

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

NATIONAL TECHNICAL UNIVERSITY
«KHARKIV POLYTECHNIC INSTITUTE»

Methodological Guidelines for Practical Classes in the discipline
“Modern Research Methods in Management” for students of the third (doctoral)
level of higher education, leading to the Doctor of Philosophy (PhD) degree in
Management, within the Educational and Scientific Programme “Management”,
specialty D3 “Management, field of knowledge”, D “Business, Administration and
Law”, for all modes of study.

Compiler: O. Yu. Linkova

Approved
by the University Editorial and Publishing
Council
Protocol No. 1 dated 19.02.2026

Kharkiv
NTU «KhPI»
2026

Methodological Guidelines for Practical Classes in the discipline “Modern Research Methods in Management” for students of the third (doctoral) level of higher education, leading to the Doctor of Philosophy (PhD) degree in Management, within the Educational and Scientific Programme “Management”, specialty D3 “Management, field of knowledge”, D “Business, Administration and Law”, for all modes of study./ Compiled by O.Yu. Linkova. Kharkiv: NTU «KhPI», 2026. 78 p.

Compiled by: O.Yu. Linkova

Reviewer: O.S. Makovoz

Department of Management

INTRODUCTION

Management plays a key role in the effective operation of any business organization. Growing competition and economic instability create conditions in which the organization must constantly analyze its condition and assess the prospects of its activities. In this regard, the training of economic specialists with the skills of information search and critical thinking when choosing directions for solving applied problems of business organization plays an important role. Methodological guidelines for practical work on the academic discipline "Modern Research Methods in Management" are developed to assist in the study and organization of independent work of a PhD student.

The presented material orients students to the study of primary sources and literature, which contains examples of practical application of the achievements of management science in the activities of domestic companies and companies operating in countries with a market economy.

The methodological guidelines provide the structure of the academic discipline and topics for in-depth study.

The purpose of teaching the discipline Modern Research Methods in Management: to familiarize PhD students with a multidimensional approach to conducting scientific research in the field of management. To provide students with knowledge about solving current management problems. The task of teaching the discipline: theoretical and practical training of PhD students on the issues of: organizational theories, management research methods, organizational process, analysis of the internal and external environment of organizations, the evolution of organizations, organizational effectiveness of research in management.

COURSE STRUCTURE

Table 1. Structure of the course

«Modern Research Methods in Management»

Topic	Lectures (hrs)	Practice/Seminars (hrs)	Independent Work (hrs)
Topic 1. Research of management systems	4	4	16
Topic 2. Methodology of scientific research in management	4	4	16
Topic 3. Planning and organization of research in management	4	4	16
Topic 4. Organization as a society. Formal–logical research methods	4	4	16
Topic 5. Evolution of management. Special research methods in management	4	4	16
Total: 4 credits (120 hours)	20	20	80

Practical lesson 1.

Topic 1. Research on control systems

The main goal is to gain an understanding of the theoretical foundations and practical methods of studying management systems in organizations; to acquire skills in analyzing, evaluating and optimizing management systems to increase the efficiency of the organization's activities.

Knowledge:

the concept of a management system, its elements, types, functions, principles of construction and development;

approaches, methods, models, tools used to study management systems;

reengineering, Lean, six sigma;

specifics of managing different types of businesses, the influence of the external environment, strategic management.

Understanding:

the essence and importance of studying management systems for the effective functioning of the organization;

the relationship between the structure, functions and management processes in the organization;

the principles of a systems approach to analyzing and solving management problems;

the importance of a comprehensive approach to studying management systems (taking into account both formal and informal aspects of the organization's activities);

the need to adapt management systems to changes in the external environment and the organization's strategic goals.

Skills:

identification of problems, "bottlenecks" and opportunities for improvement;

design of new processes, structures and management mechanisms;
use of appropriate tools and technologies for analysis and modeling of management systems;
development of a system of indicators and assessment methods, analysis of results and formation of conclusions;
identification of problem situations, analysis of the causes of their occurrence and development of solution options.

Expected results:

ability to independently conduct research on management systems based on the acquired knowledge and skills;

ability to develop and justify recommendations for improving management systems;

mastery of modern methods and tools for research and optimization of management systems;

understanding of the principles of ethical behavior in research activities;

increasing professional competence in the field of management.

Task 1. Analysis of the organizational structure of management

Description of the situation: Company "A" is engaged in the production and sale of furniture. The organizational structure of the company is quite complex and includes several departments (production, marketing, finance, human resources, etc.).

Task:

Depict the organizational structure of company "A" in the form of a diagram.

Determine the type of organizational structure (linear, functional, matrix).

Analyze the advantages and disadvantages of the existing organizational structure.

Suggest ways to improve the organizational structure to increase management efficiency.

Task 2. Analysis of functions and powers

Situation description: Company "B" has a problem of duplication of functions between different departments, which leads to inefficient use of resources and conflicts.

Task:

Identify the functions and tasks of each department of Company "B".

Assess the effectiveness of the distribution of functions and powers between departments.

Identify duplication of functions and conflicts of interest.

Suggest ways to optimize the distribution of functions and powers to eliminate problems.

Task 3. Description and analysis of management processes

Situation description: Company "A" has problems with project management, which leads to delays in work and budget overruns.

Task:

Describe the project management process in Company "A" in the form of a flowchart or diagram.

Analyze the effectiveness of the existing project management process.

Identify "bottlenecks" and problems in the project management process.

Suggest ways to optimize the project management process to increase its efficiency.

Task 4. Application of methods for optimizing management processes

Situation description: Company "D" wants to increase the efficiency of the production process by applying optimization methods.

Task:

Get acquainted with methods for optimizing management processes (reengineering, Lean, Six Sigma).

Choose one of the optimization methods that, in your opinion, is productive for this situation.

Develop a plan for implementing the selected optimization method in the production process of company "D".

Assess the expected effect of implementing the optimization method.

Task 5. Assessment of the effectiveness of the management system

Situation description: The management of company "O" wants to assess the effectiveness of the existing management system and determine areas for its improvement.

Task:

Determine the criteria for assessing the effectiveness of the management system (economic, social, organizational).

Develop a system of indicators for assessing the effectiveness of the management system.

To assess the effectiveness of the existing management system based on the developed indicators.

To suggest ways to improve the effectiveness of the management system of company "O".

Questions for independent study:

What are the main types of management systems in organizations?

What factors influence the choice of a management system?

What are the features of building management systems in different types of organizations?

What are the main stages of the process of studying management systems?

What methods are used at each stage of the study?

How to ensure the quality and reliability of the research results?

What are the main elements that make up the management system?

How do the elements of the management system interact with each other?

How to assess the effectiveness of each element of the management system?

What can be the object of research in management?

How to correctly determine the object of research?

What are the features of the study of various management objects?

What features of the management system are inherent in business?

What factors affect the effectiveness of the business management system?

What are the current trends in the development of business management systems?

What methods are used to analyze the structure of the management system?

What are the criteria for assessing the effectiveness of the management structure?

How to identify problems and shortcomings in the structure of the management system?

How to determine the functions and tasks of each element of the management system?

How to assess the effectiveness of the distribution of functions and powers?

How to identify duplication of functions and conflicts of interest?

What methods are used to describe and analyze management processes?

What are the criteria for assessing the effectiveness of management processes?

How to identify "bottlenecks" and problems in management processes?

What are the methods for optimizing management processes (reengineering, Lean, Six Sigma)?

What are the features of applying each of the methods?

How to assess the effectiveness of optimizing management processes?

Topic 1. Research on control systems

The main goal is to gain an understanding of the theoretical foundations and practical methods of researching information support for management and the role of the human factor in the effectiveness of management systems; to acquire skills in analyzing, evaluating and improving information support and human factor management to increase the effectiveness of the organization's activities.

Knowledge of:

information quality criteria, principles of building information management systems;

classification of sources, methods of collecting and processing information;

statistical methods, expert assessment, verification methods;

communication models, information technologies, decision support systems;

basic concepts and models of motivation, competencies, behavior;

surveys, interviews, observations, experiments;

training, development, motivation, stimulation, conflict management;

certification, 360-degree assessment, assessment centers, coaching, mentoring.

Understanding:

the importance of information support for making informed management decisions;

the role of the human factor in the effectiveness of management systems, its impact on the results of the organization's activities;

the relationship between information support and the human factor in management systems;

the need for a comprehensive approach to the study of information support and the human factor, taking into account both formal and informal aspects of the organization's activities;

the importance of adapting information support and human factor management to changes in the external environment and the strategic goals of the organization.

Skills:

identification of problems, "bottlenecks" and opportunities for improvement;
design of new information systems, processes and procedures;
use of appropriate tools and technologies for information analysis;
development of communication models, use of information technologies;
conducting surveys, interviews, observations;
training, development, motivation, stimulation;
conducting certification, using modern methods of assessment and development.

Expected results:

the ability to independently conduct research on information support management and the role of the human factor based on the knowledge and skills gained;

ability to develop and justify recommendations for improving information support and human factor management;

mastery of modern methods and tools for research and influence on information support and the human factor;

understanding of the principles of ethical behavior in research activities and personnel management;

increasing professional competence in the field of management;

Task 1. Analysis of management information support

Situation description: Company "G" is engaged in software development. The company's management believes that management information support is insufficient and needs improvement.

Task:

Determine the requirements for management information support in company "G" (what types of information are needed, with what frequency, in what format).

Identify existing sources of information used in the management system of company "G".

Assess the quality and reliability of information coming from different sources.

Suggest ways to improve management information support, including the use of modern information technologies.

Task 2. Organization of effective information exchange

Situation description: Company "B" has a problem of ineffective information exchange between different departments, which leads to delayed decision-making and errors.

Task:

Describe the existing information exchange system in company "B".

Identify problems and "bottlenecks" in the information exchange system.

Suggest ways to organize effective information exchange, including the use of modern communication technologies.

Task 3. Research on personnel motivation

Situation description: Company "A" has low staff motivation, which negatively affects productivity and quality of work.

Task:

Conduct a study on the motivation of company "A" staff using a survey or interview.

Identify the main factors affecting staff motivation.

Suggest ways to increase staff motivation to achieve company goals.

Task 4. Assessment of staff competencies

Situation description: Company "D" plans to implement a new information system and wants to assess the readiness of staff to work with it.

Task:

Determine the list of competencies necessary for successful work with the new information system.

Conduct an assessment of the competencies of the personnel of company "D" using various methods (testing, interviews, 360-degree assessment).

Develop a training and development program for personnel to increase their competencies in the use of information technologies.

Task 5. Impact on personnel behavior

Situation description: Company "O" has a problem of low executive discipline among personnel.

Task:

Conduct an analysis of the causes of low executive discipline.

Develop a system of measures to influence personnel behavior in order to increase executive discipline.

Assess the effectiveness of the proposed measures.

Questions for independent study:

What are the main requirements for information in management systems?

What information quality criteria are the most important?

How to ensure the timeliness, reliability and relevance of information?

What types of information sources exist in management systems?

What methods are used to collect and process information?

How to organize an effective information collection and processing system?

What methods are used to assess the quality and reliability of information?

How to check the reliability of the information received?

How to minimize the impact of errors and distortions on the analysis results?

What communication models are used in management systems?

What information technologies contribute to effective information exchange?

How to create an effective information exchange system in an organization?

What motivation theories are most relevant for modern organizations?

What methods are used to study staff motivation?

How to develop an effective staff motivation system?

What types of competencies are most important for the success of an organization?

What methods are used to assess staff competencies?

How to develop a staff competency development program?

What factors influence staff behavior in an organization?

What methods are used to study staff behavior?

How to influence staff behavior to achieve organizational goals?

What methods are used to evaluate personnel?

What personnel development programs are the most effective?

How to create a system of continuous personnel development in an organization?

Practical lesson 2.

Topic 1. Research on control systems

The main goal is to gain an understanding of the theoretical foundations and practical methods for assessing the effectiveness of management systems, automation of management systems and modern trends in the study of management systems; to acquire skills in analyzing, evaluating and improving management systems, as well as the application of modern information technologies in management.

Knowledge of:

criteria for assessing the effectiveness of management systems: economic, organizational, social criteria, their features and measurement methods;

integral indicators of management system effectiveness: calculation methods, interpretation and use in management;

methods for assessing the economic efficiency of implementing new management systems: comparative analysis, investment assessment, sensitivity analysis;

possibilities of information technologies for improving management systems: process automation, decision support, knowledge management;

methods for automating management systems: modeling, programming, systems integration;

risks of implementing digital technologies in management: technical, organizational, social risks, methods for identifying and managing them;

modern trends in the study of management systems: development of management theory and practice, new research methods, development prospects in the context of digital transformation.

Understanding:

the importance of assessing the effectiveness of management systems for making informed management decisions and ensuring sustainable development of the organization;

the role of automation in increasing the effectiveness of management systems and achieving the strategic goals of the organization;

the importance of modern trends in the study of management systems for adapting to changes in the external environment and the requirements of the digital age;

the need for a comprehensive approach to the study and improvement of management systems, taking into account both formal and informal aspects of the organization's activities;

the importance of taking into account risks when implementing digital technologies in management and the need for their effective management.

Skills:

identification of problems, "bottlenecks" and opportunities for improvement;

design of new processes, structures and management mechanisms;

use of appropriate tools and technologies for analysis and modeling;

use of information technologies to automate processes and support decision-making;

development of a system of indicators and assessment methods, analysis of results and formation of conclusions;

use of methods of identification, analysis and risk management when implementing digital technologies.

Expected results:

ability to independently assess the effectiveness of management systems, analyze automation capabilities and take into account modern development trends based on the knowledge and skills acquired;

ability to develop and justify recommendations for improving management systems, taking into account economic, organizational and social aspects;

mastery of modern methods and tools for assessing the effectiveness, automation and research of management systems;

understanding the principles of ethical behavior in research activities and technology management;

increasing professional competence in the field of management.

Task 1. Assessing the effectiveness of the management system

Situation description: Company "G" is engaged in the production and sale of clothing. The company's management wants to assess the effectiveness of the existing management system and identify areas for its improvement.

Task:

Determine the criteria for assessing the effectiveness of the management system of company "G" (economic, organizational, social).

Calculate the integral indicators of the effectiveness of the management system using various methods of weighing criteria.

Analyze the impact of the management system on the company's performance (sales volume, profit, market share, customer satisfaction, etc.).

Suggest ways to improve the effectiveness of the management system based on the results of the analysis.

Task 2. Assessing the economic efficiency of implementing a new management system

Situation description: Company "B" plans to implement a new CRM system for customer relationship management.

Task:

Assess the economic efficiency of implementing a CRM system using various methods (comparative analysis, investment assessment, sensitivity analysis).

Determine the payback period for investments in the CRM system.

Assess the risks associated with implementing a CRM system.

Suggest ways to minimize risks and increase the efficiency of implementing a CRM system.

Task 3. Automation of the management system

Situation description: Company "A" wants to automate the process of managing warehouse inventories to reduce costs and increase efficiency.

Task:

Get acquainted with the capabilities of modern information technologies for automating warehouse inventory management.

Choose the optimal information system for automating warehouse inventory management of company "A".

Develop a plan for implementing the selected information system.

Assess the expected effect of automating warehouse management.

Task 4. Analysis of risks of implementing digital technologies in management

Situation description: Company "D" plans a large-scale digital transformation of the management system, including the implementation of cloud technologies, artificial intelligence and machine learning.

Task:

Identify potential risks associated with the implementation of digital technologies in the management of company "D" (technical, organizational, social).

Assess the probability of each risk occurring and possible consequences for the company.

Develop a risk management plan, including measures to prevent them and minimize negative consequences.

Task 5. Analysis of current trends in the study of management systems

Situation description: Company "O" wants to be aware of current trends in the study of management systems and use them to increase its competitiveness.

Task:

To get acquainted with current trends in the development of management theory and practice, the latest research methods in the field of management and the prospects for the development of research on management systems in the context of digital transformation.

To analyze how these trends can be applied in the activities of Company "O" to improve the management system.

To develop recommendations for the use of current trends in the study of management systems to increase the efficiency of Company "O".

Questions for independent study:

What economic criteria are used to assess the effectiveness of management systems?

What organizational criteria are important for assessing effectiveness?

What social criteria should be taken into account when assessing the effectiveness of management systems?

How to calculate the integral indicator of the effectiveness of the management system?

What methods are used to weigh individual criteria?

How to interpret the value of the integral performance indicator?

What methods are used for comparative analysis of implementation options?

How to assess investments in new management systems?

How to conduct sensitivity analysis and assess risks?

What information technologies can be used to automate management processes?

How do information technologies contribute to decision-making support?

What opportunities do information technologies open up for knowledge management?

What methods are used to model management systems?

What programming tools are used for automation?

How to ensure the integration of various information systems?

What technical risks are associated with the implementation of digital technologies?

What organizational risks may arise during digital transformation?

What social risks should be considered when implementing digital technologies?

What new research methods are emerging in the field of management?

What modern management theories are the most relevant?

What are the prospects for the development of research on management systems in the context of digital transformation?

Practical lesson 3.

Topic 2. Methodology of scientific research in management

The main goal is to master the methodology of scientific research in management, in particular the dialectical approach, the logical scheme of research, the principles of problem formulation, the definition of the object and subject of research; to acquire skills in applying methodological principles to analyze current management problems and develop ways to solve them.

Knowledge:

dialectical approach to research: essence, principles, categories of dialectics (unity and struggle of opposites, the transition of quantity into quality, the negation of negation);

logical scheme of research: stages of scientific research, their interrelation and sequence;

topical problems of research in management: modern challenges and trends in the development of management, problem situations that require scientific solutions;

research problems: principles and criteria for formulating the problem, requirements for its relevance and significance;

object and subject of research: the relationship between the object and subject of research, their specification and focus.

Understanding:

the essence and significance of the methodology of scientific research for obtaining reliable and substantiated results;

the role of the dialectical approach in the study of socio-economic systems, its capabilities for identifying contradictions and development dynamics;

the importance of correctly formulating the research problem for the success of the entire study;

the need to clearly define the object and subject of research to focus the study and obtain specific results.

Skills:

applying the dialectical approach to analyzing management problems and identifying their essence;

building a logical research scheme and using it to plan and organize scientific work;

formulating a relevant and significant research problem based on an analysis of literature and management practice;

determining the object and subject of research in accordance with the formulated problem;

critically evaluating existing theories and concepts in management.

Expected results:

the ability to independently apply methodological principles for conducting scientific research in management;

ability to formulate relevant and significant research problems and determine the object and subject of research;

possession of methodological tools for conducting scientific research in management;

understanding the principles of ethical behavior in scientific research;

increasing professional competence in the field of scientific activity.

Task 1. Dialectical analysis of the problem

Situation description: Company "G" faced a decrease in staff productivity. The company's management cannot clearly determine the cause of this problem.

Task:

Apply a dialectical approach to analyzing the problem of decreasing labor productivity.

Identify the contradictions underlying the problem (for example, between the needs of employees and the capabilities of the company, between the requirements for product quality and the level of personnel qualification).

Suggest ways to resolve the identified contradictions to increase labor productivity.

Task 2. Building a logical research scheme

Situation description: Company "B" plans to conduct market research to launch a new product on the market.

Task:

Develop a logical research scheme, including all stages - from setting a goal to implementing the results.

Determine the tasks of each stage of the study and methods for solving them.

Justify the choice of research methods for each stage.

Task 3. Formulation of the research problem

Situation description: Company "A" has problems with product quality management.

Task:

Formulate a relevant and significant research problem related to product quality management in company "A".

To substantiate the relevance and significance of the selected problem using statistical data and literature analysis.

To determine the criteria for assessing the effectiveness of solving the problem.

Task 4. Determining the object and subject of the study

Situation description: Company "D" is conducting a study of the influence of organizational culture on personnel motivation.

Task:

To determine the object and subject of the study in the context of the given topic.

To justify the choice of the object and subject of the study.

To formulate the goal and objectives of the study based on the determined object and subject.

Questions for independent study:

What are the basic principles of dialectics?

How to apply the dialectical approach to the analysis of socio-economic systems?

What are the advantages and limitations of the dialectical approach in research?

What are the main stages of scientific research?

What is the logical sequence of the stages of the study?

How to develop a research plan?

What are the current challenges facing management?

What problems require scientific solutions?

How to determine the relevance and significance of a research problem?

What are the requirements for formulating a research problem?

What are the criteria for choosing a research problem?

How to correctly formulate a research problem?

What is the relationship between the object and the subject of research?

How to specify the object and the subject of research?

What are the features of defining the object and the subject of research in management?

Topic 2. Methodology of scientific research in management

The main goal is to master the methods of identifying and analyzing management problems, learn to formulate a scientific hypothesis and determine the research tasks arising from it; acquire skills in applying methodological principles to solve specific management problems.

Knowledge:

methods of identifying management problems: literature analysis, surveys, observations, expert assessments, SWOT analysis;

methods of analyzing management problems: cause-and-effect analysis, system analysis, factor analysis, modeling;

scientific hypotheses: essence, structure, types of hypotheses;

requirements for a scientific hypothesis: verifiability, falsifiability, non-contradictoryness, simplicity;

research tasks: the connection of tasks with the hypothesis, specificity and achievement of tasks.

Understanding:

the importance of correctly identifying and analyzing management problems for successful solution;

the role of a scientific hypothesis in research, its importance for directing research and obtaining new knowledge;

the need to clearly formulate the requirements for a scientific hypothesis to ensure its validity and scientific validity;

the connection between the hypothesis and research tasks, their interdependence and subordination.

Skills:

application of methods for identifying and analyzing management problems to identify and study specific problems in the organization;

formulation of a scientific hypothesis based on the analysis of the problem and existing theoretical positions;

definition of research tasks that correspond to the formulated hypothesis and ensure its verification;

critical evaluation of existing hypotheses and concepts in management.

Expected results:

the ability to independently identify and analyze management problems, formulate scientific hypotheses and determine research tasks;

the ability to apply methodological principles to solve specific management problems;

possession of tools for formulating hypotheses and defining research objectives;

understanding the principles of ethical behavior in scientific research;

increasing professional competence in the field of scientific activity.

Task 1. Identification and analysis of management problems

Situation description: Company "G", which is engaged in the production and sale of sports equipment, has encountered a decrease in sales over the past two quarters. The company's management cannot clearly determine the cause of this problem.

Task:

Apply various methods for identifying management problems (for example, statistical data analysis, personnel surveys, SWOT analysis) to identify possible reasons for the decrease in sales.

Analyze the identified management problems using various methods (for example, cause-and-effect analysis, Ishikawa diagram).

Identify the most significant problems that require priority solutions.

Task 2. Formulation of a scientific hypothesis

Situation description: Based on the analysis of the identified management problems of company "G" (see Task 1), it is necessary to formulate a scientific hypothesis regarding the possible causes of the decrease in sales.

Task:

Formulate a scientific hypothesis that explains the decrease in sales of company "G".

Substantiate the formulated hypothesis using theoretical provisions and analysis results.

Check the compliance of the hypothesis with the requirements (verifiability, falsifiability, consistency, simplicity).

Task 3. Defining research tasks

Situation description: To verify the formulated scientific hypothesis (see Task 2), it is necessary to define specific research tasks.

Task:

Identify the research tasks that need to be solved to verify the hypothesis.

Substantiate the connection between the research tasks and the hypothesis.

Formulate the research tasks specifically and achievable.

Questions for independent study:

What methods exist for identifying management problems?

What methods are used to analyze management problems?

How to choose the optimal method for a specific situation?

What is the role of a scientific hypothesis in research?

What types of scientific hypotheses exist?

How to formulate a scientific hypothesis?

What are the main requirements for a scientific hypothesis?

How to check the hypothesis' compliance with these requirements?

What errors can occur when formulating a hypothesis?

How to determine the research task based on the hypothesis?

What requirements are imposed on the research tasks?

How to formulate the research task specifically and achievable?

Practical lesson 4.

Topic 2. Methodology of scientific research in management

The main goal is to master the methods of data collection and analysis in management, learn to choose the optimal methods for a specific study; acquire skills in applying various methods of data collection and analysis to solve specific management problems.

Knowledge:

of data collection methods in management: survey (questionnaire, interview), observation (field, laboratory, included), experiment (laboratory, field), document analysis (primary, secondary);

of the features of the application of each of the data collection methods: advantages, disadvantages, limitations, scope of application;

of data analysis methods in management: statistical analysis (description, comparison, correlation, regression), content analysis, qualitative analysis (thematic analysis, in-depth interview);

of the optimal methods of data collection and analysis for a specific study: selection criteria, combinations of methods, justification of the choice.

Understanding:

of the importance of the correct choice of data collection and analysis methods to obtain reliable and substantiated research results;

features of the application of each data collection method depending on the specific situation and research objectives;

the relationship between data collection and analysis methods, their interdependence and impact on research results;

the need to take into account ethical aspects when collecting and analyzing data in management.

Skills:

development of data collection tools (questionnaires, interview questions, observation protocol);

conducting surveys, observations, experiments and document analysis;

application of various data analysis methods to interpret the results obtained;

justification of the choice of optimal data collection and analysis methods for a specific study;

critical assessment of the quality of data and analysis results.

Expected results:

the ability to independently choose and apply data collection and analysis methods to solve specific management problems;

the ability to develop data collection tools and conduct research;

mastery of various data analysis methods and their application to interpret results;

understanding of the principles of ethical behavior in data collection and analysis;

increasing professional competence in the field of research activities.

Task 1. Development of tools for data collection

Situation description: Company "G" is conducting a study of customer satisfaction with the quality of service.

Task:

Develop a questionnaire for customer surveys that will include questions on various aspects of service quality (staff courtesy, speed of service, competence, etc.).

Justify the structure of the questionnaire and the wording of the questions.

Conduct a pilot survey to check the quality of the developed questionnaire.

Task 2. Conducting an observation

Situation description: The research group is studying the peculiarities of the work of sales department personnel in company "B".

Task:

Develop an observation protocol that will include a list of parameters to be observed (customer service time, number of contacts with the client, communication style).

Conduct an observation of the work of sales department personnel for a certain period of time.

Record the results of the observation in the protocol.

Task 3. Conducting an experiment

Situation description: Company "A" wants to investigate the impact of different motivation methods on staff productivity.

Task:

Develop an experiment plan that will involve dividing personnel into experimental and control groups.

Apply different motivation methods for the experimental group.

Measure and compare the productivity of personnel in both groups.

Analyze the results of the experiment and draw conclusions about the effectiveness of different motivation methods.

Task 4. Document analysis

Situation description: The research group studies the history of the development of company "D" by analyzing archival documents (reports, orders, meeting minutes).

Task:

Get acquainted with the archival documents of company "D".

Conduct a content analysis of documents to identify key trends and patterns in the company's development.

Systematize and interpret the results of the analysis.

Task 5. Choosing the optimal methods of data collection and analysis

Situation description: Company "O" is conducting market research to launch a new product on the market.

Task:

Determine which data collection methods (survey, observation, experiment, document analysis) are the most optimal for achieving the research goal.

Justify your choice of data collection methods.

Determine which data analysis methods (statistical analysis, content analysis, qualitative analysis) will be used to process and interpret the results obtained.

Questions for independent study:

What are the advantages and disadvantages of the survey method?

In what cases is it advisable to use the observation method?

What are the features of conducting an experiment in management?

What types of documents can be used for analysis?

How to correctly compose a questionnaire for a survey?

How to organize observation of personnel behavior?

What ethical aspects should be considered when conducting an experiment?

How to ensure the reliability and representativeness of data when analyzing documents?

What statistical methods are used for data analysis in management?

How to conduct content analysis of texts?

What are the features of qualitative data analysis?

What criteria should be considered when choosing methods of data collection and analysis?

How to combine different methods to obtain a more complete picture?

How to justify the choice of research methods for a specific problem?

Practical lesson 5.

Topic 3. Planning and organization of research in management

The main goal is to master the methodology of planning and organizing scientific research in management, learn to formulate the goal and objectives of the study, develop a research program and justify the choice of research methods; acquire skills in the practical application of methodological principles for planning and organizing specific research in management.

Knowledge:

essence, requirements for formulation, criteria for choosing a relevant and significant goal;

connection with the goal, requirements for tasks, specificity and reachability; research programs: structure, elements, justification for choosing research methods;

research methods in management: classification, characteristics, advantages and disadvantages of various methods (survey, observation, experiment, document analysis, statistical methods, modeling);

implementation and control of research results: stages of implementation, control methods, effectiveness assessment.

Understanding:

the importance of correctly formulating the research goal for the success of the entire study;

the need to clearly define research tasks to achieve the set goal;

the role of the research program in the organization and management of scientific work;

the importance of a well-founded choice of research methods to obtain reliable and objective results;

the importance of monitoring the implementation of research and assessing their effectiveness to ensure the achievement of the set goals.

Skills:

formulating the research goal in accordance with current management problems and requirements for its formulation;

determining research tasks that meet the set goal and ensure its achievement;

developing a research program that includes all the necessary elements and substantiating the choice of research methods;

applying various research methods to collect and analyze data;

monitoring the implementation of research and assessing their effectiveness.

Expected results:

the ability to independently plan and organize scientific research in management;

the ability to formulate the goal and objectives of the research, develop a research program and justify the choice of research methods;

possession of tools for planning and organizing scientific research in management;

understanding the principles of ethical behavior in scientific research;

increasing professional competence in the field of scientific activity.

Task 1. Formulation of the research goal

Situation description: Company "G" is engaged in the production and sale of sports equipment. The company's management is interested in increasing the efficiency of personnel management.

Task:

Formulate a relevant and significant research goal related to increasing the efficiency of personnel management in company "G".

Substantiate the relevance and significance of the selected goal using statistical data and literature analysis.

Determine the criteria for assessing the achievement of the set goal.

Task 2. Determination of research objectives

Situation description: To achieve the formulated research objective (see Task 1), it is necessary to determine specific tasks.

Task:

Identify the research tasks that need to be solved to achieve the set goal.

Justify the relationship between the research tasks and the goal.

Formulate the research tasks specifically and achievable.

Task 3. Development of a research program

Situation description: Based on the defined research tasks (see Task 2), it is necessary to develop a research program.

Task:

Develop a research program that will include all the necessary elements (goal, task, object, subject, research methods, research stages, implementation deadlines, resource provision).

Justify the choice of research methods for each stage of the research.

Develop a calendar plan-schedule for the research.

Task 4. Justification of the choice of research methods

Situation description: To study the problem of increasing the efficiency of personnel management (see Task 1), it is necessary to choose the optimal research methods.

Task:

To get acquainted with various research methods that can be used to solve a given problem (survey, observation, experiment, document analysis, statistical methods, modeling, etc.).

To justify the choice of specific research methods for each stage of the study, taking into account the specifics of the problem and available resources.

To describe the procedure for applying the selected research methods.

Questions for independent study:

How to correctly formulate the purpose of research in management?

What are the requirements for formulating the purpose of research?

What are the criteria for choosing a relevant and significant research purpose?

What errors can occur when formulating the purpose of research?

How to determine research tasks that correspond to the set goal?

What are the requirements for research tasks?

How to formulate research tasks specifically and achievable?

What are the main elements included in the research program?

What is the optimal structure of the research program?

How to justify the choice of research methods in a research program?

What are the classifications of research methods in management?

What are the advantages and disadvantages of different research methods?

How to choose the optimal research methods for a specific problem?

What stages does the research implementation process include?

What methods are used to control the implementation of research?

How to evaluate the effectiveness of scientific research?

Topic 3. Planning and organization of research in management

The main goal is to master the methodology of planning and organizing scientific research in management, in particular the issues of resource provision, timing, control, collection, processing and analysis of data, as well as the design of research results; to acquire skills in the practical application of methodological principles for planning and organizing specific research in management.

Knowledge of:

resource provision of research: material and technical (equipment, software), financial (research budget), personnel (involvement of experts, researchers);

timing of research: determining the optimal terms of implementation, division into stages, setting the duration of stages, calendar plan-schedule;

monitoring of research implementation: control methods (regular reports, interim assessments), responsibility for implementation, plan adjustments;

data collection: collection methods (surveys, observations, experiments, document analysis), organization of the collection process, ensuring the quality and reliability of data;

data processing and analysis: processing methods (statistical analysis, content analysis, qualitative analysis), use of software tools (SPSS, Excel, NVivo), organization of the processing and analysis process;

preparation of research results: requirements for scientific reports and publications, rules for citing and preparation of a list of references (APA, MLA, Chicago).

Understanding:

the importance of a comprehensive approach to research planning, which takes into account all aspects - from resource provision to preparation of results;

the need to clearly define the terms and stages of the study to ensure timely implementation;

the role of monitoring the implementation of the study to ensure quality and compliance with the plan;

the importance of properly organizing the process of collecting, processing and analyzing data to obtain reliable and objective results;

the importance of complying with the requirements for the preparation of scientific reports and publications to ensure their quality and compliance with standards.

Skills:

budget preparation, preparation of logistical support, formation of a team of researchers;

determining the terms and duration of stages, establishing control points;

preparing reports, conducting interim assessments, adjusting the plan;

developing tools, conducting surveys, observations, experiments, document analysis, using software;

preparing scientific reports and publications, compiling a list of literature;

Expected results:

ability to independently plan and organize scientific research in management at all stages - from resource provision to the registration of results;

ability to develop a research calendar, monitor its implementation and adjust if necessary;

possession of tools for organizing the collection, processing and analysis of data, as well as the registration of research results;

understanding the principles of ethical behavior in scientific research;

increasing professional competence in the field of scientific activity.

Task 1. Planning research resource provision

Situation description: Company "G" plans to conduct market research to enter a new segment.

Task:

Determine the necessary resources for conducting the research (material and technical, financial, personnel).

Prepare a detailed estimate of the research, taking into account all types of costs (researchers' wages, equipment costs, software, transportation costs, etc.).

Develop a plan for attracting the necessary personnel to conduct the study (experts, analysts, interviewers, etc.).

Task 2. Determining the optimal timing and dividing the study into stages

Situation description: Company "B" is conducting a study of the effectiveness of implementing a new personnel motivation system.

Task:

Determine the optimal time for conducting the study, taking into account its complexity and available resources.

Divide the study into separate stages (preparatory, data collection, data processing and analysis, results presentation).

Establish the duration of each stage of the study.

Task 3. Developing a calendar-schedule and control methods

Situation description: The research group is developing a project to study the impact of organizational culture on labor productivity.

Task:

Develop a calendar-schedule for conducting the study, taking into account all stages and their deadlines.

Determine methods for monitoring the implementation of deadlines and stages of the study (regular reports, interim assessments, personal meetings, etc.).

Develop a motivation system for researchers for timely and high-quality work.

Task 4. Organization of the data collection process and ensuring its quality

Situation description: Company "A" conducts a customer survey to assess their level of satisfaction.

Task:

Develop a plan for organizing the data collection process (selection of respondents, mailing questionnaires, collection of completed questionnaires).

Determine methods for ensuring the quality and reliability of data (checking questionnaires for errors, monitoring the representativeness of the sample, etc.).

Develop a system for storing and protecting the received data.

Task 5. Organization of the data processing and analysis process

Situation description: The research group received a large amount of data based on the results of the survey.

Task:

Develop a plan for organizing the data processing and analysis process (data coding, data entry into a computer, statistical analysis, etc.).

Select the necessary software for data analysis (SPSS, Excel, NVivo, etc.).

Analyze the data and interpret the results.

Task 6. Preparation of scientific reports and publications

Situation description: The research group has prepared a report on the results of the study.

Task:

Prepare a scientific report in accordance with the requirements for the preparation of scientific works (report structure, preparation of tables and graphs, citation rules, etc.).

Prepare a list of literature used in the report in accordance with the requirements of the selected citation standard (APA, MLA, Chicago).

Prepare a presentation on the results of the study for presentation at a conference or seminar.

Questions for independent study:

What types of resources should be taken into account when planning a study?

How to draw up a research budget?

How to ensure the material, technical and personnel support of the study?

What factors affect the duration of the study?

How to determine the optimal timing of the study?

How to divide the research into separate stages and establish their duration?

What forms of calendar plans-schedules exist?

How to develop a calendar plan-schedule for research implementation?

How to use a calendar plan-schedule to monitor research implementation?

What methods of monitoring research implementation exist?

How to organize a research implementation control system?

How to respond to deviations from the plan?

What data collection methods are used in management?

How to organize the data collection process?

How to ensure the quality and reliability of data?

What methods are used to check data quality?

How to minimize errors in data collection and processing?

How to ensure representativeness of the sample?

What methods of data processing and analysis are used in management?

How to organize the data processing and analysis process?

What software can be used for data analysis?

Practical lesson 6.

Topic 3. Planning and organization of research in management

The main goal is to master the methodology for preparing a presentation based on the results of scientific research, criteria for assessing the effectiveness of research, methods for assessing significance and economic efficiency, features of scientific research management, modern trends and prospects for the development of research in management; to acquire skills in the practical application of methodological principles for presenting research results, assessing its effectiveness and managing scientific activities.

Knowledge:

Preparation of a presentation: presentation structure, requirements for content and formatting, data visualization methods, rules for public speaking;

Criteria for assessing the effectiveness of scientific research: scientific novelty, practical significance, economic efficiency, social significance;

Methods for assessing the effectiveness of scientific research: expert assessments, statistical methods, economic analysis, social survey;

Management of scientific research: management models (project, program, matrix), organization of the work of the scientific team, methods of motivation and stimulation;

modern trends in the development of scientific research in management: digital transformation, agile methodologies, data-driven management, artificial intelligence;

the latest research methods in management: big data analytics, machine learning, neural networks, cognitive modeling.

Understanding:

the importance of effective presentation of research results for their wide dissemination and use;

the need for a comprehensive assessment of the effectiveness of scientific research, which takes into account various aspects - from scientific novelty to economic efficiency;

the role of scientific research management in ensuring the success of scientific activity and achieving set goals;

the importance of modern trends in the development of scientific research for adapting to the requirements of the digital age and solving complex management problems.

Skills:

structuring material, data visualization, preparation of presentations, public speaking;

application of various assessment methods, analysis of results, formulation of conclusions;

planning, organization, motivation, control, assessment of research effectiveness;

application of modern research methods in management to solve specific problems;

analysis of the prospects for the development of research in management in the context of digital transformation.

Expected results:

ability to independently prepare and present the results of scientific research in management;

ability to assess the effectiveness of scientific research and justify their significance;

possession of tools for managing scientific research and applying modern research methods;

understanding of modern trends and prospects for the development of research in management;

increasing professional competence in the field of scientific activity and management.

Task 1. Preparation of a presentation based on the results of the study

Situation description: The research group has completed a study of the impact of the motivation system on the productivity of personnel in company "G".

Task:

Prepare a presentation based on the results of the study for presentation to the company's management.

The presentation should include:

A brief description of the problem and purpose of the study.

A review of the research methods used.

Main results of the study (including statistical data, graphs, diagrams).

Conclusions and recommendations for improving the motivation system.

Justification of the practical significance of the results obtained.

The presentation must be designed in accordance with the requirements for the design of presentations (clear structure, conciseness, data visualization).

Task 2. Assessment of the effectiveness of scientific research

Situation description: Company "B" conducted a market study to enter a new segment.

Task:

Assess the effectiveness of the study using various criteria (scientific novelty, practical significance, economic efficiency, social significance).

Assess the economic efficiency of the study using appropriate methods (for example, calculation of net discounted income, payback period).

Substantiate the conclusions regarding the effectiveness of the study.

Task 3. Scientific research management

Situation description: The research group is developing a research project on the impact of digital transformation on the business processes of company "A".

Task:

Develop a scientific research management plan, including:

Definition of a research management model (project, program, matrix).

Organization of the work of the scientific team (distribution of responsibilities, setting deadlines).

Development of a system of motivation and stimulation of scientific workers.

Substantiate the chosen research management model.

Task 4. Analysis of current trends in the development of scientific research in management

Situation description: Company "D" wants to be aware of current trends in the development of scientific research in management and use them to increase its competitiveness.

Task:

To get acquainted with current trends in the development of scientific research in management (digital transformation, agile methodologies, data-driven management, artificial intelligence, etc.).

To analyze how these trends can be applied in the activities of company "D" to improve the management system and increase the efficiency of activities.

To develop recommendations for the use of current trends in the research of management systems to increase the efficiency of company "D".

Questions for independent study:

What are the main requirements for the structure and content of the presentation?

What data visualization methods are the most effective?

What rules of public speaking should be taken into account?

What economic criteria are used to assess effectiveness?

What organizational and social criteria are important for assessment?

How to assess the scientific novelty and practical significance of the results?

What statistical methods are used to assess effectiveness?

What expert assessment methods are the most effective?

How to conduct an economic analysis of research effectiveness?

What models of scientific research management exist?

How to organize the work of a scientific team?

What methods of motivating and stimulating scientists are the most effective?

How does digital transformation affect scientific research in management?

What new research methods are emerging in management?

What are the prospects for the development of research in management in the context of digital transformation?

Practical lesson 7.

Topic 4. Organization as a society. Formal and logical research methods

The main goal is to master the methodology of researching an organization as a society, in particular formal-logical and general scientific methods, as well as to acquire in-depth knowledge of the social aspects of the functioning of an organization; to acquire skills in applying various research methods to analyze the social structure, processes and culture of an organization, as well as to assess the impact of social factors on its effectiveness.

Knowledge of:

formal-logical research methods: analysis, synthesis, deduction, induction, classification, construction of definitions, argumentation;

general scientific research methods: observation, survey, experiment, modeling, system analysis;

organization as a society: the concept of a social group, types of social groups, interaction between groups, social processes (communication, conflicts, leadership), organizational culture (concept, functions, types), the influence of social factors on the effectiveness of the organization;

methods for researching the social structure of an organization: sociometric methods, analysis of communication networks, analysis of organizational culture.

Understanding:

the importance of a comprehensive approach to studying an organization that takes into account both formal and social aspects of its functioning;

the role of social factors in ensuring the effectiveness of an organization's activities;

the importance of organizational culture for the success of the organization and its impact on personnel behavior;

the need to apply various research methods to obtain objective and complete information about the organization as a society.

Skills:

application of formal-logical methods for analyzing organizational phenomena and processes;

use of general scientific methods for studying social aspects of the organization;

analysis of the social structure of the organization, identification of social groups and their interaction;

study of social processes in the organization, in particular communications, conflicts and leadership;

analysis of organizational culture and its impact on the effectiveness of the organization;

assessment of the impact of social factors on the results of the organization's activities.

Expected results:

the ability to independently study the organization as a society, using various research methods;

ability to analyze the social structure, processes and culture of an organization, as well as to assess the impact of social factors on its effectiveness;

possession of tools for researching the social aspects of an organization;

understanding the principles of ethical behavior in sociological research;

increasing professional competence in the field of human resources management and organizational behavior.

Task 1. Analysis of social groups in the organization

Situation description: Company "G" is divided into different departments (production, marketing, finance), each of which has its own interests and goals.

Task:

Determine what social groups exist in company "G".

Describe the interaction between these groups (formal and informal).

Analyze how the interests and goals of different groups affect the effectiveness of the organization's activities.

Suggest ways to harmonize the interests of different groups to achieve common goals.

Task 2. Research social processes in the organization

Situation description: Company "B" has a problem of ineffective communication between departments, which leads to delayed decision-making and errors.

Task:

Investigate communication processes in company "B" (what communication channels are used, how information is exchanged).

Identify problems and "bottlenecks" in the communication system.

Suggest ways to improve communication processes to increase management efficiency.

Investigate conflicts that arise in the organization and suggest ways to resolve them.

Analyze the leadership style used in the company and its impact on staff motivation and productivity.

Task 3. Organizational culture analysis

Situation description: Company "A" wants to investigate its organizational culture and its impact on performance.

Task:

Describe the organizational culture of company "A" (what values and behavioral norms are dominant).

Determine the type of organizational culture (for example, clan, adhocracy, market, hierarchical).

Analyze how organizational culture affects staff motivation, satisfaction and productivity.

Suggest ways to form the desired organizational culture that would contribute to achieving the company's strategic goals.

Task 4. Study of the influence of social factors on the efficiency of the organization

Situation description: Company "D" wants to increase the efficiency of its activities, taking into account the influence of social factors.

Task:

Determine which social factors influence the efficiency of the activities of company "D" (for example, staff motivation, organizational culture, climate in the team, level of conflict).

Conduct a study of the influence of these factors on key indicators of the efficiency of the company's activities (labor productivity, product quality, level of customer satisfaction).

Develop recommendations for taking into account social factors to increase the efficiency of the organization's activities.

Task 5. Application of formal-logical research methods

Situation description: The research group is studying the problem of staff turnover in company "O".

Task:

Apply formal-logical research methods (analysis, synthesis, deduction, induction, classification, construction of definitions, argumentation) to analyze the problem of staff turnover.

Identify the causes of staff turnover using various research methods (surveys, interviews, document analysis).

Classify the causes of staff turnover according to various criteria (for example, by the level of impact on the employee, by the type of problem).

Suggest ways to solve the problem of staff turnover based on the analysis.

Questions for independent study:

How to apply analysis and synthesis to study an organization?

What is the role of deduction and induction in scientific research?

How to correctly construct definitions and classifications?

What rules of argumentation should be taken into account?

What are the advantages and disadvantages of the observation method?

How to correctly organize and conduct a survey?

What are the features of using an experiment in sociological research?

How to use modeling and systems analysis to study an organization?

What types of social groups exist in an organization?

How does interaction between social groups occur?

What are the features of communication processes in an organization?

What are the causes of conflicts and how to resolve them?

What leadership styles exist and how do they affect the effectiveness of an organization?

What functions does organizational culture perform?

How is organizational culture formed and how can it be changed?

What social factors affect the effectiveness of an organization?

How to apply sociometric methods to study social structure?

How to analyze communication networks in an organization?

What methods are used to analyze organizational culture?

Topic 4. Organization as a society. Formal and logical research methods

The main goal is to master formal-logical methods of researching organizations and acquire skills in their application for the analysis of organizational processes, structures and social interactions.

Knowledge:

formal-logical research methods: analysis, synthesis, deduction, induction, classification, construction of definitions, argumentation, modeling;

possibilities and limitations of formal-logical methods in the study of social systems;

application of formal-logical methods for the analysis of organizational processes, structures and social interactions;

tools of formal logic for modeling organizational structures and social interactions.

Understanding:

the importance of formal-logical methods for the study of organizations, their possibilities and limitations;

the role of formal logic in the analysis and modeling of organizational systems;

the need to combine formal-logical methods with other research methods to obtain more complete and objective information.

Skills:

application of formal-logical methods (analysis, synthesis, deduction, induction, classification, construction of definitions, argumentation) for researching organizations;

analysis of organizational processes using formal-logical methods;

modeling of organizational structures using formal-logical tools;

research of social interactions in organizations using formal-logical methods.

Expected results:

ability to independently apply formal-logical methods for researching organizations;

ability to analyze organizational processes and model organizational structures using formal-logical methods;

mastery of formal logic tools for researching organizations;

understanding of the possibilities and limitations of formal-logical methods in the study of social systems;

increasing professional competence in the field of management and organizational development.

Task 1. Analysis of the organizational process using formal-logical methods

Situation description: Company "G" has problems with project management. Projects often fail on time, exceed budget and do not achieve the set goals.

Task:

Describe the project management process in company "G" in the form of a sequence of actions and decisions.

Apply formal logical methods (analysis, synthesis, deduction, induction) to analyze this process.

Identify "bottlenecks" and problems in the project management process.

Suggest ways to improve the project management process based on the analysis.

Task 2. Modeling the organizational structure using formal logic tools

Situation description: Company "B" plans to reorganize its organizational structure to improve management efficiency.

Task:

Describe the existing organizational structure of company "B" in the form of a diagram or graph.

Apply formal logic tools (for example, set theory, predicate logic) to model different organizational structure options.

Compare different organizational structure options according to different criteria (efficiency, flexibility, adaptability).

Choose the optimal organizational structure option for company "B".

Task 3. Study of social interactions in an organization using formal-logical methods

Situation description: In company "A" there is a conflict between the marketing department and the sales department.

Task:

Describe the conflict situation between the marketing department and the sales department.

Apply formal-logical methods (for example, game theory, logic of actions) to analyze the conflict situation.

Identify the causes of the conflict and possible ways to resolve it.

Build a model of social interaction between the marketing department and the sales department, which would take into account the interests of both parties.

Task 4. Analysis of communication processes in an organization using formal-logical methods

Situation description: In company "D" there is a problem of ineffective communication between different levels of management.

Task:

Describe the existing communication system in company "D".

Apply formal-logical methods (for example, graph theory, statement logic) to analyze communication processes.

Identify problems and "bottlenecks" in the communication system.

Suggest ways to improve the communication system to increase management efficiency.

Questions for independent study:

What are the possibilities and limitations of formal-logical methods in the study of social systems?

How to apply analysis and synthesis to study organizational processes?

What is the role of deduction and induction in scientific research?

How to correctly construct definitions and classifications?

What rules of argumentation should be taken into account?

How to use formal-logical methods to analyze the social structure of an organization?

How can communication processes in an organization be studied using formal-logical methods?

How to apply formal-logical methods to study conflicts and decision-making in organizations?

How can models be built using formal-logical methods to describe social interactions in organizations?

Practical lesson 8.

Topic 4. Organization as a society. Formal and logical research methods

The main goal is to master the ethical aspects of researching the organization as a society, modern trends and prospects for the development of research on the social aspects of the organization in the context of digital transformation; to acquire skills in applying ethical principles in the study of the social aspects of the organization, as well as the analysis of modern trends and prospects for the development of research in management.

Knowledge of:

ethical principles of researching the organization as a society: respect for the individual, confidentiality, anonymity, voluntary participation, non-harm;

methods of ensuring confidentiality and anonymity of data: data coding, data depersonalization, data access restriction;

the researcher's responsibility to the research participants: informing about the purposes of the study, obtaining consent to participate, ensuring the possibility of refusing to participate;

trends in researching the organization as a society: digital transformation, agile methodologies, data-driven management, artificial intelligence;

new methods in the field of research on organizations as a society: big data analytics, machine learning, neural networks, cognitive modeling.

Understanding:

the importance of adhering to ethical principles when researching the social aspects of an organization;

the need to ensure confidentiality and anonymity of data to protect the rights of research participants;

the responsibility of the researcher for ethical research and compliance with the rights of participants;

the importance of modern trends in the study of organizations as a society for adapting to the requirements of the digital age;

prospects for the development of research on the social aspects of organizations in the context of digital transformation.

Skills:

application of ethical principles in the study of the social aspects of organizations;

ensuring confidentiality and anonymity of data when conducting research;

assessment of ethical aspects of research projects;

analysis of modern trends in the study of organizations as a society;

forecasting the prospects for the development of research on the social aspects of organizations in the context of digital transformation.

Expected results:

ability to independently conduct research on the social aspects of an organization in compliance with ethical principles;

ability to analyze current trends and prospects for the development of research in management;

possession of tools for conducting ethical research on the social aspects of an organization;

understanding of the principles of ethical behavior in scientific research;

increasing professional competence in the field of human resource management and organizational behavior.

Task 1. Analysis of ethical dilemmas in organizational research

Situation description: The research group conducts a survey among employees of company "G" regarding their satisfaction with working conditions. The survey includes questions related to the personal lives of employees.

Task:

Determine what ethical dilemmas may arise in this situation.

Suggest ways to resolve these dilemmas, taking into account the ethical principles of research (respect for the individual, confidentiality, anonymity, voluntary participation, non-harm).

Develop a plan to ensure the confidentiality and anonymity of the data obtained during the survey.

Task 2. Development of a research code of ethics

Situation description: Company "B" plans to conduct a large-scale study of organizational culture.

Task:

Develop a research code of ethics that will regulate all aspects of the study, from data collection to publication of results.

The code should take into account the rights and interests of all study participants (employees, management, researchers).

Describe the procedure for obtaining consent to participate in the study and ensuring voluntary participation.

Task 3. Analysis of modern trends in the study of the organization as a society

Situation description: The research group is studying modern approaches to the study of social systems in management.

Task:

To get acquainted with modern trends in the study of organizations as a society (digital transformation, agile methodologies, data-driven management, artificial intelligence).

To analyze how these trends affect research methods and interpretation of results.

To determine what new research methods are emerging in the field of research on organizations as a society (big data analytics, machine learning, neural networks, cognitive modeling).

Task 4. Forecasting the prospects for the development of research on the social aspects of organizations

Situation description: The research group forecasts the prospects for the development of research on the social aspects of organizations in the context of digital transformation.

Task:

To analyze how digital transformation affects the social aspects of organizations (communication, collaboration, leadership, organizational culture).

To determine what new opportunities and challenges arise in this regard for researchers.

To predict which areas of research will be most relevant in the future.

Questions for independent study:

What ethical principles should be taken into account when researching the social aspects of an organization?

What methods exist for ensuring confidentiality and anonymity of data?

What is the researcher's responsibility to research participants?

What approaches to researching social systems exist in management?

What new methods are emerging in the field of researching organizations as a society?

What are the prospects for the development of research into the social aspects of an organization in the context of digital transformation?

Practical lesson 9.

Topic 5. Evolution of management. Special research methods in management

The main goal is to master special research methods in management and learn how to apply them to analyze and diagnose situations, as well as evaluate research results.

Knowledge of:

special research methods in management: observation, description, experiment, intuitive methods, polemic, modeling, imitation, extrapolation, inductive and deductive methods;

features and advantages of each management research method;

criteria for choosing the optimal research method for a specific situation;

tools for conducting special research in management;

ethical aspects when conducting research in management;

methods for evaluating research results and diagnosing situations.

Understanding:

the importance of using special research methods to obtain objective and complete information about management processes and situations;

the need to take into account the characteristics of each research method when choosing and applying it;

the role of ethical aspects in ensuring the reliability and objectivity of research results;

the importance of evaluating research results for making informed management decisions.

Skills:

application of special research methods (observation, description, experiment, intuitive methods, polemic, modeling, imitation, extrapolation, inductive and deductive methods) for analysis and diagnosis of situations in management;

selection of the optimal research method for a specific situation;

use of tools for conducting special research in management;
evaluation of research results and diagnosis of situations;
compliance with ethical aspects when conducting research in management.

Expected results:

ability to independently apply special research methods for analysis and diagnosis of situations in management;

ability to choose the optimal research method for a specific situation and evaluate research results;

possession of tools for conducting special research in management;

understanding of the principles of ethical behavior in scientific research;

increasing professional competence in the field of management and research activities.

Task 1. Application of special research methods

Situation description: Company "G" needs to investigate the influence of different management styles on staff motivation.

Task:

Choose the optimal research method to solve this problem (for example, an experiment).

Develop a research plan that will include:

Formulation of the goal and objectives of the study.

Determination of the study sample (group of employees who will participate in the study).

Development of research tools (questionnaires, questionnaires, tests).

Conducting the study.

Analysis of the results obtained.

Apply the selected research method to collect data.

Analyze the data obtained and draw conclusions about the influence of different management styles on staff motivation.

Task 2. Evaluation of research results and diagnostics of the situation

Situation description: Company "B" conducted a study of customer satisfaction with the quality of service.

Task:

Evaluate the results of the study using various methods (statistical analysis, comparative analysis, expert assessments).

Conduct a diagnostics of the situation based on the results of the study.

Identify problem areas and possible ways to improve the quality of service.

Task 3. Choosing the optimal research method

Situation description: Company "A" wants to investigate the causes of staff turnover.

Task:

Learn about the different research methods that can be used to solve this problem (surveys, interviews, observations, document analysis).

Choose the optimal research method for this situation, taking into account the specifics of the problem, available resources and time.

Justify your choice.

Task 4. Taking into account ethical aspects when conducting research

Situation description: The research group is conducting a study among employees of company "D".

Task:

Learn about the ethical principles that must be taken into account when conducting research in management (confidentiality, anonymity, voluntary participation, non-harm).

Develop a plan to ensure the confidentiality and anonymity of data obtained from research participants.

Obtain the consent of employees to participate in the study.

Questions for independent study:

Special research methods in management:

What are the features and advantages of each management research method (observation, description, experiment, intuitive methods, polemic, modeling, imitation, extrapolation)?

How to apply inductive and deductive research methods in management?

What types of business games exist in management and how to conduct them?

What criteria should be considered when choosing a research method?

How to choose the optimal research method for a specific situation?

What tools can be used to conduct observation, description, experiment, modeling and other research methods?

What software can be used to process and analyze data obtained as a result of research?

What ethical principles should be considered when conducting research in management?

How to ensure the confidentiality and anonymity of data obtained from research participants?

What is the researcher's responsibility to research participants?

What methods can be used to evaluate research results?

How to diagnose the situation based on the research results?

Topic 5. Evolution of management. Special research methods in management

The main goal is to master the methods of evaluating research results and diagnosing situations in management, learn how to apply them to analyze and interpret data, assess the effectiveness of research and diagnostics, as well as identify problem areas and opportunities for the development of the organization.

Knowledge of:

criteria for evaluating research results in management: scientific novelty, practical significance, economic efficiency, social significance, reliability and objectivity of results;

methods for analyzing and interpreting scientific research data in management: statistical analysis, content analysis, qualitative analysis, comparative analysis, expert assessments;

assessment of the practical significance and effectiveness of research: analysis of the impact of research results on the organization's activities, assessment of the economic efficiency of implementing research results;

presentation of research results in an accessible form: reports, presentations, publications, recommendations;

possible errors when evaluating research results and ways to avoid them: sampling errors, interpretation errors, subjectivity of assessment;

methods of diagnosing situations in management: SWOT analysis, PEST analysis, GAP analysis, expert assessment method, survey, observation, document analysis;

criteria for assessing the effectiveness of situation diagnostics: timeliness, accuracy, completeness, objectivity, practical significance.

Understanding:

the importance of a comprehensive assessment of research results, which takes into account various aspects - from scientific novelty to practical significance;

the need to use various methods of analysis and interpretation of data to obtain objective and complete information;

the role of situation diagnostics in identifying problems and opportunities for the development of the organization;

the importance of timely and high-quality diagnostics for making effective management decisions.

Skills:

application of various assessment methods, analysis of the results obtained, formulation of conclusions;

use of statistical methods, conducting content analysis and qualitative analysis, comparison of results;

analysis of the impact of research results on the activities of the organization, assessment of economic efficiency;

preparation of reports, presentations and publications;

application of various diagnostic methods, identification of problem areas and opportunities for development.

Expected results:

ability to independently evaluate the results of scientific research in management and diagnose situations;

ability to analyze and interpret data, assess the practical significance and effectiveness of research;

possession of tools for evaluating research results and diagnosing situations;

understanding the principles of ethical behavior in scientific research;

increasing professional competence in the field of management and research activities.

Task 1. Evaluation of research results

Situation description: Company "G" conducted a study of customer satisfaction with the quality of service. A significant amount of data was obtained (questionnaires, interviews, statistical data).

Task:

Determine the criteria for evaluating the results of the study (scientific novelty, practical significance, economic efficiency, social significance, reliability and objectivity).

Apply various methods of data analysis and interpretation (statistical analysis, content analysis, qualitative analysis) to process the obtained data.

Assess the practical significance and effectiveness of the study, analyzing the impact of the results on the company's activities.

Present the results of the study in an accessible form (report, presentation) for the company's management.

Identify possible errors when evaluating the results of the study and suggest ways to avoid them.

Task 2. Diagnostics of situations in management

Situation description: Company "B" has problems with decreasing staff productivity.

Task:

Apply various methods of situation diagnostics (SWOT analysis, PEST analysis, GAP analysis, expert assessment method, survey, observation, document analysis) to identify the causes of decreased labor productivity.

Identify problem areas and potential opportunities for personnel development.

Conduct a comprehensive diagnosis of the organization and its divisions to identify factors that affect labor productivity.

Suggest ways to solve problems and increase personnel productivity.

Assess the effectiveness of the conducted situation diagnostics, taking into account the criteria of timeliness, accuracy, completeness, objectivity and practical significance.

Task 3. Case study analysis

Situation description: Company "A" has developed and implemented a new personnel motivation system.

Task:

Assess the effectiveness of the implementation of a new motivation system using various methods of evaluating research results.

Conduct a situation diagnosis after the implementation of a new motivation system to identify its advantages and disadvantages.

Offer recommendations for improving the personnel motivation system.

Questions for independent study:

What criteria are used to evaluate research results in management?

What methods of data analysis and interpretation exist?

How to assess the practical significance and effectiveness of research?

What errors can occur when evaluating research results and how to avoid them?

What methods are used to diagnose situations in management?

How to identify problem areas and potential opportunities for development?

How to conduct a comprehensive diagnosis of the organization and its divisions?

What criteria are used to assess the effectiveness of situation diagnostics?

Practical lesson 10.

Topic 5. Evolution of management. Special research methods in management

The main goal is to clarify the relationship between the evolution of management, research methods and situation diagnostics, as well as to determine the development trends of this relationship.

Knowledge of:

the main stages of the development of management thought, from classical management to modern concepts (scientific management, administrative management, human relations, behavioral sciences, systems approach, situational approach, knowledge management);

research methods in management: observation, description, experiment, intuitive methods, polemics, modeling, imitation, extrapolation, inductive and deductive methods, statistical methods, sociological methods, psychological methods;

diagnostics of situations in management: diagnostic methods (SWOT analysis, PEST analysis, GAP analysis, expert assessment method, survey, observation, document analysis), criteria for assessing the effectiveness of diagnostics.

Understanding:

how the evolution of management influenced the development of research methods: with the development of management thought, new research methods appeared that met the needs of management practice;

how research methods help in diagnosing situations and making management decisions: research methods allow you to obtain objective and complete information about the situation, which is the basis for making informed management decisions;

how the evaluation of research results contributes to the improvement of the management system: the evaluation of research results allows you to identify effective and ineffective management decisions, which is the basis for improving the management system;

trends in combining the evolution of management, research methods, and situation diagnostics: the development of integrated approaches to management that combine different research and diagnostic methods to solve complex management problems.

Skills:

identifying patterns in the development of research methods in accordance with the needs of management practice;

using different research methods to obtain information about the situation and its analysis;

applying different evaluation methods to determine the effectiveness of management decisions;

analysis of current trends in management development and research methods to predict future development directions.

Expected results:

understanding the connection between the evolution of management, research methods and situation diagnostics;

ability to apply research methods to diagnose situations and make management decisions;

ability to evaluate research results and their impact on the management system;

possession of tools for analyzing and forecasting management development trends;

increasing professional competence in the field of management and research activities.

Task 1. Analysis of the influence of the evolution of management on the development of research methods

Situation description: Let us consider the evolution of management from F. Taylor's scientific management to modern concepts of knowledge management.

Task:

Describe the main stages of the development of management thought (scientific management, administrative management, human relations, behavioral sciences, systems approach, situational approach, knowledge management).

Analyze how each of these stages influenced the development of research methods in management. Give specific examples of research methods that appeared or became widespread at each stage.

Draw a conclusion about how the evolution of management contributed to the development of research methods and the expansion of their spectrum.

Task 2. Application of research methods for diagnosing situations and making management decisions

Situation description: Company "G" has problems with decreasing staff productivity.

Task:

Choose several research methods that can be used to diagnose the situation (for example, surveys, observations, document analysis).

Develop a research plan that will include:

Formulation of the goal and objectives of the study.

Determination of the research sample.

Development of research tools (questionnaires, questionnaires, tests).

Conducting the study.

Analysis of the results.

Apply the selected research methods to collect data.

Analyze the data obtained and draw conclusions regarding the reasons for the decrease in labor productivity.

Suggest management solutions aimed at increasing staff productivity.

Task 3. Evaluation of research results and their impact on the management system

Situation description: Company "B" has implemented a new personnel motivation system.

Task:

Evaluate the effectiveness of implementing the new motivation system using various methods of evaluating research results (for example, comparing labor productivity indicators before and after implementing the motivation system, surveying personnel on their satisfaction with the new motivation system).

Analyze how the research results affect the company's management system.

Suggest ways to improve the personnel motivation system based on the research results.

Task 4. Analysis of trends in the combination of management evolution, research methods and situation diagnostics

Situation description: Modern trends in management development are characterized by the integration of various approaches and management methods.

Task:

Get acquainted with modern trends in management development (digital transformation, agile methodologies, data-driven management, artificial intelligence).

Analyze how these trends affect research methods and situation diagnostics in management.

Determine what new research and diagnostic methods may appear in the future in connection with the development of digital technologies and intelligent systems.

Questions for independent study:

How has the evolution of management influenced the development of research methods?

How do research methods help in diagnosing situations and making management decisions?

How does the evaluation of research results contribute to the improvement of the management system?

What trends in the combination of management evolution, research methods, and situation diagnostics exist?

Topics for individual assignment – test (presentation)

from the academic discipline «Modern Research Methods in Management»

1. The influence of cognitive biases on managerial decision-making.
2. The role of emotional intelligence in leadership.
3. Theory of constraints in project management.
4. The influence of organizational culture on innovative activity.
5. Personnel motivation in the context of digital transformation.
6. Ethical dilemmas in modern management.
7. Knowledge management in organizations.
8. Leadership in remote work.
9. The influence of the information generation on modern management.
10. The importance of business social responsibility in increasing competitiveness.
11. Optimization of the personnel management system at the enterprise.
12. Development of a strategy for entering new markets for the company.
13. Increasing the efficiency of project management in an IT company.
14. Assessment of the effectiveness of implementing a CRM system in a company.
15. Managing organizational changes in the context of digital transformation.
16. Recommendations for increasing the competitiveness of an enterprise.
17. Developing a quality management system at an enterprise.
18. Optimization of logistics processes in a company.
19. Managing financial risks in conditions of economic instability.
20. Strategy for the development of small businesses in conditions of increased competition.

Exam questions for the academic discipline
«Modern Research Methods in Management»

1. Research on management systems.
2. Concept and stages of research.
3. Classification of research.
4. Research in management practice.
5. Management systems in organizations.
6. Elements of the management system.
7. Definition of the object of research in management.
8. Features of the business management system.
9. Research methodology.
10. Logical scheme of research.
11. Features of research methodology.
12. Problems of research in management.
13. Dialectical approach in research. The essence and principles of the dialectical approach.
14. Contradictions of management and ways to resolve them.
15. Features of the dialectical approach in the study of socio–economic systems.
16. Planning and organization of research in management.
17. Implementation and control of research results in management.
18. Classification of research methods in management.
19. Formal–logical research methods. Construction of definitions, argumentation, classification.
20. General scientific research methods.
21. Inductive and deductive research methods.
22. Problematics as a method of management research.
23. Methods: observation; description; experiment; intuitive; polemic;

modeling; imitation; extrapolation.

24. Methods of sociological research in management. Method of studying documents.

25. Business games in management.

26. Methods of testing and expert assessments.

27. Diversification research methods in management.

28. Synectics method.

29. Method of designing concepts.

30. Matchett method.

31. Evaluation of research results and diagnostics of situations

32. System approach in management.

33. Principles of research effectiveness and management potential.

34. Factology. System of indicators for management research.

REFERENCES

Main literature

1. Boyko Yu.P. Fundamentals of scientific research: textbook Khmelnytsky: KhNU, 2023. 138 p.
2. Dunska A.R. Methodology and applied research techniques in management: educational and methodological complex of the discipline. 2021, Igor Sikorsky Kyiv Polytechnic Institute. 50 p.
3. Linkova O.Yu. Practical training of a manager: main challenges and opportunities in the conditions of digitalization. Monograph. 2021. FOP Sekishova T.E. 134 p.
4. Organization of scientific research in the field of management and organization security: textbook / V. Blikhar, O. Omelchuk, V. Vovk, M. Blikhar, M. Kopyt-ko, M. Veresklyya, N. Mykhalynska. Khmelnytskyi: Leonid Yuzkov University of Management, 2022. 443 p.
5. Claire Hughes Johnson(2023) Scaling People: Tactics for Management and Company Building. Stripe Press.
6. Management and Business Research. Mark Easterby-Smith, Lena J. Jaspersen, Richard Thorpe, Danat Valizade. Seventh Edition. Publisher: 2021. SAGE Publications Ltd. 2021. 496 p.
7. Management Research. Susan Rose, Nigel Spinks, Ana Isabel Canhoto. 2nd Edition. Routledge. 2023. 482 p.

Additional literature

1. Adizes I. K. Styles of good and bad management. translated from English. Valery Glinka. Kyiv: Our format, 2020. 222 p.
2. Babaylov V. K. Methodology of scientific research: a textbook. Kharkiv: O.V. Brovin, 2019. 148 p.
3. Research on the elements of a modern personnel management system: monograph. Dnipro: Polygraph Center "Format", 2022. 116 p.
4. Kopych I.M. Mathematical models in management and marketing: a textbook / I.M. Kopych, V.M. Sorokivskyi, V.I. Stefanyak; Uko–opspilka, Lviv Commercial Academy. Lviv: Novyi Svit–2000, 2020. 375 p.
5. Linkova O.Yu. Initiative is the basis of business success in the knowledge economy // Bulletin of NTU "KhPI". Series: Economic Sciences. No. 5 Kharkiv: NTU "KhPI", 2023. p. 89–93.
6. Management. textbook / edited by Prof. Krasnokutskaya N.S. Kharkiv: 2019. 235 p.
7. Nadykto V.T. Fundamentals of scientific research. Kherson: OLDIPLYUS, 2017. 268 p.
8. New paradigms of management in martial law conditions: monograph / Batiuk B.B., Voskobiynyk S. Ya., Vovk M. V. and others. Lviv: SPOLOM, 2024. 374 p.
9. Diagnostics of the state of the enterprise: theory and practice: monograph / edited by A. E. Voronkova. Kharkiv: INZHEK, 2006. 448 p.
10. Linkova O.Yu. Methodological instructions for practical classes in the academic discipline "Modern methods of research in management". Kharkiv: NTU "KhPI", 2024. 79 p.

Internet Resources:

1. According to the State Statistics Service of Ukraine. Access mode:

<http://www.ukrstat.gov.ua>

1. <https://www.mckinsey.com/>
2. <https://www.cmc-ukraine.com/>
3. <https://www.management.com.ua/consulting/cons162.html>
4. <https://youtu.be/rb5m8a2TH9k?si=I4W7u3ZOp3qXVvAP>
5. <https://youtu.be/KPSLPK0tD5Y?si=eLLSUpj5iR6UZsIw>
6. https://www.isealalliance.org/sustainability-news/delivering-sustainability-assurance-through-effective-standards-and-accredited?gad_source=1&gclid=Cj0KCQjw9Km3BhDjARIsAGUb4nxEnLwUuMyYNZtzHI2ItK-43byTyYtIktbDObtpL6c5AZvItIXZPD8aApL3EALw_wcB
7. https://osc.com.ua/uploads/p_69_92536021.pdf
8. https://biz.ligazakon.net/analitics/224740_shcho-take-kodeks-etiki-dlya-kogo-vn-neobkhdniy

CONTENTS

Introduction	3
Structure of the course «Modern methods of research in management»	4
Practical lesson 1. Topic 1. Research of management systems.....	5
Practical lesson 2. Topic 1. Research of management systems.....	15
Practical lesson 3. Topic 2. Methodology of scientific research in management.....	21
Practical lesson 4. Topic 2. Methodology of scientific research in management.....	28
Practical lesson 5. Topic 3. Planning and organization of research in management.....	32
Practical lesson 6. Topic 3. Planning and organization of research in management.....	41
Practical lesson 7. Topic 4. Organization as a society. Formal-logical research methods.....	46
Practical lesson 8. Topic 4. Organization as a society. Formal-logical research methods.....	55
Practical lesson 9. Topic 5. Evolution of management. Special research methods in management.....	59
Practical lesson 10. Topic 5. Evolution of management. Special research methods in management.....	67
Topics for individual assignments - test papers (presentations) on the academic discipline "Modern research methods in management".....	71
Questions for the exam on the academic discipline "Modern research methods in management"	72
List of references.....	74

Educational publication

Methodological Guidelines for Practical Classes in the discipline “Modern Research Methods in Management” for students of the third (doctoral) level of higher education, leading to the Doctor of Philosophy (PhD) degree in Management, within the Educational and Scientific Programme “Management”, specialty D3 “Management, field of knowledge”, D “Business, Administration and Law”, for all modes of study
LINKOVA Olena Yuriivna

Responsible for the publication Prof. N.M. Shmatko
The work was recommended for publication by Prof. D.V. Rayko

In the author's edition

Plan 2026, pos. 93

Signed for printing 19.02.26. Format 60/84 1/24. Offset printing.

Font Times New Roman Cyr. Print size. sheet. 0.7. Order No. .

Price negotiable

Publishing center of NTU «KhPI». 61002, Kharkiv, Str. Kyrpichova, 2

Certificate of state registration of DK No. 5478 dated 08/21/2017

Electronic version