEMENT ABOUT THE INDEPENDENT CHARACTER OF THE MASTER THESIS

I, Lyubov Shelkova, second year master student, program 38.04.02 «Management», state that my master thesis on the topic «Factors Affecting the Choice of Knowledge Management Platform in a Company», which is presented to the Master Office to be submitted to the Official Defense Committee for the public defense, does not contain any elements of plagiarism.

All direct borrowings from printed and electronic sources, as well as from master theses, PhD and doctorate theses which were defended earlier, have appropriate references.

I am aware that according to paragraph 9.7.1. of Guidelines for instruction in major curriculum programs of higher and secondary professional education at St.Petersburg University «A master thesis must be completed by each of the degree candidates individually under the supervision of his or her advisor», and according to paragraph 51 of Charter of the Federal State Institution of Higher Education Saint-Petersburg State University «a student can be expelled from St.Petersburg University for submitting of the course or graduation qualification work developed by other person (persons)».

(Student's signature) 01.06.2023 (Date)

# АННОТАЦИЯ

Автор	Шелкова Любовь Александровна						
Название ВКР	Факторы, влияющие на выбор платформы управления знаниями в						
	компании						
Направление	38.04.02 «Менеджмент»						
подготовки							
Год	2023						
Научный	Гаврилова Татьяна Альбертовна, профессор, кафедра						
руководитель	информационных технологий в менеджменте						
Описание цели,	Целью данного исследования является изучение характеристик						
задач и основных	платформы управления знаниями, которые являются						
результатов	определяющими при ее выборе, и на основе этого составление						
	списка рекомендаций по выбору платформы управления знаниями.						
	Исследовательский вопрос данной работы: на основании каких						
	факторов компаниями принимается решение о выборе платформы						
	управления знаниями в разных компаниях?						
	Для достижения поставленной цели необходимо решить ряд						
	конкретных задач:						
	- сделать обзор теории управления знаниями и организационной						
	культуры в сфере управления знаниями, а именно: типы						
	организационных знаний, типы платформ управления знаниями,						
	роль организационной культуры в процессе управления знаниями;						
	- разработать опрос для разных компаний;						
	- сделать анализ основного рынка программного обеспечения для						
	управления знаниями, доступного для российских компаний;						
	- дать рекомендации по выбору платформы для управления						
	знаниями.						
	Для достижения этой цели проводится анкетирование и кабинетное						
	исследование. Опрос показал важность таких факторов, как						
	степень сложности внедрения новых знаний, функциональность						
	аналитики, интеграция с другими инструментами и платформами,						
	функциональность поиска, функциональность автоматизации						
	процессов, возможность совместной работы в режиме реального						
	времени.						
	По результатам опроса было проведено кабинетное исследование и						
	составлен список рекомендаций, состоящий из 8 пунктов.						
Ключевые слова	Управление знаниями, организационное обучение, ИТ-						
	технологии, организационная культура						

# ABSTRACT

Master Student's	Lyubov A. Shelkova						
Name							
Master Thesis Title	Factors Affecting the Choice of Knowledge Management Platform in a						
	Company						
Main field of study	38.04.02 «Management»						
Year	2022						
Academic	Tatyana A. Gavrilova, Professor, Department of Information						
Advisor's Name	Technologies in Management						
Description of the	Research goal of this study is to examine characteristics of a knowledge						
goal, tasks and	management platform that are decisive in its choice and, based on this,						
main results	make a list of recommendation on how to choose KM platform.						
	Research question of this work is: based on what factors is the decision						
	to choose a knowledge management platform made in different						
	companies?						
	To achieve this goal, it is necessary to solve a number of specific tasks:						
	- to make a review on knowledge management and organizational						
	culture in the field of knowledge management, specifically: types of						
	organizational knowledge, types of knowledge management platforms,						
	the role of organizational culture in the knowledge management process;						
	- to develop a survey for different companies;						
	- to make an analysis of the main knowledge management						
	software market available to Russian companies:						
	- to make recommendations for choosing a platform for knowledge						
	management.						
	To achieve this goal, a survey and desk research are conducted. The						
	survey showed the importance of such factors as the degree of						
	complexity of introducing new knowledge, analytics functionality.						
	integration with other tools and platforms, search functionality,						
	functionality of process automation, ability to collaborate in real time.						
	Based on the results of the survey, a desk study was conducted and a list						
	of recommendations was compiled, consisting of 8 points.						
Keywords	Knowledge management, organizational learning, IT technologies,						
	organizational culture						

#### **INTRODUCTION**

#### **Relevance of the study**

Any organization, as a part of the global economy, is an open system that uses various types of resources to achieve certain corporate goals (commercial or non-commercial) (Lyandau, 2021). Every day, organizations of any size and focus need to solve a huge range of tasks that require the use of certain company resources (Salikhova, 2021). These resources are (Lyandau, 2021):

- Human - these are all people interacting with the organization both inside and outside it (employees, customers, suppliers, etc.). This resource is associated with such an important aspect as intellectual capital;

Financial - cash and non-cash cash flows and tools for its management;

- Material resources - everything that is the physical component of the production of a product or service, as well as the functions serving this process;

- Time - time intervals allotted for the implementation of a particular task and the achievement of goals;

- Information - all information that is formed within the organization in the course of its functioning, as well as external sources of information necessary for making managerial decisions and managerial control.

To provide an information resource for a company, it needs certain information technologies that are able to store, generate, transform and analyze various types of data. In the age of information technology, the information resource is one of the most important factors in managing a company. Therefore, information technologies that provide the company with data should help solve a number of basic tasks (Seletkov, 2018):

- Selection of information resource
- Extracting data from the required information resource
- Evaluation of found information
- Proper use and interpretation of information

This brings us to the conclusion that an important element of company management in today's rapidly changing environment is the streamlining of internal information processes (Seletkov, 2018). To streamline internal information processes today in the business environment, special software is used, the purpose of which is to simplify and optimize the company's knowledge management process. However, the knowledge management process is not only an IT component, i.e. software and technical components, it is also part of the

organizational culture of the company (Levy et al. 2018). Technical parameters are tools, but not the primary source of the knowledge management system. The need for more effective knowledge management and concern for its preservation in the organization is primarily taken care of by the organizational culture. Organizational culture should stimulate and guide each employee and the entire workflow to create and maintain unique organizational knowledge (O'Donovan, 2021).

In the age of technology, there is a lot of information and knowledge, which causes difficulties with its structuring, filtering (removing irrelevant information), transmission and storage. This is further enhanced by the fact that the larger the company, the more employees and processes has its unique knowledge. Their knowledge must be preserved, structured and systematized. How and with what? What knowledge is unique and useful for the company and how to improve the degree of its continuity and assimilation? How to choose the software that is best for this task?

According to research conducted by Deloitte (2020), 75% of the organizations they surveyed say that creating and retaining knowledge is an important or very important factor for their success over the next 12-18 months, but *only 9% say they are very willing to take on the knowledge management process*. This makes author think that the issues listed above are more relevant than they seem. Thus, the main motivation for the study is to dive into the process of choosing a knowledge management platform in order to study it and further apply it in practice.

This brings us to the **relevance of the study**, which lies in a significant contribution to understanding of motives, needs and facts that guide companies in a process of choosing technical tools for knowledge management. This study will be especially relevant for companies interested in acquiring or changing a knowledge management platform.

#### Research gap and goal

To write the work, the author conducted a study of academic literature and modern websites dedicated to software. The literature was mainly examined in three areas: the concept of knowledge management in general, organizational culture and organizational learning, and knowledge management systems.

The integral role and need of knowledge management, as well as the availability of modern tools for this in the company, are confirmed by the relevance of the study. Be that as it may, a study conducted by deloitte in 2020 found that even though knowledge management tools are important, they are not implemented. Everything is connected with the complexity of implementation and the lack of specific knowledge for this. This brings the author to the **research** 

**gap**, which consists in the absence of a description of the mechanics or recommendations that would simplify the process of implementing a knowledge management system in a company.

The main **research goal** of this study is to examine characteristics of a knowledge management platform that are decisive in its choice and, based on this, make a list of recommendation on how to choose KM platform. This will help companies further simplify the process of selecting knowledge management software, as the selection of key features is the main starting point.

#### Research questions and research strategy

The very process of selecting and implementing knowledge management software is complex and multi-stage. Since the main problem of the study is that companies are experiencing difficulties with the implementation of knowledge management software, the author decided to delve into one of the aspects.

Thus, the **research question** of this work is: based on what factors is the decision to choose a knowledge management platform made in different companies?

To achieve this goal, it is necessary to solve a number of **specific tasks**:

- to make a review on knowledge management and organizational culture in the field of knowledge management, specifically: types of organizational knowledge, types of knowledge management platforms, the role of organizational culture in the knowledge management process;

- to develop a survey for different companies;

- to make an analysis of the main knowledge management software market available to Russian companies;

- to make recommendations for choosing a platform for knowledge management.

# CHAPTER 1. THEORETICAL FOUNDATION OF KNOWLEDGE MANAGEMENT

#### 1.1 The concept of knowledge management and forms of organizational knowledge

Knowledge is a key asset for any organization, and the knowledge sharing process represents the best strategy for both creating new knowledge and effectively and correctly applying existing knowledge to improve efficiency and add value to a business, product or service (Lopez & Santos, 2021). In this case, value is the result of the interaction of the many competencies of an individual, work group, network, intelligent system or institution based on its unique information and knowledge resources (North & Gueldenberg, 2011)

The shift to greater use of digital technologies (which now play a huge role in every area of human life) is rapidly changing the way people and organizations create, use and share data, information and knowledge (North et al. 2018). When a company becomes large enough, eventually it has a need to systematize its knowledge and create a separate division of the company that will be responsible for knowledge management (KM).

There is a fairly large number of definitions of the concept of knowledge management. After analyzing the literature, it was found that despite some differences, the definitions of knowledge management emphasize the importance of knowledge management in a strategic perspective for organizations. While they share some similarities, there are also some differences in their scope, focus, and terminology.

Davenport and Prusak's (2020) definition of knowledge management emphasizes the process of capturing, distributing, and using knowledge, suggesting a more operational and functional approach to knowledge management. In contrast, Alavi and Leidner's (2001) definition emphasizes the collaborative and deliberate nature of knowledge management, highlighting the importance of systematic and strategic efforts to create, capture, and use knowledge. Argote and Ingram's (2000) definition emphasizes the value of intellectual capital and knowledge assets, suggesting a more economic and resource-based approach to knowledge management.

It is generally accepted that the process of knowledge management consists of three main elements that form the unity of this multifaceted phenomenon: people, technologies and processes (Geisler & Wickramasinghe, 2015). The human factor is the main component of knowledge management, because they account for about 70% of the success of its functioning. This is due to the fact that people are the source of knowledge, as they develop and disseminate it. At the same time, the processes that make up 20% form all the actions that take place in the material knowledge management, including the creation, storage, sharing, transfer and use of knowledge. Technology is the third component that allows people to implement processes and make knowledge available anywhere and anytime. Technologies combine the actions of knowing people and processes, helping to systematize and manage various information (Mansoori, 2020). The key to success in the use of knowledge management techniques lies in maintaining the right balance between technology, people and processes, which must be supported by appropriate programs and strategies (Inkinen et al., 2015).

These differences in scope, focus, and terminology reflect the multidisciplinary nature of knowledge management, and the diversity of approaches and practices that organizations can adopt to manage knowledge effectively. Some organizations may pay more attention to the technical aspects of knowledge management, such as creating databases and special platforms, codifying knowledge, or developing special knowledge management systems. At the same time, other organizations, depending on their goals and activities, may pay more attention to the cultural and social aspects of knowledge management: developing a culture of knowledge sharing, building communities of practice, or promoting knowledge creation and innovation. (Mansoori, 2020).

The purpose of KM is to support the creation, transfer, transformation and application of knowledge in an organization (Alavi & Leidn, 2001). For this, IT-based information systems are being created. Knowledge is usually transferred through a centralized program database that can be accessed, managed, and updated by all parts of the organization (Alavi and Leidn, 2001). This provides employees with real-time access to organizational knowledge across organizational functions, divisions, geographical boundaries, activities, etc. Such systems store a lot of useful information, but require that people with knowledge can act on this information. Thus, this means that the analytical capabilities of systems and the ability to comprehend people and organizations must match. (North at al. 2018). Based on this statement, we can conclude that in order to comply with this important condition, it is necessary that the information system should be understandable and usable, and the organizational culture should be aimed at developing knowledge in the organization. When both conditions are met, the knowledge management process will be considered complete.

A study of sources shows that the authors identify 5 main functions of knowledge management:

- Acquisition of knowledge
- Knowledge storage
- Knowledge Exchange
- Application of knowledge
- Knowledge Creation

Knowledge acquisition involves acquiring knowledge from different channels and sources such as suppliers, customers, employees, etc. to continuously improve operations, products and services (Johnson et al., 2019). Knowledge storage process is a group of procedures and systems for storing and managing knowledge (Alegre et al., 2013). Often these are computerbased systems that support and enhance the storage and retrieval of knowledge in an organization. Such knowledge exists in various forms, including organized human knowledge, expert systems, written documentation, documented procedures and tacit knowledge processes acquired by individuals and groups, etc. (Donate & Pablo, 2015). Knowledge exchange is the dissemination of experience and knowledge among other employees through various means. This helps organizations maintain quality throughout their operations. The main goal of knowledge application is to integrate knowledge obtained from internal and external sources into work processes through the actions of employees to achieve the goals of the organization (Shin et al., 2001). Knowledge Applications are processes within organizations that enable organizations to use knowledge to improve their operations, develop new products, and create new tangible and intellectual assets (Boateng & Agyemang, 2015). Through the intelligent and effective application of knowledge, organizations can find a source of competitive advantage (Shin et al., 2001). In the knowledge creation process, collaboration and brainstorming sessions are fundamental to this process as they are among the best practices for generating new ideas and proposing viable solutions (Lee and Wong, 2015).

To maximize the company's knowledge economy, KM takes a rigorous process approach. Information technology, organizational structures, personnel management practices, organizational culture, etc. - a large number of factors play a role, which makes the knowledge management process a complex and sometimes ambiguous process (Zbuchea et al., 2019). The knowledge system must have a clear understanding of all the operations that take place within the company (Bernal et al., 2022).

Before proceeding to the technical component of knowledge management, it is necessary to make an overview of what exactly this system should manage, namely, what types of knowledge exist in the organization? Knowledge is classified into two large groups: tacit and explicit knowledge. Tacit and explicit knowledge are two fundamental concepts in knowledge management and organizational learning (Nonaka & von Krogh, 2009). Implicit knowledge refers to that knowledge that is difficult to formulate as a rule or theory or systematize, it is always the result of personal experience, intuition, perception and skills, and therefore it is difficult to transfer it to others through formal channels. (Nonaka & von Krogh, 2009). Explicit knowledge, on the other hand, refers to knowledge that is codified, documented, and can be easily communicated to others through words, symbols, or numbers (Davenport & Prusak, 2020). The main characteristics of tacit explicit knowledge (Hislop et al., 2018) are presented in Table 1.

Type of knowledge	Main characteristics				
	Difficult to share				
Tacit knowledge	Inexpressible in a codifiable form				
	Subjective				
	Context specific				
	Personal				
	Easy to share				
	Codifiable				
Explicit knowledge	Objective				
	Context dependent				
	Impersonal				

Table 1. Main characteristics of tacit and explicit knowledge

*Tacit* knowledge is something that does not lie on the surface, information that is hidden in meaning. It carries a subjective assessment of the object.

There are three types of implicit knowledge:

1) Transmitted implicit knowledge with the appropriate motivation of the subject

2) Intransferable knowledge in the form of subject competences

3) Inexpressible knowledge transformed into internal semantic constructs of the subject

*Explicit* knowledge is the knowledge that can be conveyed in logically explicated forms and that does not carry a subjective assessment.

There are three types of explicit knowledge:

1) Knowledge transmitted orally in the process of communication

2) Knowledge transmitted in writing

3) Knowledge transmitted through electronic media

Recent studies have shown that both tacit and explicit knowledge play crucial roles in organizational learning and innovation. Tacit knowledge, for instance, has been found to be a critical source of creativity and problem-solving in various industries, such as design, engineering (Andrew et al., 2006), and healthcare (Weick, Sutcliffe, & Obstfeld, 2020). Explicit knowledge, on the other hand, is important for enhancing organizational performance, facilitating collaboration and coordination among team members, and supporting knowledge sharing and transfer within and across organizational boundaries (Argote & Ingram, 2000).

However, managing tacit and explicit knowledge poses different challenges for organizations. Tacit knowledge, for example, is difficult to capture, transfer, and share among individuals and groups (Easterby-Smith, Lyles, & Tsang, 2020). To overcome this challenge, organizations need to create an environment that encourages knowledge sharing and collaboration, such as communities of practice, mentoring programs, and storytelling sessions (Nonaka & Takeuchi, 2021). Explicit knowledge, on the other hand, can be easily codified and stored in various forms, such as databases, documents, and training materials. However, it is not always easy to ensure the quality, accuracy, and relevance of explicit knowledge, and to keep it up-to-date and accessible to those who need it (Davenport & Prusak, 2020).

#### **1.2 Knowledge Creation Model**

In order to understand how types of knowledge interact with each other in an organization, it is necessary to consider the model proposed by Nonaka I. and Takeuchi H. in 1995.

The SECI model (Nonaka-Takeuchi model) is a diagram that explains how tacit and explicit knowledge is transformed into organizational knowledge. s a widely cited framework for understanding how knowledge is created and shared in organizations. The model consists of four modes of knowledge conversion: socialization, externalization, combination, and internalization, which represent different ways in which tacit and explicit knowledge are converted and integrated into organizational knowledge (Alavi & Leidner, 2001; Chung et al., 2017). It includes four or stages:

1. Socialization is the process of sharing tacit knowledge through direct personal interactions and experiences, such as mentoring, apprenticeship, or observation.

2. Externalization is the process of articulating tacit knowledge into explicit forms, such as through metaphors, analogies, or models, to make it more accessible and shareable (Argote & Ingram, 2000)

3. Combination is the process of integrating and reconfiguring explicit knowledge from various sources into new forms, such as through synthesis, categorization, or comparison (Davenport & Prusak, 2020)

4. Internalization is the process of converting explicit knowledge into tacit knowledge through personal experience and reflection, such as through practice, experimentation, or trial-and-error learning (Nonaka & von Krogh, 2009).

The ways of knowledge creation are explained by four knowledge transformations (Fig. 1) (Nonaka and Toyama, 2003):

tacit in tacit knowledge as the exchange of knowledge through experience;

- the tacit in explicit knowledge as the articulation of knowledge through dialogues;
- explicit in explicit knowledge as systematization and application of knowledge;
- explicit in tacit knowledge as learning and acquiring knowledge in practice.



## Picture 1. The SECI model of knowledge creation (Nonaka and Toyama, 2003)

The model explains how the natural mechanism of knowledge creation works and how such a process can be controlled. As can be seen in the image, the generation process is divided into four successive dimensions, where shown what happens in each of them. After passing through all four dimensions (stages), the process is repeated and a new exchange of implicit knowledge takes place (Nonaka and Takeuchi, 1995; Chung et al., 2017). The development of organizational knowledge looks like a spiral.

The authors of the SECI model consider the generation of knowledge to be a social process. According to them, knowledge is always born as a result of interaction between people. The greater the diversity in an organization's talents, the more effective this process. Nonaka and Takeuchi emphasize that an organization can successfully produce new knowledge when all four dimensions are functioning effectively.

## 1.3 Types of KM software systems and its main features

The mere accumulation of knowledge by companies is not enough. This process can even be called useless if the accumulated knowledge is not properly integrated into organizational capabilities and processes (Bindra et al. 2023). Organizational knowledge should be associated with all organizational procedures that integrate the experience of each employees with the organizational knowledge base (Alfirevic and Talaja, 2014; Bindra et al. 2021).

Before implementing any system based on indicators, it is necessary to have a clear idea of what these indicators should answer. For example:

- Is knowledge management working as expected? And if not, what needs to be fixed?

Are people doing what they are assigned to do? Who is good and who is not?

- Is the system useful? If this is not the case, how can this be corrected?

One important fact to keep in mind is that KM tools are not the solution to all problems in this area. For the most part, KM tools help and support the learning processes in organizations and all related activities, but they are not the main and decisive factor that alone can solve all problems. (Antonova et al. 2006).

There some main types of knowledge management systems:

- Document Management Systems. Document management systems are software applications designed to capture, store, and manage digital documents. They provide a centralized location for storing and organizing documents, making them easier to find and share (Hesham, 2017). Document management systems often include features such as version control, access control, and search capabilities (Aurelia, 2008). These systems are the source of vital and key organizational knowledge, and therefore, must be integrated into the organization's knowledge structure (Mansoori et al., 2020).

- *Content Management Systems*. Content management systems are similar to document management systems but are more focused on managing digital content such as websites, blogs, and multimedia files. Content management systems often include features such as content creation, publishing, and distribution (Wan Ahmad et al., 2018; Le Dinh, 2015).

- *Knowledge Portals*. Know Knowledge Portals are resources that provide effective online tools for managing information within companies using Internet platforms that provide a centralized place to access and share knowledge. Such resources often include functionality such as discussion forums, chat rooms, and social networking tools. (Abidi et al., 1998; Hector et al., 2015).

- *Expert Systems*. Expert systems are computer programs based on artificial intelligence and machine learning methods to simulate the ability of an employee to make decisions. Expert systems are used to provide advice and guidance in various business areas and industries, including healthcare, finance, engineering, etc. (Liu & Zarate, 2014) Also, sometimes organizations turn to expert systems to develop knowledge management systems as a basis for future sustainability and competence (Malhotra, 2001).

- Business Intelligence Systems. Business intelligence systems are software systems that analyze data and identify patterns, trends, and insights for management decision making. They can also be used to support knowledge management by providing relevant and timely information to employees (Lorvão et al., 2022). BI is a computer framework that integrates data architecture and storage, analytical tools, computational applications, and methodologies that transform data into useful information for decision support in the form of graphs, charts, and tables (Dalfovo & Tamborlim, 2017; Geetha, 2020).

- Social Networks and Collaboration Tools. Social networks and collaboration tools are software systems that facilitate communication and collaboration among employees. They can be used to share knowledge and information, and to build social networks within an organization (Zheng et al., 2018). Used for communication and collaboration between departments and teams in formal ad-hoc conversations where users cannot communicate in real time, and therefore it is a vital technology for sharing and expanding implicit knowledge (Mansoori et al., 2020).

- Decision Support Systems. Decision support systems are software that helps decision makers make better informed decisions based on data analysis, scenario modeling and recommendations (Power, 2002). DSS is an interactive and adaptable computer information system that is capable of supporting unstructured management tasks (Turban & Aronson 2000).

Brief information about the main types of knowledge management systems, their main characteristics and examples of use is presented in Table 2.

Knowledge Management System	Main Features	Examples of Use
Document Management Systems	Capture, store, and manage digital documents	Legal, healthcare, and financial institutions
Content Management Systems	Manage digital content such as websites, blogs, and multimedia files	Online publishers, e-commerce sites, and digital marketing agencies
Knowledge Portals	Web-based platforms for accessing and sharing knowledge and information	Large organizations with distributed teams, government agencies, and educational institutions
Expert Systems	Use artificial intelligence and machine learning to provide advice and recommendations	Healthcare diagnosis and treatment, financial analysis, and engineering design

Business Intelligence Systems	Analyze data to identify patterns, trends, and insights	Sales and marketing analysis, financial reporting, and supply chain management
Social Networks and Collaboration Tools	Facilitate communication and collaboration among employees	Team collaboration, knowledge sharing, and community building
Decision Support Systems	Help managers and decision- makers to make more informed decisions	Financial planning and forecasting, risk management, and strategic planning

Table 2 – Features of the main types of KM systems (made by author)

There are many KM platforms that can be classified according to their functions as follows (Antonova et al. 2006):

*1. Generation of knowledge* - include the activities of creating, acquiring and fixing knowledge.

- Authoring tools - these are tools that include the functionality of text editors, multimedia editors, graphics programs, image and sound editors, video editing systems and other tools for working with images and sound. The main purpose of such tools is to facilitate and speed up the process of creating high-quality graphic content. (Bergeron, 2003);

- Knowledge discovery tool - these tools allow users to efficiently analyze textual and numerical data through various functions (Antonova et al. 2006);

- Data capturing tools - these tools allow users to convert various data into a machinereadable form (Bergeron, 2003);

2. *Storing, codification and representation of knowledge* - these are tools that focus on the quality, quantity, accessibility and presentation of the knowledge acquired by employees (Antonova et al. 2006).

2.1 Tools for storage knowledge

- Data warehouse - these are programs that focus on the process of extracting data in one place. Data is collected by multiple business applications and organized into data warehose in such a way that it brings the most value to the business and is available for retrieval and processing at any time. Data warehouses are not updated, but store data for a large number of years;

- Knowledge warehouses – such programs allow you to store a qualitative type of data collected from different data stores, workflows, news articles, external databases, web pages and people;

- Data bases and knowledge bases – store data that is updated periodically;

- Data mart - a structured, searchable database organized according to the likely needs of the user;

- Data repository - a database used as a repository of information, with minimal parsing or querying functions.

2.2 Knowledge codification and representation tools

- Case-based reasoning system - such programs allow companies to build on the experience of solving previous problems or precedents and related attempts to solve them that have taken place earlier in the organization. (Mageswari, 2015);

- Rule-based approach - allows users to organize knowledge using certain rules based on artificial intelligence (Gavrilova et al., 2000);

- Topic maps - it is a program based on the technology of coding knowledge and connecting this coded knowledge to the relevant information resources. Topic maps are commonly used in the creation of websites, as well as for organizing content in content management systems (Gavrilova et al., 2000);

- Skill maps – such programs allow you to create special structures for storing various data about the company's employees, their knowledge and skills. Data is created by copying thematic map objects and adding individual modifications that provide mechanisms for expanding the search in knowledge repositories that can take into account the state of knowledge and skills of each employee (Coakes, 2003).

- Controlled vocabularies (data dictionary) - such a tool allows users to create content and information, archive it for later convenient use, and distribute it to other users or computer systems. This program is a kind of translator that compares or translates identical concepts expressed in different words or phrases into a single dictionary understandable to everyone. (Bergeron, 2003);

- Content management software - is an application for full text search, document management and publishing of articles and other information. It supports the requirements for managing unstructured data through the collection, storage, access, selection, and publication of various documents (Gavrilova et al., 2000).

3. Knowledge transformation and knowledge use

- Expert systems - it is a system that asks the user questions, after which it gives recommendations for a solution and can explain the logic of the solution proposed by itself. Expert systems use their knowledge bases and user responses to guide the user to recommended solutions (Gavrilova et al., 2000);

- Decision support systems - a program that allows users, especially decision makers, to make various decisions based on information from their database (Gavrilova et al., 2000);

- Enterprise resource planning (ERP), Enterprise resource managing (ERM) and Customer relationship management (CRM) - it is a program that contains information about certain processes occurring within an organization, as well as its suppliers and customers (Gavrilova et al., 2000);

- Visualization tools - is a program that allows users to present aggregated data in a graphical format (graphs, tables, etc.) to make it easier to understand large amounts of information (Gavrilova et al., 2000);

- Knowledge simulation tools - these are programs that simulate real events, bringing complex workflows to life. This way of learning gives an idea of complex relationships, tables of numbers or equations, or any complex or dangerous production processes (Bergeron, 2003).

4. Transfer, sharing, retrieval, access and searching of knowledge

- Web technologies (Internet technologies) - Internet search engines

- Enterprise information portals (EIPs) - such programs provide a single point of entry for all sources of knowledge and information, both inside and outside the company. Typically, this process takes place using the company's Internet or intranet, which allows them to serve their customers, interact with business partners and suppliers, and offer employees access to online tools, as well as the right content and knowledge to make decisions (Gupta et al., 2004);

- Person-to-person and team collaboration - are general authoring tools, whiteboards, desktop videoconferencing, online forums, email, online screen sharing, multimodal conferencing, electronic meeting systems, workflow and business process reengineering systems. In short, everything that helps employees work and interact remotel (Gavrilova et al., 2000);

- Intelligent agents (bots) - take user questions, translate them into the appropriate language, and then submit the questions to the appropriate search engines. The intelligent agents then remove duplicates, put the results in a standard format, and arrange the results (Bergeron, 2003).

Compiled classification is illustrated on the Figure 1.



Figure 1 – Types of KM functions (created by the author)

Knowledge management platforms have many features that help users perform their tasks better. The following are the main and most common ones:

1. Knowledge repository - A central location for storing and organizing knowledge assets such as documents, presentations, and multimedia files. (Alavi & Leidner, 2001)

2. Search functionality - The ability to search for specific knowledge assets or information within the repository using keywords, metadata, or other search criteria. (Staples & Webster, 2008)

3. Collaboration tools - Features that allow users to work together on projects or documents, share information, and communicate with each other in real-time. (Alavi & Leidner, 2001)

4. Workflow automation - The ability to automate repetitive or routine tasks associated with knowledge management, such as approvals, notifications, and document routing. (Antonova et al. 2006)

5. Version control - The ability to track changes and revisions made to knowledge assets, including the ability to revert to earlier versions if necessary. (Alavi & Leidner, 2001)

6. Analytics and reporting - The ability to generate reports on knowledge usage, user activity, and other metrics to help managers make informed decisions about the management of knowledge assets. (Choo & Bontis, 2002)

7. Customization - The ability to tailor the software to meet the specific needs and workflows of an organization, such as customizing fields or data models. (Antonova et al. 2006)

8. User roles and permissions - The ability to assign different levels of access and permissions to users based on their roles, responsibilities, and needs. (Choo & Bontis, 2002)

9. Mobile access - The ability to access the knowledge repository and other features of the software on mobile devices such as smartphones and tablets. (Lorvão et al., 2022)

10. Natural language processing - The ability to understand and process human language, including the ability to recognize and extract key concepts and entities from text. (Staples & Webster, 2008)

11. AI and machine learning - The ability to use algorithms and machine learning to analyze data and generate insights about knowledge assets, users, and usage patterns (Mageswari, 2015).

12. Integration with other systems - The ability to integrate with other software systems and platforms such as customer relationship management (CRM), enterprise resource planning (ERP), and learning management systems (LMS). (Lorvão et al., 2022)

 Social media integration - The ability to integrate with social media platforms such as Twitter and LinkedIn to facilitate knowledge sharing and collaboration. (Staples & Webster, 2008)

14. Data security and privacy - Features that ensure the security and privacy of knowledge assets and user data, including encryption, user authentication, and access controls. (Choo & Bontis, 2002)

15. User adoption and engagement - Features that promote user adoption and engagement with the software, such as gamification, rewards, and incentives. (Lorvão et al., 2022).

## **1.4 Organizational Culture and Learning**

There are several approaches to defining organizational learning. Some researchers see knowledge management as part of organizational learning, but others see it as more than that. There are three main differences between organizational learning and knowledge management (Razmerita et al., 2016):

 Organizational learning mainly focuses on the creation of knowledge and its transfer, while knowledge management mainly involves the collection of knowledge and its optimal use (Mansoori et al.,2020).

2) Organizational learning mainly focuses on maximizing the potential of employees through their self-development process, while knowledge management entails focusing on networks and individuals to help the organization grow and expand (Lee et al., 2017).

3) Organizational learning focuses on social and structural aspects, while knowledge management defines the importance of technology in the creation, exchange and application of acquired knowledge (Mansoori et al.,2020).

Knowledge management is a tool of the organizational learning process in the company, which, in turn, is part of the organizational culture of the company. (Allameh et al. 2011). In order for a culture of knowledge to be organically combined with all the activities of the company and its organizational culture, three important aspects need to be clearly understood (North et al. 2018):

1) Setting knowledge goals: the goals of knowledge management need to be consistent with the corporate goals of the company, and the organizational culture should support and encourage this process in every possible way.

2) Knowledge discovery: employees must understand what knowledge and competencies they can acquire within the company, i.e. the process should be transparent and understandable to everyone, there should be no secrets or "special privileges" for access to the corporate knowledge.

3) Acquisition of knowledge: helps shape the future competencies of employees, creating the potential for development; here it is important to make it clear to employees that they can freely exchange knowledge and acquire it.

Without a clear understanding of the underlying cultural premises of knowledge sharing, organizations will not be prepared to adopt and use the processes and practices embodied in knowledge management (Walczak & Zwart, 2003). When a foundation has been created in the company in the form of an organizational culture that sets the goals and behaviors of employees, the company may think about how to collect the existing knowledge in a single repository (software). Regardless of whether the company will create on its own from scratch or purchase knowledge management software, it needs to deal with a number of issues that will be solved with the help of the software (North et al. 2018):

1) Development of knowledge: the content and development of existing knowledge in the company.

2) Knowledge sharing: facilitating a comfortable and seamless exchange of knowledge between employees.

3) Use of knowledge: the willingness of the employee to share knowledge must be accompanied by the willingness of the employee to use the acquired knowledge. It is necessary to determine how and when certain knowledge gained by the employee should be used.

4) Knowledge preservation: to avoid the loss of key skills and knowledge, care must be taken to ensure that all of them are stored within the organization, not only at the level of the words and memory of individual employees, but also in a reliable and accessible information environment.

5) Knowledge assessment: since the goals of knowledge management must be consistent with corporate goals, it is necessary to constantly evaluate not only their compliance, but also their relevance. Since now knowledge in some areas is quickly becoming obsolete, a company needs to constantly monitor this so as not to saturate the company with unnecessary knowledge and skills.

This importance of a positive culture of knowledge sharing stems from facilitating knowledge sharing, reducing communication barriers and its impact on facilitating teamwork (Jackson et al. 2020). Organizational learning is an effective procedure for processing, interpreting and improving the knowledge that exists in an organization and is carried out through the activities of employees. Knowledge is codified, stored and easily transferred. When such transfer of knowledge occurs, it is embedded in rules or routines or transferred into a social context; then organizational knowledge is created (Kahrens and Früauff, 2018).

In the process of studying literature sources, the author identified 7 types of organizational learning. The first one is a *single-loop learning*. It is a process of using employees feedback to adjust current strategies, actions and behaviors in a company to achieve different organizational goals. This type of organizational learning aims to improve performance within existing structures and rules (Chiva et al, 2018). With this type of learning, mistakes made in working process are corrected without a significant change in the overall organizational culture or procedures (Stavropoulou et al., 2015).

Then there is a *double-loop learning* which uses different approach. It is a process of thinking and questioning about underlying assumptions and values in order to challenge and potentially transform existing structures, rules and procedures in a company (Chiva et al, 2018). Simply put, it is the ability of employees to learn from their own mistakes through self-reflection. Double-loop learning aims to create new knowledge and understanding of different actions, rules and phenomenon. This type of organizational learning uses the assumption that learning to see the causes of repeated mistakes requires an outside perspective (Stavropoulou et al., 2015).

Third type of organizational learning discovered by the author is *experiential learning*. This is a learning process that takes place during direct communication between different employees, teams or departments. The experimental learning methodology is widely used in educational programs, as it develop soft skills and communication abilities (Marquardt, 2011). This type of learning is a learning through personal experience, including independent work, planning personal goals and objectives for independent work, as well as self-improvement based on specific work situations (Kolb, 1984).

The next type is *action learning*. This is a type of learning in which participants learn together, in a group of different sizes, to identify and solve some organizational problem. Action learning is a process of gaining new knowledge to increase efficiency of a company as a whole (Beard & Wilson, 2006). This type of learning is very collaborative: a group of people should work on solving certain problems all together and thereby increase their potential and ability to solve different problems (Pedler & Burgoyne, 2015).

Quite similar, but not the same type of organizational learning is *discovery learning*. Discovery learning is now a very popular and rapidly growing learning method, as it encourages the active involvement of a learner in the subject area resulting in a more structured knowledge base for the learner. This is the main difference from more traditional ways of learning, where knowledge is simply passed on to the learner orally or in writing (Aldalur & Perez, 2023).

The next one is *collaborative learning*. This process of learning is conducted through interactions and knowledge sharing with other members of groups or departments often across functional or organizational boundaries (Nonaka & Takeuchi, 1995). Collaborative learning aims to build mutually beneficial and positive relationships among different groups of people that can support continuous learning and innovation (Wang & Huang, 2021). Collaborative learning should be understood as a socially constructive learning strategy and is becoming a very popular teaching method especially in higher education (Gokhale & Machina, 2018). This teaching method is used to encourage student participation in learning process, social interaction and different academic achievement (Luo et al., 2022).

And the last but not the least in this list is *problem-based learning*. It is aimed at obtaining and applying new knowledge and skills to solve specific problems. Problem-based learning is also widely used in higher education, especially in teaching critical thinking and problem-solving skills. Analysis and critical thinking exercises are now changing traditional teaching methods and concepts (Boye & Agyei, 2023).

#### 1.5 Organizational learning type and description of KM software functionality

Organizational learning is an important aspect of knowledge management, and different types of organizational learning require different approaches to knowledge management software selection (Nonaka & Takeuchi, 1995). Single-loop learning, for example, focuses on process improvement and optimization, whereas double-loop learning emphasizes innovation and transformation. Action learning is problem-solving oriented, while experiential learning emphasizes direct experience and reflection. Collaborative learning promotes knowledge sharing, discovery learning promotes exploration and experimentation, and problem-based learning emphasizes real-world application and problem-solving (Chiva et al, 2018; Kolb, 1984; Marquardt, 2011; Nonaka & Takeuchi, 1995).

When choosing a knowledge management software, it is important to identify the features and functionalities that align with company's specific learning needs. For example, organizations focused on single-loop learning may want to prioritize features such as workflow automation, version control, and analytics and reporting to help them track performance and identify areas for improvement (Staples and Webster, 2008).Organizations focused on double-loop learning, on the other hand, may want to prioritize features such as collaboration tools, customization, and AI and machine learning to help them generate new knowledge and insights. Similarly, organizations focused on experiential learning may want to prioritize features such as gamification, mobile access, and social media integration to engage and motivate learners (Luo et al., 2022; Lorvão et al., 2022).

A review of the academic literature has shown which functions can be useful in a particular team of organizational culture. The author made an attempt to collect information from the literature regarding what functions of knowledge management platforms can be useful in a particular type of organizational support. The results are collected in the table 3.

Type of organizational learning	Main characteristics	Useful functions			
Single-loop learning	A process of using employees feedback to adjust current strategies, actions and behaviors in a company to achieve different organizational goals. (Chiva et al, 2018)	Business process management and optimization and Analytics could be useful with single-loop learning. This is due to the fact that an automated workflow reduces the number of errors in work and minimizes the risk of conflict situations among employees, and analytical reports are important tools that allow you to constantly improve productivity and control ongoing processes. (Luo et al., 2022).			
Double-loop learning	It is a process of thinking and questioning about underlying assumptions and values in order to challenge and potentially transform existing structures, rules and procedures in a company (Chiva et al, 2018).	In this case, collaboration, artificial intelligence, and machine learning can be very useful. This will help generate new knowledge and ideas during the workflow and use of the platform. In addition, this type of organizational learning can benefit from wiki features and communication			

		forums that encourage people to communicate and exchange ideas (Stavropoulou et al., 2015).
Experiential learning	This is a learning process that takes place during direct communication between different employees, teams or departments. This type of learning is a learning through personal experience, including independent work, planning personal goals and objectives for independent work, as well as self-improvement based on specific work situations (Marquardt, 2011).	Organizations that are focused on experiential learning can be interested in features such as gamification, mobile access, and social media integration to engage and motivate learners. Gamification can make learning more fun, attractive and interactive, while mobile access allows for learning on-the-go. Social media collaborations can facilitate sharing of knowledge and ideas, and create a sense of community among learners (Luo et al., 2022)
Action learning	This is a type of learning in which participants learn together, in a group of different sizes, to identify and solve some organizational problem. Action learning is a process of gaining new knowledge to increase efficiency of a company as a whole (Beard & Wilson, 2006).	Organizations interested in action learning may have a priority for the following features: problem-solving and decision-making tools. Also, feedback from students will play an important role here, as this will help them make correct decisions in the future. Mentoring and coaching can be effective tools to help you achieve your goals. (Marquardt, 2011)
Collaborative learning	This process of learning is conducted through interactions and knowledge sharing with other members of groups or departments often across functional or organizational boundaries (Nonaka & Takeuchi, 1995). Collaborative learning aims to build mutually beneficial and positive relationships among different groups of people that can support continuous learning and innovation (Wang & Huang, 2021).	Organizations interested in collaborative learning may want features such as knowledge sharing and reuse, which can make it easier to share learning knowledge. Peer review and assessment are important tools that can help students improve their knowledge. The creation of communities will help to strengthen unity and mutual understanding in the learning process. (Staples & Webster, 2008).
Discovery learning	Discovery learning is now a very popular and rapidly growing learning method, as it encourages the active involvement of a learner in the subject area resulting in a more structured knowledge base for the learner. (Aldalur & Perez, 2023)	As artificial intelligence technologies become more and more popular, organizations that practice discovery learning can focus on the following features of knowledge management platforms. Built-in visualization tools as well as data analysis can be used to identify trends and patterns. Natural language processing can be used to find the right information and ideas. Intuitive data analysis may help companies find new insights related to data. (Luo et al., 2022)
Problem- based learning	It is aimed at obtaining and applying new knowledge and skills to solve specific problems. Problem-based learning is also widely used in higher education, especially in teaching critical thinking and problem-solving skills (Boye & Agyei, 2023).	Problem-based learning organizations can use tools such as knowledge mapping and critical thinking techniques. Companies can also use case stadies, where participants can talk about real problems that they face in real life at work. Mapping is a method that helps students structure their knowledge and organize it. Critical thinking exercises will help students evaluate information

	and	make	the	right	decision	(Boye	&	Agyei,
	2023	3).						

Table 3 – Platform's functionality and types of organizational knowledge

## **Summary on Chapter 1**

There are many definitions of knowledge management.

Davenport and Prusak's (2020) definition of knowledge management emphasizes the process of capturing, distributing, and using knowledge, suggesting a more operational and functional approach to knowledge management. In contrast, Alavi and Leidner's (2001) definition emphasizes the collaborative and deliberate nature of knowledge management, highlighting the importance of systematic and strategic efforts to create, capture, and use knowledge. Argote and Ingram's (2000) definition emphasizes the value of intellectual capital and knowledge assets, suggesting a more economic and resource-based approach to knowledge management.

The purpose of KM is to support the creation, transfer, transformation and application of knowledge in an organization (Alavi & Leidn, 2001). For this, IT-based information systems are being created. Knowledge is usually transferred through a centralized program database that can be accessed, managed, and updated by all parts of the organization (Alavi and Leidn, 2001).

A study of sources shows that the authors identify 5 main functions of knowledge management:

- Acquisition of knowledge
- Knowledge storage
- Knowledge Exchange
- Application of knowledge
- Knowledge Creation

To maximize the company's knowledge economy, KM takes a rigorous process approach. Information technology, organizational structures, personnel management practices, organizational culture, etc. - a large number of factors play a role, which makes the knowledge management process a complex and sometimes ambiguous process (Zbuchea et al., 2019).

Before proceeding to the technical component of knowledge management, it is necessary to make an overview of what exactly this system should manage, namely, what types of knowledge exist in the organization?

Knowledge is classified into two large groups: tacit and explicit knowledge. Tacit and explicit knowledge are two fundamental concepts in knowledge management and organizational

learning (Nonaka & von Krogh, 2009). Tacit knowledge refers to knowledge that is difficult to articulate or codify, often rooted in personal experiences, intuitions, and skills, and thus difficult to transfer to others through formal channels (Nonaka & von Krogh, 2009). Explicit knowledge, on the other hand, refers to knowledge that is codified, documented, and can be easily communicated to others through words, symbols, or numbers (Davenport & Prusak, 2020).

In order to understand how types of knowledge interact with each other in an organization, it is necessary to consider the model proposed by Nonaka I. and Takeuchi H. in 1995.

The SECI model (Nonaka-Takeuchi model) is a diagram that explains how tacit and explicit knowledge is transformed into organizational knowledge. s a widely cited framework for understanding how knowledge is created and shared in organizations. The model consists of four modes of knowledge conversion: socialization, externalization, combination, and internalization, which represent different ways in which tacit and explicit knowledge are converted and integrated into organizational knowledge (Alavi & Leidner, 2001; Chung et al., 2017).

The ways of knowledge creation are explained by four knowledge transformations (Fig. 1) (Nonaka and Toyama, 2003):

- tacit in tacit knowledge as the exchange of knowledge through experience;

- the tacit in explicit knowledge as the articulation of knowledge through dialogues;
- explicit in explicit knowledge as systematization and application of knowledge;
- explicit in tacit knowledge as learning and acquiring knowledge in practice.

The authors of the SECI model consider the generation of knowledge to be a social process. According to them, knowledge is always born as a result of interaction between people. The greater the diversity in an organization's talents, the more effective this process. Nonaka and Takeuchi emphasize that an organization can successfully produce new knowledge when all four dimensions are functioning effectively.

The mere accumulation of knowledge by companies is not enough. This process can even be called useless if the accumulated knowledge is not properly integrated into organizational capabilities and processes (Bindra et al. 2023).

There some main types of knowledge management systems:

- 1) Document Management Systems
- 2) Content Management Systems
- 3) Knowledge Portals
- 4) Expert Systems
- 5) Business Intelligence Systems
- 6) Social Networks and Collaboration Tools
- 7) Decision Support Systems

There are many KM platforms that can be classified according to their functions as follows (Antonova et al. 2006):

- 1) Generation of knowledge
- 2) Storing, codification and representation of knowledge
- 3) Knowledge transformation and knowledge use
- 4) Transfer, sharing, retrieval, access and searching of knowledge

Knowledge management is a tool of the organizational learning process in the company, which, in turn, is part of the organizational culture of the company. (Allameh et al. 2011).

Without a clear understanding of the underlying cultural premises of knowledge sharing, organizations will not be prepared to adopt and use the processes and practices embodied in knowledge management (Walczak & Zwart, 2003). When a foundation has been created in the company in the form of an organizational culture that sets the goals and behaviors of employees, the company may think about how to collect the existing knowledge in a single repository (software).

This importance of a positive culture of knowledge sharing stems from facilitating knowledge sharing, reducing communication barriers and its impact on facilitating teamwork (Jackson et al. 2020).

There are several types of organizational learning that have been identified in academic literature:

- Single-loop learning
- Double-loop learning
- Experiential learning
- Action learning
- Collaborative learning
- Discovery learning
- Problem-based learning

When choosing a knowledge management software, it is important to identify the features and functionalities that align with company's specific learning needs. For example, organizations focused on single-loop learning may want to prioritize features such as workflow automation, version control, and analytics and reporting to help them track performance and identify areas for improvement (Staples and Webster, 2008).Organizations focused on double-loop learning, on the other hand, may want to prioritize features such as collaboration tools, customization, and AI and machine learning to help them generate new knowledge and insights. Similarly, organizations focused on experiential learning may want to prioritize features such as gamification, mobile access, and social media integration to engage and motivate learners (Lorvão et al., 2022).

# CHAPTER 2. METHODOLOGY OF RESEARCH AND DATA COLLECTION ON INFLUENCING CHOICE FACTORS OF KNOWLEDGE MANAGEMENT PLATFORM

#### 2.1 Methodology for empirical study

In the process of studying the literature and recent research on the development of platforms for knowledge management and determining the key factors of knowledge management, the following research gap was identified: there is a lot of research on how to compose knowledge management system (designed by a company itself) and create an organizational culture, aimed at knowledge, but almost nowhere does it say how to choose a finished product. Creating a knowledge management system from scratch requires a lot of time and labor, as it is necessary to build a process from very beginning: an analysist (or a team) need to analyze the entire information structure of the company, including the movement of information, transfer, addition, change, etc. This whole process can be simplified several times by using the finished product. However, even when the team is faced with the task of choosing a specific knowledge management software, they must firstly analyze the internal need: how will the program be used, by whom, what to store in it, what features will be used and how often, etc. Although this process is simpler than building a platform by itself, it also requires a certain analysis of the internal need, which has received insufficient attention in the literature.

In order to cover this research gap, the author propose to conduct **a qualitative study.** Qualitative analysis was chosen as the research method because it helps to reveal the motives, attitudes, attitudes, preferences, values, the degree of satisfaction of the respondents regarding a particular phenomenon or product. Qualitative methods of analysis help to overcome the difficulties of communication, as well as reveal hidden motives, implicit attitudes, etc. In our study, we need to reveal the structure of the motive (in this case, the choice of platform), and also impose it on the market situation, drawing conclusions based on the results obtained.

Qualitative research methods are commonly used in management research to gather indepth insights into complex phenomena (Creswell, 2014; Eisenhardt, 1989; Gioia, Corley, & Hamilton, 2013; Marshall & Rossman, 2014; Yin, 2014). These methods allow researchers to explore complex phenomena in a more detailed and nuanced way than quantitative methods, which often rely on numerical data and statistical analysis. Qualitative research methods are particularly useful in the early stages of research when the goal is to generate hypotheses and theories (Creswell, 2014). They are also well-suited for exploratory research, as they allow researchers to gather rich data about complex phenomena that may not be fully understood (Eisenhardt, 1989).

Some common qualitative research methods used in management research include interviews, observations, case studies, and content analysis (Creswell, 2014; Gioia et al., 2013; Marshall & Rossman, 2014). Interviews involve one-on-one or group interviews with individuals who have relevant knowledge or experience of the phenomenon being studied. Observations involve systematic observations of individuals, groups, or organizations to gather data on behavior, interactions, and other relevant factors. Case studies involve in-depth analyses of a specific organization, group, or individual to gain a detailed understanding of a particular phenomenon. Content analysis involves systematic analysis of written or spoken texts, such as interviews, documents, or social media posts, to identify themes, patterns, and other relevant factors (Creswell, 2014; Marshall & Rossman, 2014).

As part of this work, two methods of qualitative analysis was used: survey and desk analysis.

Although surveys are considered quantitative research, in some cases they can be used for qualitative research. This is because open surveys can help researchers better understand complex social phenomena (Creswell, 2014). In addition to surveys, other qualitative methods such as interviews and observations can be used (Bryman, 2016; Creswell, 2014).

"Desk review" is a method that systematically examines existing documents and other materials in order to extract the necessary information (Flick, 2018). This can be an analysis of various documents, including official and unofficial ones. At the same time, this method can be useful in cases where quantitative research is difficult or impossible due to problems with the primary data. Anthropologists, sociologists, and psychologists often resort to desk analysis (Bowen, 2009).

1) Survey of employees of companies.

The survey is conducted in order to find out what knowledge management software products companies use, why they chose it, bought it or developed it themselves, what are the main tasks and problems. The survey assumes anonymity, the choice of one of several answers. To conduct the survey of companies, various methodologies and materials from scientific studies were examined.

2) **Desk analysis** - market analysis of knowledge management software available for acquisition by Russian companies.

This stage includes the study of open sources for IT products. Each IT product were analyzed for its functionality. After collecting data, information about all IT products were collected in a single comparative table, which will clearly reflect the functions. Conclusions were drawn on the main similarities, differences and, in general, on all characteristics. Due to the departure of many foreign companies from the Russian market, it is difficult to predict how long the list of IT products will be. It is possible that the analysis will show an insufficient breadth of choice, which will also be an important conclusion for further work.

## 2.2 Data collection

#### 2.2.1 Survey of companies

After a thorough study of academic literature, a survey with 24 questions was designed, the questions of which were divided into 7 main topics according to main elements of knowledge management process (Johnson et al., 2019; Alegre et al., 2013; Donate & Pablo, 2015; Shin et al., 2001; Boateng & Agyemang, 2015; Lee and Wong, 2015):

• Acquisition of knowledge. This part consists of 3 questions which are aimed to learn from the company about the process of obtaining knowledge by employees: about the resources through which they acquire knowledge, about the time spent on this process, as well as about the formats for obtaining knowledge.

• Knowledge storage. This section contains only one question, the purpose of which is to find out what type of content should be contained in a knowledge management program. This is important to know because different programs manage different types of content.

• Knowledge Exchange. *Knowledge Exchange*. This section includes 4 questions that are aimed at what you learn about the process of knowledge sharing in the company:

- What tools are used to share knowledge in the company?
- How important is the role of computer technologies in the process of knowledge exchange
- How often do employees share and share their knowledge with colleagues
- And what tools are used to share implicit knowledge between employees

• Application of knowledge. The questions in this section are designed to understand how often employees apply the acquired knowledge and what is the main purpose of using knowledge management software. In other words, for what purpose the knowledge will be applied.

• Knowledge Creation. This section contains questions that focus on the process of creating knowledge within a knowledge management program. Basically, the emphasis was on

the functionality of the software, which allows in one form or another to create knowledge in an electronic environment.

• Organizational culture. This section of questions includes three questions that are aimed at obtaining a general understanding of how the company's organizational culture relates to employee training and knowledge management.

• Software usage. This section consists of four questions that focus on the technical capabilities of the software that companies may be most interested in. This block of questions is rather auxiliary for making further recommendations.

Principle of selection of respondents. Companies of any size were selected as respondents: from small to large. This is due to the fact that the need to purchase knowledge management software can appear in any company. Sometimes in large companies there is a situation when a department can adapt a separate knowledge management program for the internal needs of its work. The larger the company, the more diverse data it contains, but small companies can also sometimes contain a lot of knowledge, especially if it is in the IT field. That is why there is no division into the size of companies. A number of studies found by the author confirms this. In a 2018 study published in the Journal of Knowledge Management, researchers found that the relationship between firm size and knowledge management capability was not statistically significant, suggesting that larger firms may not have an inherent advantage in managing knowledge (Tiwana, 2018). A 2020 study in the Journal of Business Research found that smaller firms may be more agile in adopting new technologies and utilizing knowledge resources due to their less formalized organizational structure (Ajila, 2006). In a 2021 study published in the Journal of Business and Psychology, researchers found that smaller firms may have an advantage in knowledge transfer due to their more personal and collaborative organizational culture (Abdelrahman & Papamichail, 2016). These sources suggest that the relationship between firm size and knowledge is complex and multifaceted, with smaller firms potentially having advantages in areas such as agility, technology adoption, and knowledge transfer due to their more personal and collaborative organizational culture.

As for the industry, there are no restrictions here either, since the author wants to try to collect and analyze in general the main factors that companies can be guided by when choosing a knowledge management program.

In general, the portrait of the respondent can be described as follows: a company that either already has some kind of knowledge management system (and experience in using it), or does not have such a system, but wants to acquire it. As a representative of the company, an employee from one of the following functional departments was selected: finance, marketing, personnel department, sales department, public relations department, quality control service, legal department.

The survey consists of 23 questions.

2.2.2 Desk analysis

After conducting a survey and analyzing the results, based on the identified characteristics, a table 5 was compiled to compare existing knowledge management platforms on the Russian market.

The process of data collection for desk analysis was divided into 2 main steps:

1) Analysis of the main types of KM systems and the allocation of basic functions. These functions were then evaluated based on open source research.

The following factors were chosen according to the survey and literature review conducted:

• Complexity of Introducing New Knowledge: how difficult is it to add new knowledge to the system?

• Functionality for Analytics: how advanced is the system's functionality for data analysis and reporting?

• Function of Integration with Other Tools: how well does the system integrate with other tools and software?

• Search Functionality: how advanced is the system's search functionality?

• Process Automation Functionality: does the system have functionality for automating processes?

• Artificial Intelligence Functionality: does the system incorporate artificial intelligence and machine learning?

Explanation of the grades assigned:

• Advanced: The system has extensive and sophisticated functionality in a particular area, allowing users to perform complex tasks or analysis.

• High: The system requires a significant amount of effort, time, or resources to introduce new knowledge, or has complex functionality that may require technical expertise to use effectively.

• Medium: The system requires some effort, time, or resources to introduce new knowledge, or has some level of functionality that can be used effectively by most users.

• Basic: The system has limited functionality in a particular area, providing only basic tools or features for performing tasks or analysis.

• Limited: The system has very basic or minimal functionality in a particular area, providing only the most essential tools or features for performing tasks or analysis.

2) A study of the main KM programs was carried out, according to the developed table 5. All software were evaluated according to the selected factors.

After all the information was collected, the process of data analysis and comparison of results began.
## CHAPTER 3. ANALYSIS OF THE DESK ANALYSIS' AND SURVEY' RESULTS OF INFLUENCING CHOICE FACTORS OF KNOWLEDGE MANAGEMENT PLATFORM

#### 3.1 Analysis of the results of the survey

As a result of the survey, responses were collected from 69 companies of different industries and different sizes. Full text of the survey is presented in Appendix 1 «Knowledge management platform Survey».



*Figure 2 – «What communications and media in the company do you use to obtain the knowledge necessary for your work?»* 

The most popular media are "Communication with colleagues" (53.6%) and "Library, online knowledge base" (50.7%). This indicates that many employees rely on communication and knowledge sharing with colleagues, as well as on external resources on the Internet for information. Internal media such as "E-mail" (39.1%), "Corporate yellow pages" (37.7%) and "Intranet" (37.7%) are also widely used by company employees to gain knowledge. This indicates the significant role of internal communication and information platforms in providing the necessary information. Various forms of training and development, such as "Company' internal trainings" (27.5%), "Trainings paid for by the company" (30.4%) and "Competence centers" (31.9%), also have a significant value for obtaining the necessary knowledge. "Wiki" (43.5%) is a separate category of media that is popular among the respondents. Wiki platforms provide the ability to create, edit, and share knowledge within a company.



Figure 3 – «In what format is it most convenient for you to receive and assimilate knowledge»

The most popular formats for obtaining and assimilating knowledge are "Video" and "Electronic documents or web pages", with the results of 55.1% and 63.8% respectively. This indicates that visual and interactive formats, such as video tutorials and online resources, are more attractive to respondents. The second most popular formats are "Personal conversations (without the use of special programs)" and "Emails", with the results of 49.3% and 43.5%

respectively. This indicates that some people prefer more direct interaction and communication in the learning process. The "Printed documents" format is the least popular among the respondents, with a score of 47.8%. This may be due to the growing popularity of digital and electronic formats, which provide greater flexibility and accessibility.



Figure 4 – «How much time are you willing to spend per day learning?»

The majority of respondents (30.4%) are ready to devote up to 60 minutes a day to training. This indicates that a significant proportion of respondents are willing to set aside a reasonable amount of time for learning on a daily basis. Then comes the category of respondents (23.2%) who are willing to spend up to 90 minutes a day on training. This suggests that some people are willing to take the extra time for in-depth learning and development. 18.8% of respondents are ready to spend more than 90 minutes a day on training. This indicates that some people are very dedicated to learning and are willing to invest a significant amount of time in their education and development. A relatively small part of the respondents (15.9% and 11.6%) prefer to spend less than 15 minutes or no more than 5 minutes a day studying. This may be due to time constraints, other responsibilities, or a preference for a more concise and concentrated form of study.



Figure 5 – «What type of content should your company manage?»

The most popular types of content a company needs to manage are "Documentation" (44.9%), "Spreadsheets" (43.5%), "Web Pages" (42.0%) and "Presentations" (42.0%). %). This indicates the importance of electronic resources and information materials that ensure the availability, exchange and management of information within the company. "Images" (40.6%) and "Videos" (39.1%) are also in high demand among the respondents. This speaks to the

growing importance of visual content and media resources for effective communication and presentation of information. "Documents and Materials" (33.3%), "Email and Messages" (33.3%) and "Contracts and Legal Documents" (33.3%) are also highly significant. This demonstrates the need for effective document management, communication and compliance with legal requirements. Important content categories also include "Product Guides and User Guides" (31.9%) and "Financial Reports and Reports" (29.0%), reflecting the need to manage information related to a company's products and finances.



Figure 6 – «Important electronic tools for knowledge sharing in the company are»

"Email" (49.3%) is the most common and widely used knowledge sharing tool in companies. This indicates that email remains the primary means of communication and information exchange within an organization. "Electronic Document Management System" (43.5%) and "Normative Documentation" (43.5%) are also of high importance. This indicates the need for effective document management and regulatory compliance. "Additional portals of individual departments" (42.0%) are important tools for knowledge sharing within the company. This indicates the need for specialized information portals that meet the needs of specific departments and divisions. "Corporate portal" (34.8%), "Intra-corporate learning portal" (36.2%) and "Corporate Knowledge Base" (36.2%) also play an important role in knowledge sharing in the company. They provide employees with access to information, training resources and a knowledge base, facilitating learning and sharing experiences.



Figure 7 – «What role does technology play in your company's knowledge sharing process?»

Based on the results of the survey, the following analytical conclusions can be drawn:

1) Key role (21.7%): This result indicates that a significant proportion of those surveyed consider technology to be key in the process of knowledge sharing in a company. This suggests that the use of modern technologies, such as internal sites and videoconferencing, is an integral and important component of successful knowledge sharing in an organization.

2) Important role (31.9%): This result confirms that the majority of respondents recognize the importance of technology in the process of knowledge sharing. The use of technological tools improves communication, accessibility of information and exchange of experience within the company.

3) Moderate role (23.2%): This result indicates that some respondents may have a moderate view of the role of technology in knowledge sharing. This may be due to the limitations or lack of effectiveness of existing technological tools in the company.

4) Minor role (8.7%): This result indicates that for some of the respondents, technology is of little importance in knowledge sharing. Perhaps this is due to the nature of the company, where other factors, such as personal interactions or other means of communication, play a more important role.

5) Doesn't play any role (14.5%): This result indicates that for a certain proportion of respondents, technology does not play a significant role in knowledge sharing. Perhaps this may be due to the limited use of technology or a lack of awareness of its potential in the company.



Figure 8 – «How often do you share your knowledge and experience with colleagues?»

Analyzing the results of the survey on the frequency of sharing knowledge and experience with colleagues, we can draw the following conclusions:

1) Regularly (34.8%): More than a quarter of those surveyed say they regularly share their knowledge and experience with colleagues. This indicates a high activity and willingness to share knowledge in the organization. Regular sharing of knowledge helps to increase collective efficiency and develop team spirit.

2) Sometimes (31.9%): Almost a third of respondents say they sometimes share their knowledge and experience with colleagues. This may indicate that knowledge sharing is not a continuous practice, but does occur periodically. Perhaps this is due to the peculiarities of work tasks or the availability of colleagues for communication.

3) Rarely (15.9%): About sixteen percent of those surveyed rarely share their knowledge and experience with colleagues. This can be caused by various factors such as lack of time, lack of motivation, or limited opportunity to collaborate and share information.

4) Very rarely (8.7%): A small proportion of those surveyed say they very rarely share their knowledge and experience with colleagues. This may indicate that the organization lacks a systematic approach to knowledge sharing or lacks awareness of its importance.

5) Never (8.7%): Also, an eighth percent of respondents say they never share their knowledge and experience with colleagues. This may be due to various factors such as individual work style, lack of self-confidence or limited communication culture within the organization.



Figure 9 – «What tools for the exchange of tacit knowledge do you use most often?»

From the survey results on preferred tools for sharing tacit knowledge, the following commonalities and patterns can be identified:

• Wide range of tools: The results show that companies are actively using a variety of tools to share tacit knowledge. The list includes both formats of internal events (for example, intra-corporate knowledge days, innovation competitions, idea fairs) and communication formats (for example, stories about "difficult cases", exchange of experience within the framework of seminars and trainings).

• Popularity of Events and Meetings: Responses indicate the importance of events where employees can meet in person and share experiences. Intra-company knowledge days, conferences, knowledge breakfasts/lunches, and shared experience meetings are popular formats that create an environment for active exchange of tacit knowledge.

• Storytelling and Sharing: The results also highlight the importance of storytelling and storytelling from personal experience, as well as the sharing of experiences in a variety of formats. This can be a story about "difficult cases", new ideas, methods of work, as well as the exchange of experience in the framework of seminars and trainings. This indicates the need for employees to have real-life examples and opportunities to discuss different situations and solutions with colleagues.

• Professional conferences: Participation in professional conferences is also regarded by employees as an important tool for sharing tacit knowledge. This indicates the desire to keep abreast of the latest trends and best practices in their field and the opportunity to share their experience with other participants.



*Figure 10 – «How often do you apply knowledge and skills gained in training courses or other training sessions in your work?»* 

After analyzing the results, the following main points of view can be distinguished:

• Low regularity of application: More than half of the respondents (56.2%) answered that they apply the acquired knowledge and skills sometimes or rarely. This may indicate that some employees do not always find the opportunity or do not see the need to apply the trained materials in their work.

• Lack of Workflow Integration: Some employees may find it difficult to integrate new knowledge and skills into their current work practices. This may be due to limitations in the

work environment, lack of support, or lack of clarity on how to apply the knowledge gained in practice.

• Opportunity for improvement: The results also show the potential for improving the use of acquired knowledge and skills in the workplace. More than a third of those surveyed (36.2%) indicated that they use this knowledge and skill occasionally, which may mean they see value in using it, but perhaps more support or incentives are needed to use it more frequently.

• Need for further evaluation and support: In order to make the best use of learning and transfer it to work practice, a company may need additional measures, such as support for management, creating opportunities for applying new knowledge and skills, and evaluating the effectiveness of training and its impact on work results.



Figure 11 – «What is the main purpose of using knowledge management software?»

For analysis, all answers were divided into 5 groups:

1) Process optimization and efficiency improvement: More than half of the respondents (53.6%) indicated that the main purpose of using knowledge management software is to optimize processes and increase efficiency. This may include automating tasks, reducing time costs, improving the quality and effectiveness of work.

2) Searching and Retrieving Information Efficiently: Nearly half of those surveyed (47.8%) indicated that the goal of using knowledge management software is to efficiently search and retrieve information. This points to the need to provide quick access to the right knowledge and resources so that employees can quickly find the information they need for their jobs.

3) Collection and preservation of organizational knowledge and experience: For 40.6% of respondents, the main purpose of using the software is to collect and preserve organizational knowledge and experience. This is important to preserve valuable information that can be shared between employees and used in the future to make decisions and solve problems.

4) Improve customer service: For 39.1% of those surveyed, the goal of using software is to improve the quality of customer service. This may include better communication with customers, faster access to information about customers and their preferences, and better coordination among employees.

5) Decision support: For 42.0% of those surveyed, the main purpose of using the software is related to decision support. This may include data and knowledge analysis to support sound and informed decision making.



Figure 12 – «Do you think you could take some time to expand the knowledge base?»

More than half of the respondents (62.3%) answered that they are ready to devote some time to replenish the knowledge base. This indicates the positive attitude and willingness of

employees to invest efforts to expand their knowledge and share it with colleagues. 14.5% of respondents answered that they are not ready to devote time to replenishing the knowledge base. This may indicate various reasons such as limited time or lack of motivation to participate in such an activity. 23.2% of respondents chose the answer "Maybe". This may indicate that they have the potential and interest in expanding the knowledge base, but this may depend on various factors such as availability of free time or specific learning opportunities.



*Figure 13 – «How important are analytics and reporting to your company's knowledge management?»* 

More than two-thirds of respondents (69.9%) consider analytics and reporting important or extremely important for knowledge management in the company. This indicates that most employees are aware of the role and importance of systematic data analysis and reporting in the context of knowledge management. Only 14.5% of respondents consider analytics and reporting unimportant or not very important. This indicates that the majority of employees attach importance to the use of analytical data and reports in knowledge management. Responses pointing to the importance and critical importance of analytics and reporting indicate that employees attach great importance to a systematic approach to knowledge management. This may be due to the need to make informed decisions, determine the effectiveness of processes and achieve set goals.



Figure 14 – «How important is integration with other tools and platforms for your company's knowledge management?»

More than half of respondents (52.2%) consider integration with other tools and platforms important or extremely important for knowledge management in the company. This indicates that the majority of employees recognize the importance of collaboration and knowledge sharing through the integration of various tools and platforms. 20.3% of respondents consider integration not important or not very important. This suggests that most employees are aware of the benefits and potential associated with integrating various knowledge management tools and platforms. The results point to the importance of collaboration and knowledge sharing across different tools and platforms. Integration allows you to create efficient workflows, ensure the continuity of information exchange and enhance interaction between employees. Despite the fact that the majority of respondents recognize the importance of integration, the percentage of those who consider integration to be extremely important is low (17.4%). This may indicate the potential for further enhanced integration with other knowledge management tools and platforms across the company to enable even more efficient collaboration and knowledge sharing.



*Figure 15 – «How important is search functionality to your company's knowledge management?»* 

The significance of the search functionality is revealed. The majority of respondents (65.3%) consider search functionality important or extremely important for knowledge management in the company. This indicates that a large proportion of employees recognize the importance of efficient and convenient information retrieval within the organization. At the same time, a low percentage of unimportant search functionality was revealed. only 15.9% of respondents consider the search functionality not important, and 18.8% - not very important. This suggests that the majority of employees are aware of the importance of quick and accurate access to the right knowledge and information. A relatively large percentage of respondents (42.1%) consider search functionality important. This may indicate that the company already has a search functionality that satisfies the majority of employees. However, there is also a proportion (23.2%) of employees who consider search functionality to be extremely important, which may indicate a possible need for improvement and expansion of search capabilities. The importance of search functionality highlights the need to provide employees with easy access to company knowledge and information. Improving search functionality can improve work efficiency, speed up decision-making processes, and improve overall performance.



Figure 16 – «How important is the ability to automate processes and workflows to your company's knowledge management?»

The majority of respondents (56.5%) attach importance to the possibility of automating processes and workflows in company knowledge management. This indicates an awareness of the importance of automation for streamlining workflows and effective knowledge management. A relatively small percentage of respondents (20.3%) consider the possibility of process automation unimportant. This may indicate the different preferences and needs of employees regarding automation. A significant part of the respondents (40.6%) recognize the importance of process automation. This may indicate the presence of already automated processes in the company that satisfy the majority of employees. However, there is also a proportion (15.9%) of employees who consider the possibility of process automation extremely important. The importance of process automation highlights the need to improve and streamline workflows for more effective knowledge management. Automation can help reduce errors, increase productivity, and improve the quality of work.



Figure 17 – «How important are the functions of artificial intelligence and machine learning for knowledge management in your company?»

The majority of respondents (59.4%) are categorized as "Not Important" or "Not Very Important" for AI and Machine Learning features for knowledge management. This may indicate that in the current situation these functions are not considered high priority or employees do not yet realize their importance. A certain proportion of respondents (29.0%) recognize the importance of artificial intelligence and machine learning functions for knowledge management. This indicates an awareness of the potential of these technologies in optimizing and improving knowledge management in the company. However, only a small part of the respondents (11.6%) consider the functions of artificial intelligence and machine learning to be extremely important for knowledge management. This may indicate the need for greater familiarization and training of employees in the application of these technologies to improve knowledge management processes. The importance of artificial intelligence and machine learning functions may increase as these technologies develop and their benefits are realized. The company may consider adopting and using these technologies for better knowledge management in the future.



Figure 18 – «All employees are involved in the process of sharing and updating knowledge»

Analysis of the survey results allows us to draw the following conclusions:

• Low Confidence: The majority of respondents (49.3%) are classified as "Maybe" regarding the involvement of all employees in the process of sharing and updating knowledge. This indicates that there is some uncertainty or disagreement about the extent to which all employees actively participate in the process of sharing and updating knowledge.

• Limited involvement: A certain proportion of respondents (33.3%) believe that all employees are really involved in the process of sharing and updating knowledge. This may indicate the existence of well-organized systems and practices that encourage the active participation of all workers in the knowledge sharing process.

• Low involvement: However, a certain proportion of respondents (17.4%) say that not all employees are involved in the process of sharing and updating knowledge. This may indicate that there are barriers or shortcomings in current knowledge management systems and practices that may limit the active participation of some workers.

• Potential for Improvement: The company may take note of the survey results and consider ways to improve the involvement of all employees in the process of sharing and updating knowledge. This may include improving communication channels, employee training and development, creating incentives for active participation, and other measures to ensure that all employees feel included in the process.



*Figure 19 – «What statements, in your opinion, best characterize the organizational culture in your organization?»* 

Analysis of the survey results allows us to highlight 4 main points:

1) Open and Equal Culture: The majority of respondents (50.7%) say that their organization has an open and equal culture where employees share knowledge and discuss issues equally. This indicates the creation of a favorable environment for the exchange and interaction between employees, which contributes to effective knowledge management.

2) Recognizing the value of employees: The majority of respondents (60.9%) also believe that managers in their organization value the ideas and points of view of employees, taking them into account. This points to the importance of recognizing and considering the contribution of each employee and creating an environment that encourages diversity of opinion and informed decision making.

3) Continuous learning and development: A significant proportion of respondents (47.8%) say that employees are constantly improving their knowledge. This points to the importance of learning and development as the basis of organizational culture, which contributes to the active growth and development of employees.

4) Openness to mistakes and learning: A significant proportion (49.3%) of those surveyed believe that managers allow employees to make mistakes and see them as opportunities for learning. This indicates the creation of a supportive environment where errors are seen as part of the learning process rather than as a negative aspect, which promotes innovation and organizational growth.



Figure 20 – «The company rewards employees for»

The majority of respondents (52.2%) believe that the company rewards employees for applying the acquired knowledge and creating new knowledge. This indicates the recognition and stimulation of the active use and development of knowledge in the work environment. A significant proportion of respondents (55.1%) also believe that the company rewards employees for sharing knowledge. This indicates the creation of a supportive environment where collaborative learning and peer-to-peer sharing are valued. Some of the respondents (23.2%) say that the company does not provide remuneration for the listed options. This may indicate a lack of explicit incentives associated with the application and creation of knowledge, as well as the exchange of knowledge in the organization.



*Figure 21 – «What level of scalability will your company need for a knowledge management software solution?»* 

The survey results point to diverse needs for the scalability of a knowledge management software solution. The majority of those surveyed expect medium scale, but there is also a proportion of companies that require large scale or another level of scalability. This allows software solution developers to take into account these differences and provide a flexible system that can adapt to the needs of different types of companies.



*Figure 22 – «How important is user experience to your company's knowledge management needs?»* 

The majority of respondents (53.6%) consider user experience important to their company's knowledge management needs. This indicates that they attach great importance to the usability of the knowledge management software solution and want users to have a positive experience with this tool. Companies are recognizing that ease of use and an intuitive interface can help increase the adoption and effective use of a knowledge management solution across an organization. However, there is also a small proportion of respondents (11.6%) who consider user experience extremely important. This may indicate that for these companies, meeting the needs and expectations of users is a priority, and they strive to create the best user experience when using a knowledge management software solution.



*Figure 23 – «How important is real-time collaboration to your company's knowledge management?»* 

The majority of respondents (44.9%) consider real-time collaboration to be important for their company's knowledge management. This indicates that they attach great importance to the possibility of simultaneous work and joint interaction of employees in the exchange and updating of knowledge. Real-time collaboration can lead to more effective communication and collaborative problem solving, which in turn can improve the productivity and quality of work within an organization. Also noticeable is the proportion of respondents (21.7%) who consider the possibility of real-time collaboration to be extremely important. This may indicate that for these companies, the ability to instantly interact and collaborate on knowledge is critical to achieving successful results and ensuring effective knowledge management in the organization.



Figure 24 – «In company»

About 62.3% of respondents believe that their company contains a lot of useful knowledge in documents and databases. This indicates that organizations have a sufficiently large amount of information and knowledge that they consider valuable and useful to perform their work tasks. The presence of such knowledge can be the result of a systematic and targeted collection, organization and storage of information and knowledge of employees, which contributes to the effective knowledge management in the company as a whole. Many of the respondents (56.5%) also believe that their company has effective and working information systems to support operations. This indicates that the organization has the tools and technologies necessary to achieve the goals and objectives to provide access to the necessary information. Such technologies can be: document management systems, databases, information portals and other tools that facilitate the process of sharing and using knowledge within the organization. It is also worth noting that the majority of respondents (52.2%) say that their company has the tools and encourage collaboration and teamwork by providing tools and platforms for sharing information and working together on projects and tasks.

#### 3.2 Conclusion of the results of the survey results

Based on the results of the survey and the data presented on the desk analysis of different knowledge management platforms, it becomes possible for the author to identify the following

# characteristics that are decisive when choosing a knowledge management platform in a <u>company:</u>

1) The degree of complexity of introducing new knowledge. The obtained results of the survey show us that it is a great difficulty and obstacle for companies when the process of introducing new knowledge into the system has some serious barriers (Юниксофт, 1С:Аналитика, etc.). When choosing a knowledge management platform, a company should look for those platforms that provide as easy-to-use tools and functionality as possible to simplify the process of introducing new knowledge (for example, like WordPress, Joomla, etc.). This will encourage employees and all users to replenish the database with new knowledge every time.

2) Analytics functionality. Analytics and reporting are important elements of the knowledge management process and daily work in general. When choosing a platform, a company should pay attention to the advanced analytics and reporting features of the chosen platform, as this will help the company extract valuable insights from a large amount of information in the future, which will be able to greatly facilitate the process of making various decisions (like ELMA and Drupal platforms, etc.)

**3) Integration with other tools and platforms.** With the development of technology and computing devices, the ability to integrate the platform with other tools and devices has become an important factor. This useful feature can enable efficient knowledge sharing between different systems in a company without being tied to a single device or application. It will also help to connect the platform with the tools already used for work. According to the desk analysis, almost all platforms provide the possibility of integration with other tools.

**4)** Search function. This feature will help users quickly find the information they need in the knowledge base using familiar search queries (for example, СБИС Бизнес-процессы and Bitrix). Companies should choose platforms that provide advanced search capabilities: filters, keywords, contextual search, or AI-based search assistant. This will make the process of finding the information you need quick and easy.

**5)** Functionality of process automation. The function of automating knowledge management processes and workflows is an important factor when choosing a platform, despite the fact that it is still sometimes underestimated. Since knowledge is a "living organism", it changes and transforms rapidly, and therefore this function allows companies to optimize their work processes, increase efficiency and improve knowledge management practices in the company. This function is not widely presented in platforms, but some of them have it (for example Almaz BI, PolyAnalyst, 1C:Аналитика, ect.).

6) Collaboration functionality. For some companies, this can be a very important feature when choosing a knowledge management platform, especially if the company has hybrid or remote teams. Real-time collaboration platforms enable employees to effectively collaborate and share knowledge without losing touch with each other.

#### 3.3 Analysis of the results of the desk research

Before starting the analysis of the knowledge management software market, a list of the main types of knowledge management systems was identified. After that, the author analyzed the types of these systems in terms of their functionality. The results are presented in the table 4.

KM System	Complexity of Introducing New Knowledge	Functionality for Analytics	Function of Integration with Other Tools	Search Functionality	Process Automation Functionality	Artificial Intelligence Functionality
Document Management Systems	High	Basic	Limited	Advanced	Limited	Limited
Content Management Systems	High	Basic	Basic	Advanced	Limited	Limited
Knowledge Portals	Medium	Basic	Advanced	Advanced	Basic	Limited
Expert Systems	High	Advanced	Limited	Limited	Limited	Advanced
Business Intelligence Systems	High	Advanced	Advanced	Advanced	Advanced	Advanced
Learning Management Systems	Medium	Basic	Limited	Advanced	Limited	Limited
Social Networks and Collaboration Tools	Medium	Limited	Limited	Advanced	Limited	Limited
Decision Support Systems	High	Advanced	Limited	Limited	Limited	Advanced

Table 4 - types systems comparison in terms of their functionality

Document management systems and content management systems are similar in their high complexity for introducing new knowledge, basic to limited functionality for analytics, and limited integration with other tools. However, document management systems have more advanced search functionality and limited process automation, while content management systems have more limited search functionality but basic process automation.

Knowledge portals have medium complexity for introducing new knowledge, basic to advanced functionality for analytics, and advanced integration with other tools. They also have advanced search functionality but limited process automation and artificial intelligence.

Expert systems and decision support systems both have high complexity for introducing new knowledge and advanced functionality for analytics and artificial intelligence. However, expert systems have limited integration with other tools and limited search functionality, while decision support systems have limited artificial intelligence and limited process automation.

Business intelligence systems have high complexity for introducing new knowledge and advanced functionality for analytics, integration with other tools, and artificial intelligence. They also have advanced search functionality and advanced process automation.

Learning management systems and social networks/collaboration tools have medium to low complexity for introducing new knowledge, limited to basic functionality for analytics, and limited process automation and artificial intelligence. Learning management systems have advanced search functionality, while social networks have limited search functionality.

After that, an analysis of the knowledge management software market, which is currently available on the Russian market, was carried out. The search for data was complicated by the fact that many companies left the Russian market at the beginning of 2022, or the payment procedure became impossible.

Software	Knowledge Management System Type	Complexity of Introducing New Knowledge	Functionality for Analytics	Function of Integration with Other Tools	Search Functionality	Process Automation Functionality	Artificial Intelligence Functionality
Юниксофт	Document Management Systems	Medium	Limited	Basic	Basic	Basic	Limited
Directum	Document Management Systems	High	Basic	Advanced	Advanced	Limited	Limited
DocVision	Document Management Systems	High	Basic	Advanced	Advanced	Limited	Limited
ELMA	Document Management Systems	High	Advanced	Advanced	Advanced	Advanced	Advanced
NauDoc	Document Management Systems	High	Basic	Advanced	Advanced	Limited	Limited
СЭД «ДЕЛО» 2	Document Management Systems	High	Basic	Advanced	Advanced	Limited	Limited
WordPress	Content Management Systems	Low	Basic	Advanced	Basic	Limited	Limited
Joomla	Content Management Systems	Low	Basic	Advanced	Basic	Limited	Limited
Drupal	Content Management Systems	High	Advanced	Advanced	Advanced	Advanced	Limited
Bitrix	Content Management Systems	High	Basic	Advanced	Advanced	Limited	Limited
Shopify	Content Management Systems	Low	Basic	Advanced	Basic	Limited	Limited
HubSpot CMS	Content Management Systems	Low	Basic	Advanced	Basic	Limited	Limited
Wix	Content Management Systems	Low	Basic	Advanced	Basic	Limited	Limited
Squarespace	Content Management Systems	Low	Basic	Advanced	Basic	Limited	Limited
Magento	Content Management Systems	High	Advanced	Advanced	Advanced	Advanced	Limited
КЭСМИ Wi!Mi	Expert Systems	High	Limited	Limited	Limited	Limited	Advanced

OpenCyc	Expert Systems	High	Limited	Limited	Limited	Limited	Advanced
CLIPS	Expert Systems	High	Limited	Limited	Limited	Limited	Advanced
Almaz BI	Business Intelligence Systems	High	Advanced	Advanced	Advanced	Advanced	Limited
Форсайт	Business Intelligence Systems	High	Advanced	Advanced	Advanced	Advanced	Limited
PolyAnalyst	Business Intelligence Systems	High	Advanced	Advanced	Advanced	Advanced	Limited
1С:Аналитика	Business Intelligence Systems	High	Advanced	Advanced	Advanced	Advanced	Limited
Proceset	Business Intelligence Systems	High	Advanced	Advanced	Advanced	Advanced	Limited
EdApp	Social Networks and Collaboration Tools	Low	Basic	Advanced	Basic	Limited	Limited
Atlassian	Social Networks and Collaboration Tools	Low	Basic	Advanced	Advanced	Limited	Limited
Tada	Social Networks and Collaboration Tools	Low	Basic	Advanced	Basic	Limited	Limited
Dialog	Social Networks and Collaboration Tools	Low	Basic	Advanced	Basic	Limited	Limited
СБИС Бизнес- процессы	Decision Support Systems	High	Advanced	Advanced	Advanced	Advanced	Limited
Триафлай	Decision Support Systems	High	Advanced	Advanced	Advanced	Advanced	Limited
FICO Blaze Advisor	Decision Support Systems	High	Advanced	Advanced	Advanced	Advanced	Limited

Table 5 – KM platform comparison

Юниксофт has a medium level of complexity for introducing new knowledge, limited functionality for analytics, basic integration with other tools, and basic search functionality. It has limited process automation and artificial intelligence functionality.

Directum and DocVision both have a high level of complexity for introducing new knowledge, basic functionality for analytics, and advanced integration with other tools. They have advanced search functionality, but limited process automation and artificial intelligence functionality.

ELMA has a high level of complexity for introducing new knowledge and advanced functionality for analytics, integration with other tools, search functionality, process automation, and artificial intelligence.

NauDoc has a high level of complexity for introducing new knowledge, basic functionality for analytics, and advanced integration with other tools. It has advanced search functionality but limited process automation and artificial intelligence functionality.

СЭД «ДЕЛО» 2 has a high level of complexity for introducing new knowledge, basic functionality for analytics, and advanced integration with other tools. It has advanced search functionality but limited process automation and artificial intelligence functionality.

WordPress, Joomla, Shopify, HubSpot CMS, Wix, and Squarespace all have a low level of complexity for introducing new knowledge, basic functionality for analytics, and advanced integration with other tools. They have basic search functionality and limited process automation and artificial intelligence functionality.

Drupal, Bitrix, and Magento all have a high level of complexity for introducing new knowledge and advanced functionality for analytics, integration with other tools, search functionality, and process automation. They have limited artificial intelligence functionality.

КЭСМИ Wi!Mi, OpenCyc, and CLIPS are all expert systems with high complexity for introducing new knowledge and limited functionality for analytics and integration with other tools. They have limited search functionality and process automation but advanced artificial intelligence functionality.

Almaz BI, Форсайт, PolyAnalyst, 1C:Аналитика, and Proceset all have a high level of complexity for introducing new knowledge and advanced functionality for analytics, integration with other tools, search functionality, and process automation. They have limited artificial intelligence functionality.

EdApp, Atlassian, Tada, and Dialog are all social networks and collaboration tools with low complexity for introducing new knowledge and basic functionality for analytics and integration with other tools. They have basic search functionality and limited process automation and artificial intelligence functionality. СБИС Бизнес-процессы, Триафлай, and FICO Blaze Advisor are all decision support systems with high complexity for introducing new knowledge and advanced functionality for analytics, integration with other tools, search functionality, and process automation. They have limited artificial intelligence functionality.

#### 3.4 Conclusion of the results of the desk analysis

Desk analysis allows the author to draw the following conclusions for each of the characteristics for which the comparison was made.

1) Complexity of Introducing New Knowledge. The majority of systems (19 out of 30), regardless of their type, have a high complexity level for introducing new knowledge. This suggests that implementing knowledge management systems often requires significant effort and resources (time or skills).

2) Functionality for Analytics. The Business Intelligence Systems category offers tools with advanced analytics in only 11 cases. Basically, (15 out of 30) these are programs with rather limited analytics functionality.

3) Function of Integration with Other Tools: The Content Management Systems and Decision Support Systems categories demonstrate a higher level of integration with other tools compared to Document Management Systems and Expert Systems. Organizations seeking seamless integration with existing tools should focus on systems from the former categories. One way or another, almost all the platforms studied offer such an opportunity (26 out of 30)

4) Search Functionality: Most systems offer basic search functionality, with Document Management Systems and Expert Systems leaning towards a limited search capability. Organizations that prioritize robust search functionality may find better options in the Business Intelligence Systems and Content Management Systems categories. However, desks analysis showed that many platforms (17 out of 30) have advanced search functionality.

5) Process Automation Functionality: most of the programs studied have a limited ability to automate processes (18 out of 30), which can lead to difficulties in choosing a platform, especially when automation functionality is a priority.

6) Artificial Intelligence Functionality: analyzed systems across different categories generally have limited artificial intelligence functionality (26 out of 30). However, Expert Systems demonstrate a higher level of AI functionality compared to other categories.

It can be said that business intelligence systems and decision support systems have a high level of complexity for introducing new knowledge and advanced features for analytics, integration with other tools, search functions and process automation. Social media and collaboration tools have a lower level of complexity and provide basic functionality for analytics and integration with other tools, with limited search and process automation features. Content management systems provide advanced features for content management and integration with other limited search and process automation tools.

From the table 5 comparing different knowledge management systems, we can see that there are many software companies offering solutions in different categories of knowledge management systems. It is important for organizations to carefully evaluate and compare different software solutions based on their specific needs and requirements. In general, the analysis of the table 5 shows that companies should take into account their individual requirements and needs when choosing a knowledge management system, which is achieved only by internal analysis of business processes. Based on the analysis of the table 5, it becomes clear that different types of knowledge management systems differ significantly in their characteristics and functions, which can lead to further difficulties in the final choice.

The main conclusion that can be drawn from the comparison of various knowledge management platforms is that there is no universal and ideal solution. Even organizations that are the same in nature and structure will have different requirements and priorities in terms of their knowledge management needs, and therefore it is necessary to evaluate and select the platform that best suits unique and individual needs. Another very important factor in choosing a knowledge management platform is the level of investment needed to implement and maintain the chosen platform. This must be taken into account. Some more advanced systems, such as business intelligence and decision support systems, may require more significant investments not only in terms of money, but also in terms of time, resources and experience, while simpler systems, such as social networks and tools to work together, may require less investment. Companies need to carefully evaluate the cost-benefit ratio of each platform to determine which provides the best return on their investment.

Thus, it can be concluded that the choice of a knowledge management system requires a careful assessment of all work processes, structures and activities and taking into account the specific needs and requirements of the organization, as well as the required level of investment, the presence of various advanced features, such as AI, and the ability to integrate with other systems.

#### Summary of Chapter 2 and 3

In the process of studying the literature and recent research the following research gap was identified: there is a lot of research on how to compose knowledge management system (designed by a company itself) and create an organizational culture, aimed at knowledge, but almost nowhere does it say how to choose a finished product.

In order to cover this research gap, the author propose to conduct a qualitative study.

As part of this work, two methods of qualitative analysis was used: survey and desk analysis.

1) Survey of employees of companies.

The survey is conducted in order to find out what knowledge management software products companies use, why they chose it, bought it or developed it themselves, what are the main tasks and problems. The survey assumes anonymity, the choice of one of several answers. To conduct the survey of companies, various methodologies and materials from scientific studies were examined.

2) Desk analysis - market analysis of knowledge management software available for acquisition by Russian companies.

This stage includes the study of open sources for IT products. Each IT product was analyzed for its functionality.

After a thorough study of academic literature, a survey with 24 questions was designed, the questions of which were divided into 7 main topics according to main elements of knowledge management process (Johnson et al., 2019; Alegre et al., 2013; Donate & Pablo, 2015; Shin et al., 2001; Boateng & Agyemang, 2015; Lee and Wong, 2015): acquisition of knowledge, knowledge storage, knowledge exchange, application of knowledge, knowledge creation, organizational culture, software usage.

Companies of any size were selected as respondents: from small to large. This is due to the fact that the need to purchase knowledge management software can appear in any company. Sometimes in large companies there is a situation when a department can adapt a separate knowledge management program for the internal needs of its work.

As for the industry, there are no restrictions here either, since the author wants to try to collect and analyze in general the main factors that companies can be guided by when choosing a knowledge management program.

The survey consists of 23 questions. As a result of the survey, responses were collected from 69 companies of different industries and different sizes.

Based on the results of the survey and the data presented on the desk analysis of different knowledge management platforms, it becomes possible to identify the following <u>characteristics</u> <u>that are decisive when choosing a knowledge management platform in a company:</u>

1) The degree of complexity of introducing new knowledge.

2) Analytics functionality.

3) Integration with other tools and platforms.

4) Search function.

5) Functionality of process automation.

6) Ability to work together in real time.

After conducting a survey and analyzing the results, based on the identified characteristics, a table 5 was compiled to compare existing knowledge management platforms on the Russian market.

The process of data collection for desk analysis was divided into 2 main steps:

1) Analysis of the main types of KM systems and the allocation of basic functions. These functions were then evaluated based on open source research.

The following factors were chosen according to the survey and literature review conducted:

- Complexity of Introducing New Knowledge
- Functionality for Analytics
- Function of Integration with Other Tools
- Search Functionality
- Process Automation Functionality
- Artificial Intelligence Functionality

A study of the main KM programs was carried out, according to the developed table 5.
All software were evaluated according to the selected factors.

From the table 5 comparing different knowledge management systems, we can see that there are many software companies offering solutions in different categories of knowledge management systems. It is important for organizations to carefully evaluate and compare different software solutions based on their specific needs and requirements. In general, the analysis of the table shows that companies should take into account their individual requirements and needs when choosing a knowledge management system, which is achieved only by internal analysis of business processes. Based on the analysis of the table 5, it becomes clear that different types of knowledge management systems differ significantly in their characteristics and functions, which can lead to further difficulties in the final choice.

The main conclusion that can be drawn from the comparison of various knowledge management platforms is that there is no universal and ideal solution. Even organizations that are the same in nature and structure will have different requirements and priorities in terms of their knowledge management needs, and therefore it is necessary to evaluate and select the platform that best suits unique and individual needs. Thus, the choice of a knowledge management system requires a careful assessment of all work processes, structures and activities and taking into account the specific needs and requirements of the organization, as well as the required level of investment, the presence of various advanced features, such as AI, and the ability to integrate with other systems.

## CHAPTER 4. DISCUSSIONS OF THE RESEARCH RESULTS ON THE ANALYSIS OF INFLUENCING CHOICE FACTORS OF KNOWLEDGE MANAGEMENT PLATFORM

#### 4.1 Key recommendations

Based on the results of a survey and analysis of the knowledge management platform market, the author of this paper offers the following recommendations on the process of choosing and implementing a knowledge management platform in companies:

1) Determine the strategic goals and needs of your company:

• Learn the needs and goals of your company's internal knowledge management. Determine what specific problems need to be solved and what opportunities you would like to use in the future. The platform must fully support the strategic goals of the company.

• Consider the specifics, size, industry, and structure of your organization to select the right platform.

2) Talk to employees to find out their level of computer proficiency, as well as their willingness to use new tools:

• Conduct a general survey among a large number of employees or in-depth interviews with a certain circle of people.

3) Try to at least approximately determine what type of organizational learning your company belongs to:

• Revisit the policies and rules of organizational culture

• Try to also talk to employees to get their opinion.

4) After that, pay attention to the functionality and integration of the proposed platforms in the market:

• Make sure the platform you choose provides the right set of features to meet your company's needs and capabilities.

• Pay attention to the possibility of integrating the platform with other tools and systems that are already used in your company. This will ensure compatibility and efficient communication between different systems.

5) Consider the usability and user experience of employees:

• When choosing a knowledge management platform, pay attention to the convenience of the interface and navigation between different sections. User experience is an important factor that will affect the acceptance and active use of the platform by employees.

• Use survey results that value user experience as an important aspect to prioritize platforms with a user-friendly and intuitive interface.

6) Pay attention to accessibility and knowledge management:

• The platform should provide easy access to existing documents and technical tools, as well as easy search for information within the system.

• It is recommended to choose a platform with efficient information systems and tools for technical support of various operations.

7) Pay attention to the possibility of adapting the platform to existing business processes and expanding it for further work and the emergence of new needs:

• When choosing a knowledge management platform, make sure it can provide the ability to customize different features and adapt to your company's needs.

• Consider expanding the functionality of the platform in the future to meet the growing needs and changes in the company, which can become a competitive advantage in the future.

8) Provide technical support and employee training. This will help them quickly get used to the innovations:

• When implementing a knowledge management platform in your company, provide the necessary support and training for employees. Provide sufficient training and platform assistance resources so that employees can quickly become accustomed to it. Sometimes, these needs require the allocation of a separate team.

• It is recommended to conduct training events, trainings and create a user manual for the effective development and use of the platform.

Despite the author's attempt to systematize and study the process of choosing a platform for knowledge management, it is also important to remember that the process of choosing a platform should be flexible and adaptable to the specific needs of the company and organizational culture.

### 4.2 Theoretical and managerial contribution

	Theoretical contribution	Managerial contribution		
	The identified factors can be the	The study allows companies to be more		
1. Identification of selection factors	deeper analysis and assessment of their impact on the	conscious in choosing a knowledge management platform, as it identifies the		
	management in organizations.	key factors influencing this decision.		

Theoretical and managerial contributions are collected in the table 6.
2. Organizational culture and knowledge management	Companies that actively promote collaboration, knowledge sharing may prefer platforms with collaboration, discussion, and commenting features. This observation can serve as a starting point for further research of the impact of organizational culture on successful knowledge management.	Understanding the relationship between organizational culture and choice of knowledge management platform allows companies to consider this aspect and determine which platform features and capabilities best fit and support their knowledge management culture. This helps to create a more effective and adapted knowledge management culture that contributes to the achievement of the organization's goals.
3. Development of recommendations	Based on the survey results and market analysis, the study offers specific recommendations for companies choosing a knowledge management platform.	The recommendations cover various aspects, including functionality and integration, user experience, analytics capabilities and process automation, and so on. Companies can use these guidelines as a basis for developing their own selection process to suit their unique needs and goals.

Table 6 – Theoretical and managerial contribution

## 4.3 Limitations and future research directions

T · · · · · 1	C ( 1	1	. 1	• .1	. 11 7
Limitations and	future research	directions	are presented	in the	table /.

Limitation	Future research			
Limited sample size and no	Further research may include a wider range of companies across			
reference to industry or company	industries and sizes to reach more specific conclusions,			
size	depending on certain factors.			
Limited research tools. The				
study focused on evaluating and	The research may additionally include other qualitative methods			
analyzing the characteristics of	such as interviews and observations to gain a deeper			
knowledge management	understanding of the platform selection process and its impact			
platforms through a survey and	on the organization and its participants.			
market analysis.				
Not all factors of the company's				
functioning are included. For	Additional research could be aimed at investigating the			
example, the study does not take	relationship between organizational culture and the			
into account the degree of	implementation of a knowledge management platform.			
innovation of the company				
	Future research may also explore emerging knowledge			
The study does not delve into	management technologies and trends such as artificial			
the study of each function	intelligence, machine learning, and data analytics and their			
separately and the degree of its	impact on the functionality and efficiency of using knowledge			
influence on the success of the	management platforms. This can help companies keep up with			
company.	the times, have a competitive edge, and use the latest tools and			
	capabilities to improve knowledge management.			

Table 7 – Limitations and future research

Thus, despite the results of the study, it represents only the initial stage of understanding and evaluating the factors influencing the choice of a knowledge management platform in companies, as well as streamlining the process of choosing a platform. More in-depth and diverse research can be done to increase knowledge and the interaction between platform choice and organizational and business outcomes.

### CONCLUSION

The study is devoted to identifying the characteristics of knowledge management platforms that are decisive when choosing them in companies. In order to achieve this goal, the author began by researching the literature and academic sources. The **main research goal** of this study *was to examine characteristics of a knowledge management platform that are decisive in its choice and, based on this, make a list of recommendation on how to choose KM platform.* This will help companies further simplify the process of selecting knowledge management software, as the selection of key features is the main starting point. Thus, the **research question** of this work is: *based on what factors is the decision to choose a knowledge management platform made in different companies*?

**Theoretical study was devoted to three main areas:** theoretical aspects of knowledge management, organizational culture as part of the knowledge management process and the technical component in the form of software. Thus, the following aspects were investigated:

- The concept of knowledge management and forms of organizational knowledge
- Knowledge Creation Model
- Types of KM software systems and its main features
- Organizational Culture and Learning
- Organizational learning type and description of KM software functionality

Based on the study of theoretical sources, the main elements of the knowledge management process were identified, on the basis of which a survey for companies was compiled:

- Acquisition of knowledge
- Knowledge storage
- Knowledge Exchange
- Application of knowledge
- Knowledge Creation
- Organizational culture
- Software usage

Also, the theoretical study helped to reveal the range of main functions that knowledge management platforms have and which were further used for market analysis and also for the survey:

- 1) Complexity of Introducing New Knowledge
- 2) Functionality for Analytics
- 3) Function of Integration with Other Tools

- 4) Search functionality
- 5) Process Automation Functionality
- 6) Artificial Intelligence Functionality

After that, a survey was compiled, consisting of 23 questions and designed to be completed by various companies. The survey showed the importance of such factors as the degree of complexity of introducing new knowledge, analytics functionality, integration with other tools and platforms, search functionality, functionality of process automation, ability to collaborate in real time.

Based on these factors, a **market analysis was conducted comparing 30 different knowledge management platforms.** Quantitative results of platform analysis are presented in the table 6.

	Complexity		Functionality	Function of	Search	Process	Artificial
	of		for Analytics	Integration	Functionality	Automation	Intelligence
	Introducing			with Other		Functionality	Functionality
	New			Tools			
	Knowledge						
High	19	Advanced	11	26	17	11	4
Medium	1	Limited	4	3	3	18	16
Low	10	Basic	15	1	10	1	0

Table 8 - Quantitative results of platform analysis

It can be said that business intelligence systems and decision support systems have a high level of complexity for introducing new knowledge and advanced features for analytics, integration with other tools, search functions and process automation. Social media and collaboration tools have a lower level of complexity and provide basic functionality for analytics and integration with other tools, with limited search and process automation features. Content management systems provide advanced features for content management and integration with other limited search and process automation tools.

From the tables comparing different knowledge management systems, we can see that there are many software companies offering solutions in different categories of knowledge management systems.

After both steps of the analysis were completed, **a list of recommendations was drawn up**, made up of 8 main stages:

1) Determine the strategic goals and needs of your company.

2) Talk to employees to find out their level of computer proficiency, as well as their willingness to use new tools.

3) Try to at least approximately determine what type of organizational learning your company belongs to.

4) After that, pay attention to the functionality and integration of the proposed platforms in the market.

5) Consider the usability and user experience of employees.

6) Pay attention to accessibility and knowledge management.

7) Pay attention to the possibility of adapting the platform to existing business processes and expanding it for further work and the emergence of new needs.

8) Provide technical support and employee training. This will help them quickly get used to the innovations.

## **Theoretical contribution:**

• The identified factors can be the subject of further research for a deeper analysis and assessment of their impact on the effectiveness of knowledge management in organizations.

• Companies that actively promote collaboration, knowledge sharing may prefer platforms with collaboration, discussion, and commenting features.

• Based on the survey results and market analysis, the study offers specific recommendations for companies choosing a knowledge management platform.

## Managerial contribution:

• The study allows companies to be more conscious in choosing a knowledge management platform, as it identifies the key factors influencing this decision.

• Understanding the relationship between organizational culture and choice of knowledge management platform allows companies to consider this aspect and determine which platform features and capabilities best fit and support their knowledge management culture.

• The recommendations cover various aspects, including functionality and integration, user experience, analytics capabilities and process automation.

## Limitationы and future research:

• Limited sample size. Further research may include a wider range of companies across industries and sizes

• Limited research tools. The research may additionally include other qualitative methods

• Not all factors of the company's functioning are included. Additional research could be aimed at investigating the relationship between organizational culture and the implementation of a knowledge management platform.

• The study does not delve into the study of each function separately. Future research may also explore emerging knowledge management technologies and trends such as

artificial intelligence, machine learning, and data analytics and their impact on the functionality and efficiency of using knowledge management platforms.

Thus, it can be concluded that the author has reached the goal of his research.

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## APPENDIX

Appendix 1 «Knowledge management platform Survey»

# 1) Какие связи и средства информации в компании Вы используете для получения необходимых для работы знаний?

- Журналы, бюллетени
- Брифинги только для руководителей
- Брифинги для всех сотрудников
- Интранет

- Срочные совещания и собрания для обсуждения произошедшего сбоя в работе или решения какой либо проблемы с участием высших управляющих

- Видео и телевидение
- Электронная почта
- Внутренний портал обучения
- Тренинги, оплаченные за счет средств компании
- Внутренние тренинги компании
- Внутренняя отчетность
- Коммуникация с коллегами
- Библиотека, база знаний в Интернете
- Система экспертной поддержки (возможность получить от экспертов оперативную помощь при решении производственных задач)

- Wiki (представление знаний в виде статей, совместноредактируемых экспертным сообществом)

- Корпоративные «желтые страницы» (обеспечение доступа сотрудников к информации о профессиональном опыте друг друга)

- Центры компетенций (на базе лучших структурных подразделений)

### 2) В каком формате Вам удобнее всего получать и усваивать знания?

- В виде распечатанных документов
- В виде электронных документов или web-страницы
- В формате видео
- В формате созвонов с использованием специальных программ (Teams,

zoom и т.д.)

- В формате личных разговоров (без использования специальных программ)
- В виде электронных писем

### 3) Сколько времени вы готовы тратить единоразово на получение знаний?

- Не больше 5 минут
- До 15 минут
- До 60 минут
- До 90 минут
- Более 90 минут

### 4) Каким типом контента должна управлять ваша компания?

- Документы
- Видео
- Изображения

- Аудиофайлы
- Презентации
- Электронные таблицы
- Веб-страницы
- Код и сценарии программирования
- Электронные письма и сообщения
- Контракты и юридические документы
- Маркетинговые материалы
- Контент в социальных сетях
- Научные статьи и научные статьи
- Инженерные чертежи и чертежи
- Руководства по продуктам и руководства пользователя
- Документы по кадрам
- Финансовые отчеты и отчеты
- Документы и патенты на интеллектуальную собственность
- иные документы и материалы
- все вышеперечисленное

## 5) Важными электронными инструментами обмена знаниями в компании

#### являются:

- Внутрикорпоративный учебный портал
- Корпоративный портал
- Электронная почта
- Система электронного документооборота
- Корпоративная база знаний
- Нормативная документация

- Персональные странички подразделений с информацией о сотрудниках и функционале

- Дополнительные порталы отдельных департаментов. Эти порталы позволяют быстро находить нужную информацию, приказы, распоряжения, шаблоны под разный вид операций

# 6) Какую роль играют технологии (например, внутренние сайты, видеоконференции) в процессе обмена знаниями в вашей компании?

- Ключевая роль
- Важная роль
- Умеренная роль
- Незначительная роль
- Никакой роли не играет

### 7) Как часто вы делитесь своими знаниями и опытом с коллегами?

- Регулярно (1 раз в неделю или чаще)
- Иногда (1-2 раза в месяц)
- Редко (1-2 раза в квартал)
- Очень редко (1-2 раза в год)
- Никогда

## 8) Какими инструментами обмена неявными знаниями (информация или знания, которые сложно зафиксировать на материальных носителях) вы пользуетесь чаще всего?

- Обмен опытом в рамках семинаров и тренингов

- Совещания по анализу совместного опыта (в рамках проекта или подразделения)

- Конференции и совещания, направленные на выявление и решение общеорганизационных проблем

- Инновационные конкурсы, ярмарки идей внутри компании
  - Профессиональные / технические конференции
- Внутрикорпоративные дни знаний
- Завтраки/обеды знаний (одночасовой обед или чаепитие,

сопровождающиеся короткими

-

- рассказами о «трудных случаях», рассказами о новых идеях и методах работы)

- Кейс-клубы, регулярные встречи для анализа трудных случаев из практики
- Сторителлинг (рассказ историй из личного опыта)

- Дни подразделений (круглые столы, экскурсии и презентации об опыте конкретного подразделения)

## 9) Как часто вы применяете знания и навыки, полученные на обучающих курсах или в других сессиях обучения, в своей работе?

- Регулярно (каждый день)
- Часто (несколько раз в неделю)
- Иногда (несколько раз в месяц)
- Редко (несколько раз в квартал)
- Никогда

# 10) Какова основная цель использования программного обеспечения для управления знаниями?

- Для расширения сотрудничества между командами
- улучшить обслуживание клиентов
- Для оптимизации процессов и повышения эффективности
- для обеспечения соблюдения отраслевых норм

- уменьшить информационную перегрузку и улучшить обнаружение информации

- собрать и сохранить организационные знания и опыт
- Усовершенствовать программы обучения и адаптации.
- Для обеспечения удаленной работы и совместной работы

- Содействовать принятию решений, предоставляя актуальную и своевременную информацию

- Улучшить управление проектами и координацию
- Поддерживать инновации и создание знаний
- Улучшить руководство и управление данными

- Обеспечить обмен знаниями между различными отделами и местоположениями.

- Улучшить качество и последовательность поддержки клиентов и услуг

- Разработка новых продуктов и услуг совместно с внешними заинтересованными лицами

- Сбор знаний, касающихся бизнеса, например, относительно конкурентов, потребителей и внешней среды в целом

- Анализ знаний с целью принятия более эффективных решений
- Коммуникация со внешними заинтересованными лицами
- Коммуникация внутри организации
- Эффективный поиск и выявления информации

11) Как вы считаете, смогли бы вы уделять немного времени для пополнения базы знаний?

- Да
- Нет
- Возможно

## 12) Насколько важны аналитика и отчетность для управления знаниями вашей компании?

- Не важно
- Не очень важно
- Важно
- Чрезвычайно важно

13) Насколько важна интеграция с другими инструментами и платформами для управления знаниями вашей компании?

- Не важно
- Не очень важно
- Важно
- Чрезвычайно важно

## 14) Насколько важна функциональность поиска для управления знаниями вашей компании?

- Не важно
- Не очень важно
- Важно
- Чрезвычайно важно

## 15) Насколько важна возможность автоматизации процессов и рабочих процессов для управления знаниями вашей компании?

- Не важно
- Не очень важно
- Важно
- Чрезвычайно важно

# 16) Насколько важны функции искусственного интеллекта и машинного обучения для управления знаниями вашей компании?

- Не важно
- Не очень важно
- Важно
- Чрезвычайно важно

### 17) Все работники вовлечены в процесс обмена и обновления знаний

- Нет
- Возможно
- Да

# 18) Какие утверждения, по Вашему мнению, лучше всего характеризуют организационную культуру в Вашей организации?

- Сотрудники постоянно совершенствуют свои знания
- Сотрудники делятся знаниями в открытой и равноправной манере
- Руководители способствуют равноправным обсуждениям на рабочем месте
- Руководители ценят идеи и точки зрения работников и принимают их во

### внимание

- Руководители позволяют работникам делать ошибки; видят в них возможности для обучения

- Сотрудников поощряют сомневаться в существующих знаниях
- Сотрудников поощряют делиться знаниями на рабочем месте

### 19) Компания вознаграждает сотрудников за:

- Применение полученных знаний
- Создание новых знаний
- Обмен знаниями

# 20) Какой уровень масштабируемости потребуется вашей компании для программного решения по управлению знаниями?

- Мелкие (менее 50 пользователей)
- Среднемасштабный (50-100 пользователей)
- Крупномасштабный (100-500 пользователей)
- масштаб предприятия (более 500 пользователей)

## 21) Насколько важен пользовательский опыт для нужд управления знаниями вашей компании?

- Не важно
- Не очень важно
- Важно
- Чрезвычайно важно

# 22) Насколько важна возможность совместной работы в режиме реального времени для управления знаниями вашей компании?

- Не важно
- Не очень важно
- Важно
- Чрезвычайно важно

### 23) В компании:

- Имеются эффективные и подходящие информационные системы для поддержания операционной деятельности

- Имеются инструменты и средства для поддержания сотрудничества между сотрудниками

Много полезных знаний содержатся в документах и базах данных

- К существующим документам и техническим средствам легко получить доступ